Towards an Urban Mutualism
The Making and Shaping of Urban Space through Large-scale Mixed-Use Development - Case Study Beijing

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Towards an Urban Mutualism:  
The Making and Shaping of Urban Space through Large-scale  
Mixed-use Development - Case Study Beijing

a dissertation  
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in partial fulfillment of the requirements for the degree of  
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Yang Li
Darmstadt, May 2018

Affidavit

I hereby affirm that I have completed this dissertation without the help of third parties only with the stated sources and tools. All passages and/or information from sources are marked as such. This work has not been submitted in the same or similar form to any local authority.

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Abstract

The contemporary urban world, especially Asian cities characterized by increasing density and rise of the economy, have been witnessing the emergence of urban spaces with hybrid characteristics. Hybrid urban spaces are characterized by spatial complexity, mixed multiple functions and complex management and operation. Large-scale mixed-use development (MXD) – defined as a sizable real-estate project combining multiple uses, provides one of the most typical conditions, in which hybrid urban spaces are created. Since the late 1990s, China saw a rapid growth of large-scale MXDs in its major cities. However, concerns and uncertainties arose regarding large-scale MXDs and the qualities of urban spaces they provide: on one hand, privately developed MXDs are criticized as space of commercialization, privatization and gentrification; On the other hand, some new typologies are accepted as an extension of the public sphere and demonstrate a feasible model for a win-win situation between developer and generic urban users. Such uncertainties indicate the incapacity of conventional ways in understanding new urban space typologies and their qualities, necessitating a redefinition of the core value and qualities of contemporary urban spaces, and more empirical investigations on large-scale MXDs regarding their potentials or limitations as a process through which contemporary urban space are made and shaped.

Addressing these two key tasks, this research firstly provides a necessary review and re-definition of the core value and qualities represented by modern-day urban spaces regarding the “hybrid” urban situation. Second, literature is reviewed to provide an understanding of the process of large-scale MXD. On this basis, empirical research is conducted on the large-scale MXD cases of Beijing – regarding the historical context, characteristics of MXDs and urban spaces, as well as the making and shaping of urban spaces through the process of these projects, to explain the mechanisms, key actors and factors in making these urban spaces and shaping their qualities. As a conclusion, the author points out the potential of achieving a “mutualistic” relationship between large-scale MXD and urban spaces and qualities, through which both the large-scale MXD and city benefit from each other. The potential for such an “Urban Mutualism” consists of three key dimensions: 1) “Shared qualities” - urban qualities which are needed for achieving the development objectives of large-scale MXD; 2) “Supporting mechanisms” - logic and rules involved in the nature of large-scale MXD and context, which can be utilized to achieve the desired urban qualities while also contributing to the success of the large-scale MXD project; 3) “Techniques” - Innovative strategies and interventions of making and shaping in response to MXD’s nature and the specific context of development. Besides explaining such potential through selected case studies, this study offers also suggestions and recommendations to release such potential - in taking advantage of large-scale MXDs to create high quality urban spaces in Beijing or other contexts.

Keywords: mixed-use development, real estate, hybrid space, urban space quality, public space, mutualism, urban development, China, Beijing
Zusammenfassung

Die zeitgenössische Stadtentwicklung, und insbesondere die asiatischen Städte, die sich durch ihre immer größere Dichte und Wirtschaftskraft auszeichnen, sind Zeugen für die Entstehung von Stadträumen mit hybriden Charakteristika. Der hybride Stadtraum zeichnet sich durch seine räumliche Komplexität, spannende Nutzungsmisschungen und ein komplexes Management und Betrieb aus. Large-scale mixed-use development (MXD) - definiert als große Immobilienprojekte, die mehrere Nutzungen kombinieren, stellen eine den Rahmen für die Typologien, die hybride Stadträume entstehen lassen. Seit Ende der 90er Jahre ist in China ein rasantes Wachstum von großen MXDs in den Großstädten zu verzeichnen. Bedenken und Unsicherheiten ergaben sich jedoch in Bezug auf großflächige MXDs und die Qualitäten städtischer Räume: Einerseits werden privat entwickelte MXDs als Räume der Kommerzialisierung, Privatisierung und Gentrifizierung kritisiert; andererseits werden diese Räume als Erweiterung des öffentlichen Raums sehr gut angenommen und zeigen ein praktikables Modell für eine Win-Win-Situation zwischen Entwickler und öffentlichen Nutzern auf. Die damit verbundenen Fragen zeigen die Unfähigkeit konventioneller Analysemethoden, neue Typologien zeitgenössischer Stadträume und ihre Qualitäten zu verstehen, und zugleich belegen sie die Notwendigkeit, den spezifischen Wert und die zugehörigen Qualitäten zeitgenössischer Stadträume zu definieren, und in empirische Untersuchungen zu großräumigen MXDs ihre Potentiale oder Grenzen im Prozess der Stadtentwicklung aufzuzeigen, durch den städtischer Raum und seine Qualitäten geschaffen und geformt werden.


Stichworte: große mischgenutzte Hybrid, Immobilien, hybrider Raum, städtische Raumqualität, öffentlicher Raum, Mutualismus, Stadtentwicklung, China, Peking
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Chapter 1. Introduction
1.1. Background
Large-scale MXD: an emergent urban phenomenon

Within the background of urbanization, globalization, economic and political transformation at an unprecedented pace and scale, urban Asia, especially Chinese cities have been witnessing dramatic changes under the strong influence of a growing real-estate industry in recent decades. The beginning of the 21st century saw a boom of new real-estate projects in Chinese cities, in which multiple uses e.g. residential, office, commercial, hotel etc. are combined together within a single large-scale development. This emergent architectural and urban typology has largely acquired its ideas and paradigms from the previously established concept of mixed-use development (MXD) in America, Europe and Asia (e.g. Japan, Singapore and Hong Kong). Although mixed-use development also involves an aspect of urban planning, it was clearly introduced into Chinese cities much as a new real-estate concept. Usually called "城市综合体", (directly translated as "urban complex"), they are large-scale MXDs made within a Chinese context.

According to an industrial report by CRIC\(^1\) published in 2011, the number of large-scale MXD projects in 20 main Chinese cities has risen in ten years (from 2000 to 2010) from 7 to 131, and this number reached 330 in 2015, with a total built area of about 165 Million square meters. Thanks to the potential contribution of large-scale MXDs to local finance through land economy, attraction for investments and impacts as city landmarks, much passion has also been demonstrated by local governments - numerous provinces and cities have established plans or policies in order to promote the creation of new large-scale MXD projects: For instance, in 2008, the Hangzhou Municipality claimed a strategic plan for building "A Hundred Urban Complexes" for its 20 new town areas\(^2\). Shanghai has planned 50 large-scale MXD projects to be completed between 2011 and 2014.

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1. Development Report of Large-Scale MXD in China (China Real Estate Information Corp - CRIC, 2011)
2. source: www.hangzhou.com.cn
Hybrid urban space

New spaces have been produced by new processes of urban transformation. The rapidly growing modern large-scale MXDs has been bringing about new urban space typologies and conditions. Such spaces usually involve complex spatial configuration, multiple functional programs and activities, sophisticated ownership and operation, as well as a fusion of virtual digital media and reality in the way people make, use, and experience them. In recent academia, the term “hybrid” has been increasingly used to describe an emergent condition of urban development, in which spaces are increasingly created with “hybrid” characteristics (see Cho et al., 2016; De Souza e Silva, 2006; Kitchin, 2007; Holl, 2014; Fenton, 1985). First, the notion of hybrid is used to define the specific architectural and urban space typologies characterized by multi-functionality and spatial complexity (see Fenton, 1985; Holl, 2014; Cho et al., 2016). Second, “hybrid” is also used to describe the increasingly blurred and negotiated boundaries between owners and users, and that between public and private sectors in the spatial practice (see Nissen, 2008). In addition, The notion of hybrid is also used to describe the situation where the network of digital communication is merged within the physical space, which brings about changes to the use patterns of physical spaces (De Souza e Silva, 2006; Kitchin, 2007). There are four general mutually overlapping modes of hybridization expressed by the contemporary urban space developments: spatial, programmatic, operational, and real-virtual hybridization:

- **Spatial hybridization** - Spatial hybridization refers to new spatial conditions for access, connectivity, physical flexibility and innovative public uses which is reflected through structural complexity and technological innovations and their relationship to the surrounding context. Complex forms, layouts, hybrid indoor-outdoor interfaces and thresholds, underground, multi-level or elevated public spaces are some of the design manifestations of new hybrid urban space developments. In the context of the design of new spatial hybrids, the plan loses its primacy, and the section and three-dimensional modeling become crucial (see Fenton, 1985; Holl, 2014).

- **Programmatic hybridization** - Programmatic or functional hybridization refers to the combination of various activities that are mutually synergic and compatible while suggesting unconventional ways of space usage. However, Cho et al. (2016) also point out that there are risks in mixed-use developments of creating conditions of co-presence, segregation, and conflicts, rather than coexistence, cohabitation, integration and mutual synergy (see Cho et al., 2005; Francis, 2003).

- **Operational hybridization** - Operational hybridization refers to new conditions for spatial negotiation, in terms of redefining the conventional notions of boundaries, territoriality, and accessibility through negotiated ownership, temporary appropriation, safety optimization, use, time and capacity regulations, and the management of (and over) space. In contemporary hybrid urban developments, the contractual relationships, such as public-private partnerships, play an increasingly important role (see De Magalhães, 2010; Cybriwsky, 1999; Nissen, 2008).

- **Real-virtual hybridization**

Real-virtual hybridization refers to the fusion of virtual media and reality, which has been changing the way people make and use contemporary spaces (see Ananda and Lynn, 2005; Barbatsis et al., 1999; De Souza e Silva, 2006; Kitchin, 2007).

Contemporary mixed-use development - often characterized by spatial complexity, functional diversity and densely packed human activities in one place - is one of the major mechanisms of through which hybrid urban spaces are created.
**Challenges and research gaps**

Emergent hybrid conditions through mechanisms such as large-scale MXD is challenging the conventional ways in which people understand, evaluate and create urban spaces. Reflected by existing literature in the academia, such challenge consists of the following two major aspects.

**Challenge 1: assessing the quality of hybrid urban space**

The first uncertainty occurs when people try to understand and judge the qualities of emergent hybrid urban spaces. This is reflected by the polarized ideas and views in the previous debates. Many discussions in the western academia regarding the emergent urban spaces center the deeply rooted concept of “public space” - typically defined as an accessible physical space for all citizens, regardless of age, gender, race, ethnicity or socio-economic status with free circulations of people and goods at all times (Carmona et al. 2010; Shaftoe, 2008). Public space is generally viewed as the spirit of western cities, representing multiple values essential for society, such as boosting public debates, demonstration/protests, and democracy (political values, Watson, 2006), resistance against commercialization and globalization (Mitrasinovic, 2006). Observations by researchers seem to reflect a very unstable performance of the emergent typologies of urban spaces, new changes “both enriched and undermined our urban experience” (Cho et al., 2016).

From these observations, polarized ideas and views have been generated regarding the qualities these developments and spatial typologies deliver as a part of the city.

**Pessimistic view** - On one hand, hybrid developments and spaces have been observed and criticized as representative examples of privatization (Lofland 1989; Brill 2001), exclusion (Low et al. 2005; Cho et al., 2016), commercialization and gentrification (Francis, 2012). Regarding MXDs, the issues are often related to the nature of them as spatial products and commodity created in the consumption age. “The problem with mixed-use development as commonly implemented today is that they are mostly real estate projects focused on profit rather than creating community or social diversity... they frequently serve as a veil or mask for agendas such as land speculation and gentrification” (Francis, 2012). “… the outcome, more often than not, is the proliferation of generic gated communities and the replacement of veritable public domains by exclusive private open spaces”(Cho et al., 2016). The typical problems include: 1) **Exclusion** – “too often mixed-use projects become havens for young and often childless professionals and exclude new residents, families, and people of different cultural backgrounds” (Low et al. 2005) … “They result in privatized spaces that present an idealized and artificial form of public life ”(Lofland 1989; Brill 2001); 2) **Control and surveillance** – “public open spaces in mixed-use developments are too often privatized and under the surveillance and tight control of managers and property owners (Banerjee, 2001; Kohn, 2004). Many such spaces are operated under a set of motivations that emphasize individualism and consumption over civic interests and collective rewards. (Cho et al., 2016); 3) **Fail in design and management** – “they largely fail to provide for design and management, and often preempt a full range of uses and users ” (Francis, 1989) This was also demonstrated and criticized in studies of some POPS (Privately Owned Public Spaces) of New York e.g. plazas and indoor atria; 4) **Lack of connection with local context** - Besides, as emergent hybrid spaces are usually created within a short time with (international) established paradigms, some of them are also criticized as homogeneous invented places lacking linkage with the local cultural and social context (Wang, 2009). In the pessimistic views, the emergent hybrid urban spaces tend to be rejected and ignored, often categorized as “quasi-public” (Dovey, 1999; Pimlott, 2008/2009), “pseudo-public”, or even “non-places”(Augé, 1995) , which are related to exclusion, over-control, inauthenticity (invented places with no historical roots), invasion of private market forces, and erosion of community. These critiques are generally categorized as the “critique of loss” of qualities in emergent urban spaces (see Sennett, 1977).
Optimistic view - On the other hand, for the optimistic observers and views, the new hybrid spatial typologies are accepted as an extension of the public sphere, and hybrid developments have also demonstrated their capability in providing great new opportunities for creation of urban spaces and deliver qualities which can otherwise not be achieved: Zukin (1998) argues that the privatization and commodification of spaces do not necessarily mean the fall of “public culture” within them. Many contemporary privately owned commercial spaces offer comfortable spaces which are used for different classes of users as places of gathering, forming “a fluid network as public space”. Mean and Tims (2005) noticed the phenomenon of “mall walkers” – the commercial environment – clean, safe, comfortable, with free restrooms and easy access to foods and cheap café, offers an even more pleasing space for “mall walkers” (retired old, housewives etc.) to stay and gather. Oldenburg (1999), launching the concept of “third places”- which he defines as informal gathering places in which people gather between home and work - arguing that various space such as low-profile fast food stores, cafes, barber shops, bookstores and bars (community-oriented commercial developments), provide also an important and necessary dimension of public life – the dimension of enjoyment and acceptance. Gottdiener (2001) accounts some positive features of some outdoor spatial typologies e.g. commercial streets, themed markets and festival plazas in contributing to public life: 1) Such spaces help to preserve a precious “urban experience” – joy of walking and watching things happening around;2) they provide chances of engagement e.g. meeting and interacting with strangers, as well as staying alone; 3) Facilitating events which bring changes and excitement to routine daily lives. For him, these emergent spaces demonstrate indispensable qualities for “a classical joy of city living” (Gottdiener, 2011).

The optimistic view is more constructive as it contributes to both the understanding of the nature of urban spaces and opens up possibilities for exploring the new value and potential of emergent typologies in the contemporary hybrid urban conditions: First, the optimistic view points out the fact that the value or desired quality represented by urban space is complex and multi-dimensional: It criticizes the conventional mono-dimensional view by arguing that the “critique of loss” is based on a public ideology, which is “false-equated with absolute democracy, classlessness and diversity” (Cho et al., 2016, see e.g., Banerjee, 2001; Brill, 1989a, 1989b; Carr et al., 1992; Goss, 1996; Jackson, 1998; Loukaitou-Sideris & Banerjee, 1998; Worpole & Knox, 2007), “magnifying the political and civil function while ignoring the dimension of relaxation, social contact, entertainment, leisure, enjoyment, or simply having a good time” (Banerjee, 2001, Hajer and Reijndorp, 2001), and “largely influenced by the emphasis on the ownership over space” (De Magalhães, 2010; Hajer & Reijndorp, 2001). Second, the optimistic view also emphasizes a dynamic way of understanding the value or desired quality of urban spaces. It has to be recognized that the value of space is changing along with the historical and social context. As Habermas (1989) points out, the western notion of public space is a historical product, which originated from the differentiation between the state, civil society, and the market, as well as the consolidation of modern notions of private property. The relationship between public space and public life has always been dynamic and reciprocal, leading to new forms of publicness that often require new types of spaces. Overall, the new hybrid urban condition necessitates new ways of understanding contemporary urban space qualities. The ideology and qualities of contemporary urban space need reconceptualization based on exploring the shifting meanings and use of places over time.

Challenge 2: identifying the urban potential of large-scale MXD
The second challenge is that we still don’t know enough about new urban typologies or processes such as large-scale MXDs to properly deal with them in making better cities. While the qualities of contemporary urban spaces need to be redefined, much remains to be discovered about how contemporary developments and emergent typologies may promote or limit such qualities.
On one hand, mixed-use is considered by many as an advantageous concept for the city. For instance, Jacobs (1961) suggests mixed-use as one important element for an ideal urban environment. The UK Department of Environment (1995) claims some benefits of mixed-use development, which include vitality, attractive centers, a more secure environment, less need of travel, less car-dependent, more opportunities for public transportation etc. (DoE, 1995). Mixed-use is also a critical element of urban initiatives such as Smart Growth and Compact City. Importantly, different from concepts of Utopian mega projects, the idea of mixed-use is “not simply a dream of urban planners, it is a marketable development concept that public and private sectors increasingly embrace” (Schwanke, 2003). Koolhaas (1994) developed from his observation of New York a theory of “Bigness”, in which he proposed to examine “big buildings” as a different species of architecture and suggests a potentially special relationship between such architecture species and the city. Koolhaas believes that there is certain instrumentality embedded in the nature of large buildings. “Only through BIGNESS can architecture dissociate itself from the exhausted ideological and artistic movements of modernism and formalism to regain its instrumentality as a vehicle of modernization” (Koolhaas, 1994). Although being very inspiring, the theory of Bigness does not address the particular potential of large-scale MXD.

On the other hand, while “mixed-use complexes are often seen as arenas for unconventional experimentations with urban space typologies and innovative uses” (Cho et al., 2016), problems and negative impacts of large-scale MXDs have also been reflected in many observations on modern-day MXDs. Such risks include besides a series of technical failures also the risks of commercialization, exclusion, homogenization, control etc. (see Francis, 2003). Because of the market situation, homogeneous ownership structure and time pressure, the intention for diversity is usually hard to be realized, and the project turns out to be merely a three-dimensional simulation of the city.

While the existing literature discusses mixed-use development from either the perspective of real-estate development or urban planning generally, there has been no investigation revealing the particular nature and mechanisms of large-scale MXD and its influences on urban spaces and qualities. There is yet no theory which explains the urban potential of large-scale mixed-use architecture. Without careful investigations, we are on one hand missing the chances of taking advantage of the potentials of large-scale MXD for creating a better urban environment, and on the other hand loosing control of the risks and possible negative effects of such typology upon the city, being within an unconscious and dangerous situation where, as Koolhaas describes, “we don’t know what to do with it, we don’t know where to put it, we don’t know when to use it, we don’t know how to plan it” (Koolhaas, 1994). More importantly, when such project succeeds or fails, “they do so on a much larger financial and environmental scale than single-use projects... The mixed-use concept magnifies both success and failure in a development venture... and such magnification increases both the risks and potential rewards for both the private and public sectors” (Schwanke, 2003). Therefore, more empirical and theoretical studies are needed for exploring the potential and limitation of large-scale MXD in delivering urban qualities.

China as background
The specific contexts and situation within Chinese cities further demonstrate an urgent need for redefining urban space qualities and investigating large-scale MXDs as a process in which urban spaces are created. First, besides the fact that the western-originated meaning of public space itself has been changing, it is also inappropriate to use this concept and ideology to assess or evaluate urban situations in (east) Asian contexts where such definitions and paradigms do not historically and culturally existed. While western researchers observe that “the idea of civil public spaces is something very new in China” (Hassenpfleg, 2004), it has to be realized that “(East) Asian cities, founded and...
transformed through various religious and political ideologies, have formulated their own logic toward the treatment of urban spaces.” (Cho et al., 2016). Urban spaces in many Asian cities are characterized by blurry boundaries between the public and the private, a fluctuating continuum of negotiated semi-public and semi-private spaces and informal spatial usage. This further suggests the need of reconceptualizing the meaning, value, and qualities of urban spaces regarding the non-western context beyond the public-space ideology. A clear ideology of urban space which can direct the provision of urban qualities and help to identify correct ways of intervention is still missing.

Second, MXDs in Chinese cities have been rapidly made without much attention and careful examination of both their potentials and risks as spaces in delivering urban qualities. This might be essentially caused by the lack of an established ideology and clearly defined qualities of urban space and city life. Wang (2009) summarized some general characteristics of large-scale MXDs in China: 1) MXDs in Chinese cities are mostly of larger scales and built up within shorter time period; 2) Top-down approach dominates the making process of MXD projects; 3) As the modern concept of MXD was an imported real-estate idea, the MXD projects in Chinese cities demonstrated an interplay or conflict between local context and global ideologies. Besides, techniques, regulations, and policies regarding large-scale MXDs are still to be developed due to the young history of real estate industry. Within this background, much more attention has been paid on quantitative calculations (e.g. commercial profit, tax, and land economy) of large-scale MXD projects and needs of market/consumers, than the qualities and potential impacts of large-scale MXDs as parts of the city on external urban users.

On one hand, although claimed as a “city within a city”, many large-scale MXD projects failed to deliver the qualities indicated by their names. Criticizing the mass-produced MXD projects that simply put the profit-making spaces together, Zhou (2015) points out that this reflects “a hasty, careless and irresponsible attitude towards the city” on the chain of makers of large-scale MXDs - from government officers, developers, investors, to planners and architects. The negative effects of these projects are magnified because of the scale of these projects. Moreover, as a potential result, this may eventually lower people’s expectation and imagination of urban space and life inside the cities (Zhou, 2015). Such ignorance does not only lead to negative impacts upon the surrounding city but eventually also cause failure of the MXD projects themselves. Many large-scale MXD projects demonstrated weak resilience against the heated competition in the market and the rising industry of online shopping and virtual entertainment - as their advantage of convenience from merely functional co-presence is challenged. Without providing the qualities expected for urban space, large-scale MXDs quickly lose their attraction and get replaced by on-line shops or newly emerged projects.

On the other hand, innovative large-scale MXD projects have also been created and observed in Chinese cities, which have become well-known places attracting a wide range of urban users. While indicating qualities and potentials as urban spaces, these project also demonstrate potential feasible models of achieving urban space qualities through large-scale MXD and a win-win situation between the private developer and the general city users. The recent-year development trend also demonstrates increasing attention regarding urban space and qualities of large-scale MXD projects. First, as China’s economic growth is slowing down, there is a shift towards qualitative urban development. Second, under the heated competition, developers are also putting more emphasis on qualities and innovations in their products. These factors compose the chance of change towards new ways of urban space provision through large-scale MXDs.

Therefore, the examination of large-scale MXD from an urban perspective is of great importance also due to the specific context of urban development in China.
Image 1.7
Spatial distribution of large-scale MXD projects in Beijing 2017
Source: illustration by author
Research gaps

These previously introduced background and challenges suggest two main research gaps:

First, regarding the contemporary hybrid conditions, a redefinition of the core value and qualities of contemporary urban space is needed - The lack of a clearly defined ideology and qualities of contemporary urban space restrains our understanding and judgment of emergent urban typologies and leads to misdirected, unconscious, and uncontrolled practice. As hybrid urban space goes beyond the familiar typologies of conventionally defined public spaces, the previously established ideology and framework of public space are no longer appropriate for understanding these contemporary spaces and assessing their qualities, especially in a Chinese context. It is necessary to redefine the core value and desired qualities of urban spaces regarding the contemporary hybrid urban conditions. As is discussed above, the new conceptualization should be generated from a historical point of view and goes beyond the narrow “public-private dualism”, being “broad” or “fundamental” enough to account the typologies and multidimensional nature of contemporary hybrid urban spaces.

Second, more empirical studies on the hybrid spatial typologies are needed - The unstable performances of hybrid typologies reflect the fact that we still have far more to learn in dealing with emergent hybrid developments e.g. MXDs and their relationship with the city. More theoretical and empirical researches are therefore needed to explain both the potentials and limitations of emergent hybrid typologies e.g. large-scale MXDs in attaining the urban qualities newly defined. Theories developed based on the findings of empirical studies can provide guidance for future practices regarding new urban typologies such as large-scale MXD. If a special “instrumentality” or potential is agreed, much more research is needed for understanding what exactly composes such potential, and how we can release such potential.

These two tasks served as the starting point for this research.
1.2. Scope
Large-scale MXD as an urban instrument
As one key hypothesis of this work, the author believes in the potential of large-scale MXDs in serving not only the internal needs of their clients but simultaneously in being a part of the city that promote the urban life of general city users. This makes large-scale MXD more than just a real-estate product or architecture project, as people usually perceive, but also a potentially feasible instrument for mutual benefits between developers and the city. Today’s urban practitioners, developers, and general city users should explore and take advantage of such potential to achieve a better urban environment which serves a social end of the general users of cities. A similar perspective is well claimed by Rory Hyde with the idea of “humanitarian architectures“:

“What is architecture if not a medium for conveying social effects? Form and design are merely the means of embedding these social effects into the built environment, in order that they may continue to manifest over time. While mainstream architecture is distracted by its own images, humanitarian architecture offers an alternate example of an architecture that repositions form and design as secondary to the production of these social effects.” (Hyde, 2014)

Following this perspective, this book intends to discover and explain the instrumentality of large-scale MXD through theoretical and empirical investigations.

Large-scale MXD as a process
It is of fundamental importance to realize that the hybrid urban spaces and qualities to be discussed in this research are created simultaneously in the complex process of large-scale MXD projects. It is therefore critical to understand such spaces and their qualities as a result of the coherent process and logic through which MXD projects are created and operated. Correspondingly, large-scale MXD should be viewed as a process through which potential urban spaces are made and their qualities shaped. The starting point of understanding spaces within MXD, their qualities, and possible interventions is to understand large-scale MXD itself and its related mechanisms. Apparently, such a process involves different operation levels and stages, and an extensive range of actors and combinations of actions that are far beyond a single field. As such, this research views large-scale MXD as a process and investigates the making and shaping of urban space within this extensive process. It is also important to investigate the large-scale MXDs and urban spaces within the specific background of Beijing’s urban development and distinguish the influential factors provided by the specific context and that related to the nature of large-scale MXD.
1.3. Objective
The objectives of this research directly respond to the two necessary tasks previously mentioned, which include:

a. To identify the core value of contemporary urban space and redefine its qualities
The author proposes a new way of understanding contemporary urban space and its qualities based on investigating its shifted value over time, and provides a new framework for analyzing and assessing these qualities.

b. To explore the potential/instrumentality of large-scale MXD in providing spaces with defined urban qualities through an empirical study of Beijing
As one key contribution, this research aims to propose a theory which specifically explains the urban potential of large-scale MXD through an in-depth empirical investigation. As the main purpose of this research, the theory proposed is expected to be used to guide the research and practice towards a situation of “urban mutualism” - a situation in which large-scale MXD can be taken advantage of to achieve urban space qualities and better city life, in which both the developer and the city benefits.

1.4. Questions
This book intends to answer the following questions:
1) How to understand the core value and qualities represented by contemporary urban space?
2) What is the potential of large-scale MXDs in achieving the urban space qualities newly defined?
   • Which types of large-scale MXDs and urban spaces have been created within the context of Beijing? How are they related to the urban development of the city?
   • What are the factors, mechanisms, and activities in the process of large-scale MXD cases in Beijing, that have influenced the emergence and qualities of urban spaces within them?
   • What are possible ways to release such potentials, or how to take advantage of large-scale MXD to improve the quality of the urban environment?

The answers to these questions contributed to the answer to the ultimate question: How can we deal with emergent architectural/urban typologies such as large-scale mixed-use development to make better spaces in the city?

1.5. Structure
This research is generally divided into three major parts. In the first part - theoretical review (Chapter 2, 3) the author reviews the literature regarding contemporary urban space and its qualities as well as literature regarding MXD. At the end of this part, an analytical framework is developed that links the process of large-scale MXD with redefined urban space qualities. This part provides critical analytical frameworks and tools for the following empirical study in Beijing. In the second part - empirical study (Chapter 4, 5, 6), the author investigate the development of large-scale MXD projects in Beijing, including the specific contextual factors, typical development conditions, characteristics of large-scale MXDs and typologies of urban spaces created within them. In the last section of part II, a closer investigation is conducted through case studies on the development and operation process of five large-scale MXD projects and seven urban spaces, which have been created within these projects, providing a specific analysis on the mechanisms of urban space making and shaping in the development process of large-scale MXD in the context of Beijing. The last part - conclusion (Chapter 7) - summarizes the research findings. Importantly, it claims the potential of in achieving urban space qualities through large-scale MXD - the potential for an “urban mutualism”, while giving suggestions on possible interventions that can help to realize such potential.
Chapter 1 - Introduction: Chapter 1 introduces the background, perspective, objective, topic, structure, as well as methods used for the investigation of this book.

Chapter 2 - Urban Space Re-framed: Chapter 2 revisits the notion of urban space regarding its shifting value, and proposes a new framework for understanding the qualities represented by contemporary urban spaces. It firstly reviews existing literature regarding the contemporary discussion on urban space, aiming to identify the core value and qualities of space in contemporary urban condition. Key aspects of qualities are identified and organized through a framework developed upon Goffman’s theory on social gathering and interaction. This chapter also provides a framework for assessing these urban qualities newly defined.

Chapter 3 - Large-scale MXD as a process of urban space making and shaping: Chapter 3 contributes to the understanding of contemporary large-scale MXD as a process of urban space making and shaping through a theoretical investigation. First, this chapter addresses the essential characteristics of large-scale MXDs, and the critical contextual factors influencing them. Second, it investigates the process of large-scale MXD and mechanisms and factors that may influence urban space qualities in this process. It proposes four types of potential urban spaces within large-scale MXDs. Finally, this chapter develops an analytical framework, which links the process of large-scale MXD and urban qualities of space within it. This analytical framework serves the following empirical study of large-scale MXD cases of Beijing.

Chapter 4 - Beijing as Context: Chapter 4 introduces the post-reform urban development of Beijing as the context where large-scale MXD projects have been created. Addressed are the factors of historical urban legacy, property market, urban planning, and cultural context. It shows the development history of large-scale MXD projects in Beijing, demonstrating how large-scale MXD projects have grown along with the development of the city, and the characteristics of their spatial distribution within the city. Eventually, this chapter identifies four typical conditions where Beijing’s large-scale MXDs have been created.

Chapter 5 - Large-scale MXDs and Urban Spaces in Beijing: Chapter 5 investigates large-scale MXD projects and potential urban spaces within these projects in each of the four typical contextual conditions previously identified in Chapter 4. Revealing the relationship between different contexts of large-scale MXDs and resultant urban space typologies.

Chapter 6 - Urban Space Making and Shaping through Large-scale MXD - Case Studies: As a core empirical contribution, chapter 6 presents the case study of five representative large-scale MXD projects of Beijing: 1) The Place, 2) Parkview Green, 3) Indigo, 4) Wangjing SOHO and 5) Paradise Walk Daxing. Seven urban spaces have been investigated, which have been created in the process of the five large-scale MXD projects. Through a close investigation and analysis of the development process of the projects and urban spaces, it identifies the key mechanism, actors, and factors that influenced the creation and qualities of urban spaces within the large-scale MXDs. It demonstrates and explains a mutualistic relationship between the private developer and the city through the case studies.

Chapter 7. Conclusion: drawing the key findings and argument of this book, chapter 7 proposes the theory of “urban mutualism” which claims and explains the potential of contemporary large-scale MXDs in providing urban spaces and qualities. The book ends with a suggestion for developers, municipalities, architects, urban designers, and the general users of cities, to recognize such potential, and further works based on the theory.
1.6. Methods
Investigations of this research have been conducted based on a mixed methodological design involving the following methods:

• Literature review
Literature review is the major method used for establishing a theoretical basis for redefining urban space qualities and the analytical framework for the following empirical study. Literature includes researches on urban space qualities and MXD projects in both Chinese and cities of other countries.

• Review of planning and design documents
Review of planning and design document is adopted for the empirical study part, which includes reviewing literatures and documents about Beijing’s urban planning and development, as well as the development process of large-scale MXD projects and related planning and design documents, drawings, photos and other formats of information e.g. information provided in new media and project websites.

• Case study
Case study is a central approach to the investigation of the research questions. Cases of large-scale MXDs have been studied in Beijing on both the macro and micro level. On the macro level, about totally 90 projects are investigated, which have been developed between the late 1980s and 2017. The macro-level investigation contributes essentially to the understanding of the historical development of large-scale MXDs in the city, their spatial distribution in the city, and their characteristics. On the micro-level investigation, five representative cases of large-scale MXD projects have been selected for an in-depth analysis on the development process and the resulted urban spaces, which gives a detailed explanation on how urban spaces or qualities have been made and shaped in the process of large-scale MXDs.

• Interview
Interviews with experts have served as a critical way of acquiring detailed information about the development and operation process of selected large-scale MXD cases. For 4 of 5 case studies (the Place, Indigo, Wangjing SOHO and Paradise Walk), semi-structured interviews have been conducted with project planner/client architect, while for one case study (Parkview Green), required information has been extracted from a detailed interview previously conducted by a specialized magazine.

• Field research
Field researches served as an important way of collecting general data for large-scale MXD projects and its environments, as well as data required for assessing the defined urban qualities of selected spaces within these projects. Numerous field trips have been conducted in the time period between 2013-2017, through which a comprehensive database has been built up.

• Visualization tools
As an important way to make analysis easier, this research has developed several techniques to visualize a large amount of information and complex mechanisms. The visualization tools can efficiently help the process of understanding and analysis, and can contribute to further studies. Specific methods include mapping (based on geographical information system - GIS), 3D modeling other types of diagrams and illustrations.
Chapter 2. Urban Space Re-framed
As is addressed in Chapter 1, in order to investigate the potential of large-scale MXD in providing urban spaces, the first critical task is to establish a clear and proper definition of the qualities that are represented and thus should be provided by contemporary urban spaces. The new conceptualization of urban space should be based on a historical point of view - identifying the core value of urban space in the contemporary age, while being “broad” or “fundamental” enough - going beyond the narrow “public-private dualism” - to account the typologies and multidimensional nature of contemporary hybrid urban situations.

Aiming to identify the core value of urban space and re-frame its qualities, this chapter reviews the existing theories and discussions that address contemporary urban space and its shifting role. As a result of this chapter, a framework is established which allows to the examination and assessment of the quality of contemporary urban spaces - including spaces that emerged with large-scale MXDs of Beijing.

2.1. Core value of modern-day urban space
2.1.1. Origin

“What is the essential value represented by modern-day urban space?”

Answering this question should start by considering the essential meaning of city to modern-day humankind. As “by definition, “urban” means “in, relating to, or characteristic of a city.” (Oxford English Dictionary, 1992). “The natures of urban space… rely on the very reason why cities exist” (Frank, 2010).

Cities, or urban spaces, have been formed as a result of a geographical concentration of human settlement. As Mumford addresses, “the city, as one finds it in history, is the point of maximum concentration for the power and culture of a community” (Mumford, 1938). The Chinese term of city, “城市 (Cheng Shi)” consists of two characters. According to the definition of Shuo Wen Jie Zi (121 AD), one of the earliest Chinese dictionary, “城 (Cheng)” means the place where people concentrate[1], while “市 (Shi)” means the place of trade and exchange[2].

Wheeler’s explanation might be significant in identifying human ideology of urban space: “Many definitions have been advanced to explain what constitutes a city. … Too often it is overlooked that these are only the more obvious manifestations of a simple desire of man to live with other men for mutual benefits.” (Wheeler, 1971) “…cities exist for the sake of the benefits that accrue from living in close proximity to a large number of other people. (Frank, 2010). “People increasingly live in cities to achieve social and economic objectives which cannot as easily be obtained in a non-urban environment” (Wheeler, 1971).

The benefits provided by the dense settlement of people are various, including reduced transport costs, exchange of ideas, goods, sharing of natural resources, and in some cases amenities such as running water and sewage disposal. However, all these benefits are essentially caused by the fundamental fact that spatial proximity enabled by an urban environment reduces the cost of circulation of persons, goods, and information, which effectively promotes the exchange of material/goods, information and ideas between various people. As such, facilitating exchanges represents the unique instrumentality and core value that city or urban space offers originally.

While the core instrumentality of spatial proximity has been taken advantage of for defense function in the ancient cities, modern cities have moved beyond their defensive...
purpose. The essential instrumentality of urban space - facilitating material and informational exchanges - has been utilized to generate various extended values. In response to different historical and cultural contexts, such extended values can be political (e.g. a focus of opposition to the power of the state and the corporation, shaping public concepts of governance, religion and social structure, opposing institutions of power, promoting expression etc.), economic (e.g. the city, street and plaza as critical places of trade and business), cultural or social (e.g. enabling time spent with strangers free from social control, enabling a school of social learning, promoting the learning of civility towards diversity, a critical form of tolerance, see Brill, 2001).

In spite of these extended values expressed in different contexts, the essential instrumentality of urban space, or the core value of it - facilitating various exchange of goods, information and ideas between various people and the value represented by it - hasn’t changed. This has been addressed by some scholars with their conceptualization regarding the ideology of city and urban spaces: Frank (2010) argues, “in order to realize the benefits of close proximity to a large number of other people, the activities making up a city have to be both densely packed and allow freely connect and interact.” Lynch(2000, pp-192), when talking about „good city form”, argues that “a good environment is a place which affords obvious and easy access to a moderate variety of people, goods, and settings...”. “Cultural diversity is always a pacemaker of urbanity in the history of cities (Rudolph-Cleff, 2015, pp-24). Wheeler (1971) argues that “the savings in communication costs resulting from population clustering are the modern city’s greatest social asset;” “...ideal... spaces are those that encourage social interaction among the most diverse set of users possible” (Nemeth and Schmidt, 2011). Carmona (2015), recognizing the diverse exchange of goods, information, and ideas as the core of city life, concludes that:

“The essence of cities is found in the opportunities they provide for exchange - exchange of goods and services, ideas and experiences, and social interactions of all types.” (Carmona, 2015)

These notions address two key points of core value represented by physical space within a city environment: First, they emphasize urban space’s essential instrumentality and value of facilitating exchanges - including the exchange of goods (material exchange), information/ideas (informational exchange) or services (may involve both material and informational exchange); Second, these notions also emphasize the great variety of people, between whom exchanges can occur in an urban environment. These two key aspects consist the essential value of urban space. However, it is important to realize the contemporary changes brought by modern technologies, especially that of mobility.
and communication, which has led to challenges to the previously established role and instrumentality of urban space, and significant changes to the core value it represents in the contemporary age.

2.1.2. Contemporary changes
Technological development - especially the development of transportation tools, infrastructure, modern logistics industry, media and communication technologies (digitalized virtual communication) as well as electronic banking are changing the values previously represented by urban spaces in both aspects of material and informational exchange:

As a result of modern transportation facilities, logistic, digital banking, suburbanization, and Internet-based trading platforms, the exchange of goods, or trading activities, is becoming increasingly less dependent on a physical environment. In addition, because of the efficient modern transportation and logistic, the spatial proximity represented by an urban environment is also increasingly becoming irrelevant in facilitating material exchanges. Online shopping and modern logistics make it less necessary to go to the city for buying products or services. As such, physical urban space is losing the unique advantage it formerly had in facilitating material exchanges.

Meanwhile, modern media and communication technologies are also significantly reducing urban space’s role in facilitating exchanges of information. Technologies of mediated communication e.g. telephone, cell phone, Email, and Internet meeting allow people to conveniently communicate with each other over a long geographical distance. A considerable amount of communication, or exchange of information, is happening in a virtual environment.

As such, the essential value of urban space has been changing due to these new technological developments in the contemporary situation. Eventually, one particular form of informational exchange is becoming the highlighted feature that increasingly characterizes and highlights modern-day urban space - the type of interaction which is carried out without any mediating technologies and therefore necessitate people in physical spatial settings – broadly named as face-to-face interaction.
2.1.3. Facilitating face interaction - the core value of contemporary urban space

Face-to-face interaction is generally used to describe social interaction carried out without any mediating technology. As is pointed out by Goffman (1967), face-to-face interaction provides one crucial condition of communication that links naked human sense (as a way of perception) on one side and embodied transmission[3] on the other. Apparently, such kind of interaction is only possible in a physical or “real” setting – within a physical distance one person can experience another with naked sense – finding that the other is “within range”. This very requisite highlights the remaining importance of physical urban spaces in the background of contemporary urban development.

Characteristics/advantages of face-to-face interaction:

1) Providing richness of information and facilitating of feedback - Especially among all these ideas, Goffman (ibid.) has identified two distinctive features of face-to-face interaction: 1) richness of information flow; and 2) Facilitation of feedback. Regarding richness of information: face-to-face interaction engages more human senses than mediated communication. “…any message that an individual sends is likely to be qualified and modified by much additional information that others glean from him simultaneously, often unbeknownst to him; further, a very large number of brief messages may be sent”. Regarding facilitation of feedback: “… ordinarily, in using the naked senses to receive embodied messages from others, the individual also makes himself available as a source of embodied information for them… not only are the receiving and conveying of the naked and embodied kind, but each giver is himself a receiver, and each receiver is a giver” (Goffman, 1966, PP-14).

2) Contributing to building up trust between people - Face-to-face interaction also contributes to the establishment of trust between people in interaction, which is being increasingly paid attention in the contemporary world of increasing digitalization (Moyn, 2009). For example, although Online shopping is thriving, people tend to buy quality-oriented products through direct engagement with the sellers. Physical stores are retaining or even gaining more importance. Besides, various forms of activities have been developed, such as markets, which provide occasions for consumer and seller to directly interact with each other.

3) Preventing data-dependent control and predictability. Another unneglectable feature of face-to-face interaction is that face-to-face interaction is one of the primary ways in which today’s people may fight against a world increasingly getting controlled and manipulated by (commercial) corporations based on big-data and artificial intelligence[4]. Media is the main source through which (big) data is collected and produced. Powerful groups (e.g. big commercial groups or enterprises), which have access to these data, take advantage of it to build up both real and virtual spaces where all users and users’ behaviors are predictable and have a purported and controlled result (e.g. commercial profits). While data is produced and can be collected in the mediated social interaction occurring in digitalized virtual space, face-to-face interaction - direct communication with “naked” senses – can greatly prevent the production of collectible data, and therefore contribute to the prevention of controlled and predictable environments built upon big data collected. This, surprisingly through a different mechanism, contribute to urban spaces’ support for institutions of power, with same function desired for “classical” public spaces.

Accordingly, the information that an individual provides can be embodied or disembodied – embodied messages refer to messages that a sender convey by means of his own current body activity, the transmission occurring only during the time that his body is present to sustain this activity such as a frown, a spoken word, or a kick; disembodied messages/transmissions require that the organism do something that traps and holds information long after the organism has stopped informing, such as text in letters, gifts etc.

As Simone Weil has suggested, technology now “is the thing that thinks, and it is the man who is reduced to the state of the thing.” [see Lapham, 2001]
2.2. Framework for urban space qualities

2.2.1. Goffman’s rule for face-to-face social interaction

Although it is hard to make people interact directly, it is possible to influence people’s behavior indirectly through the provision of a “potential environment”\(^5\) (see Gans, 1968; Gehl, 1987), which provides a range of environmental opportunities. In this sense, “urban design can be seen as a means of manipulating the probabilities of certain actions or behavior occurring.”\(^6\) (Gans, 1968). Based on the previous notion of this chapter that facilitating face-to-face interaction is the core value represented by contemporary urban space, the urban quality of a space is therefore essentially a result of factors which shape the possibilities of face-to-face interaction of people within the space. Erving Goffman (1963) provides a critical notion in framing and identifying these factors.

Goffman (1963), a pioneer of micro-sociology, showed in his book *Behavior in Public Places* the rules of interaction in public life and described a range of mechanisms and rules that govern how social gatherings\(^6\) are structured and how people act in these situations (Ludvigsen, 2006). His framework, although developed in a sociological perspective, is considered by the author helpful for architects and urban designers for understanding the relationship between space and face-to-face interaction for this research, upon which a framework of analyzing contemporary urban spaces can be developed. Goffman’s structural understanding of gathering is built upon three central concepts: the occasion, the situation, and the encounter.

The *Occasion* is the (social) construct that provides reasons for gathering. “When persons come into each other’s immediate presence they tend to do so as participants of … a (social) occasion”\(^6\) (Goffman, 1963). The occasion forms the co-presence of people in a specific space.

The *Situation* is seen as a specific manifestation of the occasion – it is the full spatial environment anywhere within which an entering person becomes a member of the gathering that is (or does then become) present – “an environment of communication possibilities”. Situations begin when mutual monitoring occurs, and lapse when the second last person has left. It is an environment of communication possibilities for people gathered already because of the occasion. The Situation is thus defined and influenced by the settings of the specific built environment (ibid.).

The *Encounter*, or face engagement, is the actual interaction that takes place. Being typically conversational, it can involve a large number of behaviors, where “a single focus of visual and cognitive attention is ratified as mutually binding on participants” (ibid.).

Composing these concepts together, Goffman’s suggests a two-stage process in which face-to-face social interactions occur within a physical space: In the first stage, an “occasion” is formed, which gives reasons for people to come and results in the co-presence of people in a space. In the second stage, the actual interactions occur in a “situation”, where the settings of the specific built environment may conduct a promoting or restraining effect for face-to-face interactions. This process is illustrated below:

\(^5\) Gans (1968) draws a valuable distinction between “potential” and “resultant/effective” environment.

\(^6\) Goffman uses the term “gathering” to simply refer to a coming together of two or more people: “… to refer to any set of two or more individuals whose members include all and only those who are at the moment in one another’s immediate presence” (Goffman, 1963).
Essentially, Goffman’s notion indicates three aspects of factors which are necessary for a physical space to facilitate face-to-face interactions inside of it. First, fundamentally, the space must physically exist for at least a period of time to allow the process of face-to-face interaction happen; Second, reasons must be provided which cause people to be (co)present in the space; Third, qualities or factors are needed which trigger the occurrence of interaction between people already co-present in the space. Based upon this, the author defines three general dimensions of space-related factors, which critically influence the facilitation of face-to-face interaction within a physical space. These dimensions are:

1) The tempo-spatial support for co-presence and encounter, that is, the amount of available physical area provided by a space, as well as the amount of time the space is available for people to be (co)present in it. These factors are needed and set the ultimate limit for the maximal number of people that can be co-present, as well as for the maximal duration that interactions within the space can last. These are termed in this research as “Capacity”.

2) The qualities/mechanisms that form the occasion, that is, the space-related factors which cause/contribute to possibly large amount and diverse people to be co-present in it – characteristics which shape the possibilities for large amount and diverse people to be present in it – termed in this research as “Accessibility”.

3) The qualities/mechanisms that construct the situation, that is, the space-related factors which promote the face-to-face social interaction between people who are already co-present in the space, these include characteristics that stimulate and promote the possibilities of interaction, as well as qualities that increase the duration of stay of people who are already in the space – termed in this research as “Catalyst”.

Critically, it should be noticed that there is a process of perception between the objective features of a space and their qualities recognized by people. First, all the information is processed within the individual’s value system, which is closely related to the context of each individual; Second, the factors that influence the process of perception should not be ignored. The ways in which a space is perceived by people should be accounted.

Based on these three general dimensions, sub-dimensions of urban space qualities can be further identified, as well as possible ways of assessing such qualities.
Co-presence
people’s co-presence in a physical space

Individuals
persons from different social groups

Attractions
perceived qualities:
- landuse
- comfort
- engagement
- discovery
- physical
- symbolic
- managerial
- (communication)

Barriers
personal value system
- context related

perception
communication
Visit
behavior of getting copresence

Co-presence
people’s co-presence in a physical space

Encounter
facial engagement / face-to-face interaction

Accessibility
+ possibility of copresence
+ number of people
+ diversity of people

Capacity
+ available physical space
+ available time

Catalyst
+ duration of stay
+ possibility of interaction

Image 2.8
Three major aspects of urban space qualities framed based on Goffman’s model
Source: illustration by author
2.2.2. Qualities of urban space and assessment

2.2.2.1. Capacity

Definition: Capacity, in this research, refers to the characteristics of a physical space, which set the ultimate limit and maximal potential of it in facilitating face interaction. Capacity includes two critical aspects: 1) the amount of available physical area that the space provides – determining the maximal number of people that can be co-present; and 2) the amount of time the space is available for people to present in it - determining the maximal duration that face-to-face interactions within the space can last.

Size of space - The space must be physically enabled/existent and have a certain volume for external users; larger space many theoretically contain more people simultaneously for face-to-face interaction. Many contemporary hybrid urban spaces tend to be large as a result of the unconventional scale of development. Whether a space can be available for external people largely depends on the role of the space is supposed to play in the broader system (see Chapter 3).

Available time - The physical space must permanently or for a period of time be available for people to co-present in it. Theoretically, the longer a space is open for people, the longer interactions can last and the more information can be exchanged through interactions within the space. While many classical public spaces are supposed to be 24-hours open, many emergent urban spaces open only limited hours – most common spaces with malls have the identical open time with that of the mall, and increasingly many urban spaces are demonstrated as temporarily available “pop-up” spaces usually attached with and enabled by events.

Assessment

According to the above-mentioned notions, the capacity of a space should be assessed in two aspects: the size of the space and available time:
- The size can be measured by the area of physical surface where people can stay
- The available time can be measured by its open hours, e.g. 24 hours or 10 hours per day

2.2.2.2. Accessibility

Definition: Accessibility, in this research, refers to the qualities of a space in a given context which influence (promote or restrain) the (possibility of) co-presence (gathering) of a large number and diversity of people in it. The co-presence of people in a space provides the requisite for contact and face-to-face interaction. Good accessibility promotes the co-present of a possibly large number and diversity of users within the space.

As accessibility is shaped by both factors that promote and constrain the possibilities for people to be present in a space, the related factors can be generally classified into “attraction” and “barrier” perceived by people. While “attraction” are the features of a space that, when perceived, draw/motivate people to a space through satisfying their needs, “barrier” include on one hand features of a space that, when perceived, prevent people from being (co)present in it by adding difficulties, and on the other hand, factors that prevent people from perceiving the space. The possibility for individuals present in the space is shaped and resulted as they weigh the “attractions” against “barriers” within their own value systems - while perceived “attraction” contributes to the possibility of a person’s presence in the space, the perceived “barrier” reduces it. Apparently, the value system of people varies according to different cultural and social contexts, and even from individual to individual. In spite of this, there are certain “generic” qualities identified by researchers, which are commonly perceived as “attraction” or “barrier” as determined by the shared nature of humankind. In this sense, accessibility can be enhanced by provision and maximization of some or all aspects of qualities of attraction, and through minimizing the barriers. The following part will identify these “generic” characteristics and qualities of “attraction” and “barrier” through the literature review on previously done researches.
Accessibility - Attraction

Attraction refers to the features of a space that, when perceived, draw/motivate people to space through satisfying their needs. In spite of the seemingly individualistic and complex demands of human values, goals, and aspirations, the existence of an overarching hierarchy has been discovered by several authors. As the origin of most of these ideas, Maslow (1968), in his work on human motivation, identified a five-stage hierarchy of basic human needs: 1) physiological needs; 2) Safety needs; 3) Affiliation needs – social belonging; 4) Esteem needs; and 5) Self-actualization. Especially regarding urban (public) spaces, Carr et al. (1992) specifically identified five types of functional reasons that account for people’s needs in urban (public) space: “comfort”; “relaxation”; “passive engagement with the environment”; “active engagement with the environment”; and “discovery and display”. Gehl (1987) identifies 12 qualities that an urban space should aspire to and clusters them under three categories: “protection”, “comfort” and “delight”. Based on the literature review, the author presents a more precise classification and framework, proposing following aspects of “attraction”: 1) land use, 2) comfort (including protection and relaxation), 3) engagement and 4) discovery/display.

1) Land use

Definition

Land uses such as residential, working (office), commercial, traffic/public infrastructure represent the typical and major activities people need to conduct in the modern age to satisfy their multiple needs. When different land uses are supported around the space, it becomes more attractive for being able to reduce the cost of time and energy in conducting these activities. Accordingly, mixed and densely packed land uses around an urban space, as well as “magnet land uses” - uses generally open for and serve the public – near or within the space, may function as “people attractor” that motivate people’s movement through, within and to the space – ultimately contributing to people’s co-presence inside of it (see Carmona, 2010, Hillier et al., 1993). The “magnet land uses” may involve amenities supporting specific activities e.g. educational(schools, libraries...), cultural (museums, theatre, opera houses...), recreational (parks, sport fields or stadiums...), public transportation (stations, parking lots) and other civic services (post offices...) and non-specific activities (large-scale open space with hardscape and softscape grounds capable of accommodating more than one use) (see Cho et al., 2016). Therefore, The attraction of an urban space regarding land use involves the diversity (the type of uses and diversity of targeted users) and density of use programs around and within a space, and the existence of magnet uses.

Assessment

Assessing qualities of a space regarding land use includes following aspects:

Diversity of land use types supported around the space:

• diversity of land use types – indicator: number of land use types within and around (max. 500m from) the space
• diversity of users of the use programs within and around (max. 500m from) the space
• density: the density of urban pattern around(max. 500m from) a space
"Magnet uses":
• the amount of public use/programs within or around (max. 500m from) urban space

See Maslow’s theory on human needs (1943)
2) Comfort
Definition
Comfort is described as a sense of physical and psychological ease of human being. According to Carmona et al. (2010), comfort may include dimensions of environmental factors / physical comfort, and psychological/social comfort. While comfort may be described as an intrinsically subjective category, without the minimum comfort level provided people would not dwell in an urban space (Cho et al., 2016). In short, comfort is an inclusive term which involves both environmental/physical and psychological aspects. Accordingly, two different levels of comfort have been addressed by existing researches: one basic level referring more to physical/biological comfort, and an “advanced” level, involving also psychological comfort. Each level requires different qualities and strategies to achieve these qualities. The work of Gehl and Carr et al. provide reasonable terms and investigation for this research. Based on their works, this research identifies two states of comfort: 1) “protection” and 2) “relaxation”. While “protection” is more about environmental/physical comfort, “relaxation” refers to a more developed state, which also involves psychological comfort.

Protection - Protection is seen as “... a deep and pervasive need that extends to people’s experience... a sense of security, a feeling that one’s person and possessions are not vulnerable” (Carr et al. 1992). It can be understood as a basic level of comfort – deriving from spatial qualities which protect people against potential hazards or unpleasant sensory experiences. Accordingly, (see Gehl, 1987), general types of hazards in an urban environment include: 1) that of motorized traffic (traffic accidents, pollution and noise), 2) crime and violence, also in night times, and 3) bad weather or environmental conditions (wind/draft, rain/snow, cold/heat, air pollution, dust, glare etc.). Hence, an urban space’s quality regarding protection also consists of these aspects. They can be assessed through the degree of protection a space provides against these three major aspects of hazards.

Relaxation - Relaxation is viewed as a “more developed state” with the “body and mind at ease” (Carr et al. 1992). Accordingly, it tends to be more related to the psychological condition (comfort) of users. The qualities of an urban space for relaxation can bring about feelings of ease of its users both physically and mentally. Six sub-dimensions of urban space qualities influencing relaxation have been identified through literature review, which are: 1) the sensory stimulation of natural elements – natural light, trees, greenery, water features (Carr et al., 1992); 2) the chances and amenities which offer resting possibilities for the body: adequate seating possibilities (to stand, lean on, lay down etc.) (Whyte, 1980); 3) a “human scale” interface crucial for psychological relaxation[8]; 4) a maintained clean environment (Carmona et al., 2010); 5) air control and optimization (Cho et al. 2016) and 6) provision of serving amenities e.g. food, drinks, toilets (ibid.)

Assessment
Assessing qualities of a space regarding comfort includes the following aspects:
Protection:
• protection from motorized traffic – indicator: degree of pedestrian-friendliness
• protection from crime – indicator: degree of security measures adopted
• protection from crime in nighttime – indicator: availability of night-time lighting
• protection from bad weather conditions – indicator: degree of shelter and “indoor-ness”

Relaxation:
• natural element – the presence of natural light, vegetation, water etc.
• maintenance - availability of clean and maintained environment
• human- scale interface: availability of human-scale interface
• physical relaxation – indicator: types of seating possibilities
• air control and optimization - availability of air-control and optimization techniques
• food/drink services, toilets - availability of amenities e.g. food/drink services, toilets

[8] After extensive studies of how humans behave in different kinds of environments, Gehl has concluded that the most comfortable building height for urban pedestrians is between 12.5 and 25 meters, or about three to six stories.
3) Engagement (passive and active)

Definition
While the basic need for comfort is rooted in the human nature of pursuing physical and mental ease, the need for engagement is determined by the social need of human as a social animal. As stated by Whyte (1980), “what attracts people most, it would appear, is other people.” Carr et al.(1992) distinguish between two states of engagement: passive and active engagement.

Passive engagement - Passive engagement with the environment involves “the need for an encounter with the setting, albeit without actively involved” (Carr et al., 1992). The category of passive engagement “includes the frequently observed interest and enjoyment people derive from watching the passing scene” (ibid.). This need is “passive” as it is usually satisfied through looking rather than actively talking and doing – typical activities involve “people watching” - looking at pedestrian traffic, performances, activities of games or sport events, and public art or street scenes. Accordingly, what critical for a space to facilitate passive engagement is that the spatial configuration allows people to “watch people while avoiding eye contact” (ibid.) – configuring such a relationship between spaces of activities (such as pedestrian paths/junctions, gathering/performance spaces, etc.) and spaces where people can enjoy observing (space providing staying/resting possibilities).

Active engagement - Active engagement, on the other hand, represents the need for a more direct experience with a place and the people within it, interaction with people in the space or environmental settings of the space. Usually, forms of active engagement include 1) conversation (discussions, debates), 2) participating in multi-person activities (recreation/sport, performance, etc.) 3) manipulation or interaction with elements of the environment. Regarding urban settings, it is generally agreed by scholars that the chances of active engagement can be enhanced through proper design and operation of a space. One important mechanism is an effect known as “triangulation”[9] identified by Whyte (1980) - an example could be conversations with both friends and strangers that are triggered by unusual features or events in a space. One critical factor for triangulation is the presence of a “stimulus”- the more noticeable and spectacular the stimulus is, the more possible it triggers the triangulation.

Assessment
Assessing qualities of a space regarding comfort includes the following aspects:
• Passive engagement – indicator/measurement: the degree to which the spatial layout of a space supports passive engagement
• Active engagement – indicator/measurement: degree of presence of stimulus - spectacular physical elements, people activities, or interactive elements in the space

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[9] See the part „catalyst effect“ below
4) Discovery / Display

Definition

Discovery represents the human desire for stimulation (Lynch, 1963), and the delight people have for new spectacles and pleasurable experiences (Carmona et al., 2010), reflecting another deeply rooted nature shared by humankind: their curiosity and human need of exploration. Discovery in an urban space involves “a break from the routine and the expected” and requires experience of unpredictability or surprise (ibid.). Essentially, discovery is about finding something unexpected - different or unusual. Three major aspects of discovery regarding urban space can be identified: 1) discovering unusual space, landmark or vista; 2) discovering unusual activities of people or scene – through periodic programs or one-time events, and 3) meeting new people from different cultural/social context. Very often, the experience of discovery is a combination of factors from more than one of these aspects. These aspects imply also different qualities for urban space to satisfy the need for discovery.

Discovering unusual space - One major aspect of discovery is the diversity in the physical design and the changing vistas (Carr et al., 1992). A sense of discovery can be therefore enhanced by design. First, contrast with the adjacent environment and elements can provide a sense of pleasurable surprise that people enjoy (see Lynch, 1963), the contrast people feel when entering a space is also known as the “threshold” experience. The Contrast in visual form can be achieved through design with distinctive scale(height), shape, color, texture, elements or spatial relationships (Clerici and Mironowicz, 2009). Second, the discovery for “unexpected” can also be provided by design strategies that make the space distinguished from the previously established image or impression of its categories – offering a new spatial experience. In the contemporary age of consumption and inter-city competitions, such strategies are often bound up with the aim of identity building or “branding” in spatial development – intending to give the space “landmark characteristics” to win visitors or customers and survive the competitions. Third, for discovery to continue for people who have already visited a place, it is as well critical to provide changing physical characteristics and changing human activities (Carr et al., 1992). This necessitates actually design offering the qualities of flexibility and adaptability so that space can adapt to the various required settings for different programs and activities and thus continuously provide something to discover. The changing mechanism often involves integrated technique equipment, flexible/changeable elements, and reduction of structural influences, and scale of the space itself - as larger space can support more types of activities.

Discovering unusual activities - Discovery also involves unusual activities of people or scene. This experience of discovery can be either made possible naturally through time (such as seasonal changes, night-time lightings) or enabled by programs of animation. Such programs may include periodic or occasional events, for example, lunch-time concerts, evening-time light shows, art exhibitions, street theatre, festivals, parades, markets, society events and/or trade promotions, across a range of times and venues (Carmona et al., 2010). Events may not only bring unpredictable new activities into the space, they may also temporarily change the physical appearance of a space. Similar with the discovery of physical settings of a space, a lasting quality of such discovery necessitates mechanisms or programs that continuously bring changes to activities within a space.

Discovering different people - Discovery also includes meeting and interacting with new people from a different culture or social groups – the interest in “social learning” and exploring lifestyles of others. Scholars have accounted therefore strategies such as creating usable areas for different social/aging groups and arranging them properly so that people get the opportunity to learn and interact”. Discovery of different people represents actually the same qualities required for satisfying another type of need – the need to “display”, which refers to self-presentation and visibility. Therefore, if a stage of self-pre-
sentational activities is provided, there can be more possibilities for discovery of different cultural/social groups of people in it. The quality of an urban space for discovery different people can be assessed by the opportunities/programs it provides for different social groups to display themselves.

Assessment
Assessing qualities of a space regarding discovery includes following aspects:
• discovery unusual space – indicator: spatial distinctiveness/contrast to surrounding or same typology
• flexibility/adaptability of physical setting – indicator: availability of change mechanisms of space’s physical settings
• aspect: discovery unusual activities – indicator: availability of animation programs and frequency of change
• discovery unusual people – indicator: availability and amount of uses/programs for defined social groups e.g. people of different age groups or income groups.

Accessibility - Barrier
As has been previously defined, “barrier” include on one hand features of a space that, when perceived, prevent people from being (co)present in it by adding difficulties, and on the other hand, factors that prevent people from perceiving the space. Wheeler (1971) already points out two fundamental reasons for barriers to urban social interaction: 1) barriers imposed by physical space itself (uneven distribution of transport network in the city) and 2) barriers imposed by social status (intended space user groups), which lead to barriers built up through physical, managerial and/or symbolic means. Carr et al. (1992) identify visual, physical and symbolic as different forms of access. Besides, accessibility or potential barriers can also be built in aspect of management (Cho et al., 2016). Importantly, emphasizing that the process through which the information of a space is perceived by people through media should also be taken into consideration, the author adds another type of barrier – the communicational barrier, which refers to the ease or difficulties for people to learn about the features of the space. Thus, this research identifies four general types of barriers regarding urban space accessibility: 1) physical, 2) symbolic, 3) managerial and 4) communicational barriers.

1) Physical barrier
Definition
“One of the principal limitations to the present-day city as it involves social interaction...is the inescapable and oppressive burden of space itself...” (Wheeler, 1971). While physical access concerns whether the space is physically available to be accessed by large amount and diversity of people, physical barriers are the costs (time, money, energy...) and difficulties (boundaries or obstacles such as walls, gates, fences, stairs...) people perceive when accessing a space, which are caused by the physical configuration of the space. Qualities of an urban space that reduce these barriers lead to better accessibility of an urban space. As the physical configuration of a space includes both the particular geographical setting and the specific design features of the space, scholars suggest a necessary distinction between two different levels of physical configuration: 1) macro-level – referring to the relationship between a space and its hinterland, including the routes into it and its connections with its surroundings (i.e. beyond-the-place) - and the 2) micro-level - the specific design features of the place itself (i.e. within-the-place). (Varna, 2014 ). It is generally agreed that the micro-level configuration matters little in terms of density of use if it is poorly located within the local movement pattern – suggesting the macro-level configuration as a more fundamental and determining factor.

The macro- and micro-level configuration indicate also two aspects of physical barriers, as well as two aspects of qualities that may reduce these barriers. While the macro-level
physical accessibility is determined in the planning process in a larger context of a project (involving developers and urban planning activities), the micro-level physical accessibility is mainly shaped by the architects’ or designers’ activities within the given site.

Macro-level physical accessibility - The macro-level physical accessibility of an urban space refers to how well it is connected to or integrated into the urban movement network. The transportation route system itself is confined to specified portions of the city, creating spatial irregularity and thus imposes unequal barriers between all its residents (Wheeler, 1971). Such barriers are often the cost of travel (in time and/or money) for one to reach a space. Places that are strategically well-located (which can be accessed with relatively lower cost) within a city’s network have greater potential movement and thus greater potential for different social groups coming together in space and time (Hillier, 1996). The degree to which a space is connected to the networks of different ways of transportation is therefore crucial in understanding and assessing the macro-level accessibility of a space. Urban spaces that are well connected with these networks represent less presence of macro-level physical barrier.

Micro-level physical accessibility - Micro-level physical accessibility refers to the specific design features of the place itself. Two subtypes of physical barriers can be identified, that are: 1) barriers on the boundary of the space, and 2) visibility and visual barriers. Height-level differences are a common form of physical barrier. Loukaitou-Sideris and Banerjee (1998) described how many privately owned public spaces, especially those intended to project a certain corporate image, tend to be introverted and physically disconnected from the broader public realm. Designers achieve this disconnection by setting the space several steps above or below the public sidewalk. As Whyte concludes, “once past three feet a space can become relatively inaccessible . . . it is not only a physical matter so much as a psychological one” (Whyte, 1980). Besides, it is also generally accepted that the visibility of a space is crucial for people in accessing it. As “if people don’t see the space, they will not use it either (ibid.)”. In design practice, however, applying visual guidance and signs may enhance the visibility of a space. Based on these notions, the assessment of micro-level physical accessibility consists of assessing the presence of height-level on an urban space’s boundary, and the visibility of the space in the surrounding environment.

Assessment
Assessing qualities of a space regarding physical barrier includes the following aspects:

Macro-level physical barrier:
To simplify the model of assessment, this research takes pedestrian network (representing local mobility network) and metro transportation network (representing city-wide mobility network) into the scope of investigation. The connectivity of an urban space to these networks are used for assessing its macro-level physical barrier/accessibility.

• macro-level physical barrier through city-wide transportation network - indicator: Connectivity to the urban transportation network
• macro-level physical barrier through local mobility network - indicator: connectivity to local movement pattern (in this research local pedestrian network)

Micro-level physical barrier:
• physical barrier on the boundary - indicator: presence and degree of height-level differences;
• visibility – indicator: the visibility of space from major adjacent pedestrian flow
2) Symbolic barrier

Definition

Symbolic access involves visual cues or symbols suggesting whether a space feels threatening or inviting to a person (Cho et al., 2016). Apparently, the symbolic accessibility is determined by the meaning of adopted symbols in the reference system of the specific cultural context of people. Barriers can, therefore, be built with symbols which impose strong indications about “who is and who is not welcome in the space” (Carmona, 2010), forming “symbolic restrictions” which passively discourage undesirable activities and groups. First, certain design elements may act as symbolic cues of exclusion, with examples of particular kinds of shops (ibid.); Second, the physical presence of management power (security guards, gates/controlled entrances…) can also be perceived as symbolic barriers of access, this is discussed in the following part of the managerial barrier.

Design and image are often used as soft control measures, which both literally and symbolically control behavior and use of publicly accessible space. (Carmona, 2010). As Whyte (1980) observes, “property owners often worry that if a place is made too attractive it will attract the very undesirable people they were trying to keep out in the first place. The symbolic barrier is often reflected through a homogenized spatial appearance – on one hand usually observed in spaces with “corporate image and identity”, and on the other hand characterized by the overuse of visible advertising, with “unrelenting visual stimulation of billboards, signs, and posters that dominate urban environments” (see Loukaitou-Sideris & Banerjee, 1998). Urban designers, with their decisions which dictate appropriate spatial use and render a space less inviting to those failing to use it in such a manner, can therefore either “reinforce or challenge existing patterns of inclusion or exclusion” (Kohn, 2004).

Good symbolic accessibility, which enhances the diversity of people’s co-presence, may be achieved through the use of symbols and spatial layout that prevents a homogeneous spatial appearance and does not dominantly implicate that a space is intended or not intended for specific people or social groups. Further, clearly demonstrating that a space is intended for public use is considered as an effective way to diminish the symbolic barrier of a space (experience from New York). Therefore, the symbolic barrier of an urban space is assessed in this research by the types of users the symbolism of the space imply.

Assessment

Assessing qualities of a space regarding symbolic barrier:
• symbolic barrier – indicator: the types of users the symbolism of the space imply and the presence of sign indicating the legally public use

Spatial management techniques can be generally grouped into hard (or active) control, and soft (or passive) control measures (Loukaitou-Sideris & Banerjee, 1998, pp.183–185). While hard control involves the use of surveillance-cameras, private security guards, and legal measures to ban certain activities, Soft control focuses on more symbolic techniques, such as access restriction during nonbusiness hours, small-scale urban design measures (e.g., spikes on ledges), or the removal of public restrooms or food vendors that might attract undesirable users (see Whyte, 1988).
3) Managerial barrier

Definition
Quite usually (especially in privately owned spaces) barriers of access are built through management approaches. Management refers to ways in which spaces are controlled and managed, which is specifically relates to the methods used by owners to indicate appropriate uses, users and behaviors (Németh & Schmidt, 2011). Accordingly, three major dimensions of management techniques have been identified: (1) laws and rules governing the space; (2) the presence of access restrictions and territorial separations; and (3) the presence of policing and surveillance within the space.

Behavioral control – Subjective rules - Under the general category of hard control, legal and regulatory measures signal the appropriate use of a space and, consequently, what types of persons are allowed. In this sense, laws are important signifiers of a space’s “social meaning” (Blomley et al., 2001). Privately owned and managed spaces usually establish rules which are subject to the prescriptions of the property owner, and the rules governing these spaces are often more variable and inconsistent than those in publicly owned spaces, based on the fact that the planning policy of many cities allow private property owners to set up their own spatial rules (see Kayden, 2000). This suggests however also the possibilities of more inclusive laws and rules in privately operated urban spaces.

Access control - Another aspect if the managerial barrier is access control or entrance control, which denies physical entrances for certain groups of people in all or certain time periods. Passing through a constricted entry, gate, or door, or even through a security checkpoint can make visitors feel uncomfortable (Németh & Schmidt, 2011). Access control may be conducted through means of setting up gates and electronic entrance-control systems and introducing entrance fees (Cho et al., 2016). Access control of a space can be minimized through the provision of 24-hour access and use.

Policing and surveillance - The adaptation of surveillance and policing for the management is also a hard measure in managing a space. In privately owned spaces, the primary concern of the private guards is to protect the properties and interests of those paying his or her salary rather than the public interests (Oc & Tiesdell, 1999, PP-272). The overuse of security guards may be perceived as a barrier of access. While studies have shown that people often feel safer in the presence of security personnel (Fyfe & Bannister, 1998), the overabundance of security often generate suspicion that the space is not safe enough to operate without such a significant police presence. Whyte (1980) and others have decried the use of policing tactics, arguing instead that good places are fundamentally self-policing. Managers of urban spaces are now increasingly likely to prefer more indirect surveillance provided by the janitors, maintenance staff, valets, receptionists, and doormen working in the space or its immediate vicinity (Carmona et al., 2010).

Assessment
Assessing qualities of a space regarding managerial barrier includes the following aspects:
• behavior control - the number and degree of presence of subjective rules applied
• access control - the degree of presence of these control means
• policing - the presence and types of policing adopted in the space
4) Communicational barrier

Definition

Communicational access defined in this research is about the ease or difficulties for people to learn about an urban space or the ease or difficulties that information of an urban space is communicated to people. As is discussed before, the objective features of an urban space should firstly be able to be communicated and perceived by people, then there can be possibilities for people to decide whether they go to it or not. Therefore, it is reasonable to assume that spaces which are little known have also little possibilities to be visited by a large amount and variety of people. On the contrary, if more people are informed about a space, more people are likely to be attracted by its features and ultimately be co-present in the space. Essentially, reducing the communication barrier of a space is about letting more people know about it, which is usually achieved through “broadcasting” its features to a large and diverse population. In this process, the media technologies and strategies may play the central role. Increasingly, people are learning about things through modern mass media and mediated information rather than directly by themselves with pure naked senses – people may learn about a place from media and decide whether they go to it, without physically being in it. The development of such a situation is accelerating in the rapid development of modern media technologies represented by the Internet and smartphone. The Internet has apparently become a critical information source from which huge amount and range of people may learn about (and possibly attracted by) an urban space without physically being in it. The available information of a space on the Internet, in various forms e.g. texts, images, videos, panorama photos or even reviews and comments, provides a basis from which the qualities of the space may be perceived by all who have Internet access. In addition, the infrastructures and devices such as wide-covering WLAN (wireless local area network) and smartphones or similar devices make the access to the information (via access to the Internet) possible almost regardless which time and space people are situated in. Also critical, devices such as smartphones and social networks allow individuals to become sources of wide-spreading information.

In the contemporary urban situation characterized by heated inter-city competition and spatial commodification, communication activities of spaces are often much motivated by, and integrated with advertising and branding conducted by project developers/operators and local governments. Pursuing market profit, advertising activities in real-estate projects are usually viewed as one of the most critical tasks in development and operation. These activities are usually conducted systematically and aggressively by specific department or firms, and supported financially through specific funds. Information of certain spaces within the project is likely to be communicated in this process, especially when the spaces are conceptualized as a strong feature or “selling point” of the project. The author identifies three types of ways in which information about a space can be communicated or broadcasted to people:

Advertising through mass media - Thanks to the large audience mass media (including broadcast media, digital media, printed media, outdoor media - typically radio, television, websites, newspaper, magazine, billboards etc.) are able to reach, advertising through mass media is arguably the most typical way to let people know about a space. Advertising activities involve usually actively placing information of a project on these media. Besides, they also include holding events, relating the space to in-trend topic and celebrities (including “Starchitects”) – creating “news” to draw the attention of media agencies. Making the information of an urban space available and communicated through mass media promotes the possibility for people to know about it.
Communication through social-media - The popularity and development of smartphone, WLAN infrastructure, and social networks allow individual users to convey information of the space to broader potential users through a network of decentralized information sources. The smartphones can act as sensors collecting information about urban spaces, that may be immediately shared by users through the Internet and social networks. In this process users of a space become also “advertisers” of it. Therefore, advertising can be conducted by introducing people to the space and encourage the sharing activities of them. The encouragement mechanism can be achieved through 1) provision of infrastructure (hardware such as mobile Internet or free WiFi services, software enabling Internet access etc.); 2) provision of “stages” or “contents” (special scenes or events that arouse people’s attention, e.g. in-trend topics, unusual scenes and activities) and ultimately – the experience worth sharing. 3) development of rewarding mechanisms for sharing activities – in some cases, people may get rewarded by when they share information of a place on the Internet.

Communication through service platforms - Broadcasting of space can also be achieved through service-oriented Online platforms which provide services for people’s lives and bridge the service provider and users. Examples are maps, review websites etc. Such service platforms can be established by private or public sectors (for public service), or both together. (see the example of info platform of POPS in New York). Finally, space operators may also build their own platform and channel to broadcast – many private projects develop their own smartphone applications as a direct and specific channel through which the users get informed about the project (space). There might be a danger that private operators seek efficient advertising activities and tend to narrow down the receiving ends to only target consumers. However, the author believes that the communication, also when conducted by private operators, may still contribute to reducing the communicational barrier, as there is a limit to the degree, to which the range of receivers can be controlled.

Assessment
Assessing qualities of a space regarding communicational barrier includes the following aspects:
• advertising through mass media – indicator: availability of advertisement of urban space on mass media
• communication through social-media – indicator: the degree to which urban space support/encourage sharing activities of users
• communication through service platform – availability of information of urban space on service platforms
2.2.2.3. Spatial catalyst

Definition

The spatial catalyst in this research refers to the characteristics or qualities of an urban space which promote face-to-face social interaction between people who are already co-present in the space. “Catalyst”, in its original definition, means “a substance that causes or accelerates a chemical reaction without itself being affected (chemistry)”, or “something that causes activity between two or more persons or forces without itself being affected”. Catalyst qualities allow the space to functions as a “catalyst” for social interactions of people in it, especially that between the strangers. While good accessibility enables the co-presence of large range and diversity of users in a space, the spatial catalyst is necessary, as the simple proximity of people does not mean spontaneous interactions (Carmona, 2010). As has been found by Whyte (1980), it is not usual and natural that strangers begin to interact in a space. However, it is agreed that proper designs and features of a space can trigger social interactions. The catalyst qualities include 1) characteristics that promote the chances and possibilities of interaction, as well as 2) qualities that increase the duration of stay of people who are already in the space.

Extending the duration of stay - According to many scholars, comfort contribute to the length of time people stay in a space. “Comfort is a prerequisite of successful public spaces. The length of time people stay in a (public) space is a function and an indicator of its comfort.” (Carmona et al., 2010)

Increasing possibility of interaction - “Triangulation” has been termed by urban researcher William. H. Whyte to describe a phenomenon or process in which some external stimulus provides a social bond between people and prompts strangers to talk to each other as though they were not (Whyte, 1980, pp-94). The principle of triangulation is intentionally adopted by designers to encourage social interactions (Stevens, 2007). According to PPS[11], the choice and arrangement of different elements in relation to each other can put the triangulation process in motion (or not). Essentially, spaces which enable triangulation offer two essential requisites: 1) the presence of the stimulus and 2) the spatial layout supportive for the visual connection between people and the stimulus and people’s communication with each other as the audience of the stimulus.

Stimulus: The stimulus for triangulation can be either a spectacular physical object – e.g. a sculpture or other physical installations - or a spectacular sight of people doing activities – e.g. musicians, entertainers etc. also interactive settings and elements that generates activities if users; Beside the existence of stimulus, a supportive spatial layout allows the stimulus to be visible by people and provide possibilities for people to interact while being the audience of the stimulus, mentioned as “theatricality” (positioning of the physical focal points, positioning of the “activity spaces”) by some scholars. The theatre architecture, which has been developing since long, provides a spatial reflection of such layout and design strategies which have been adopted in all cultures. Contemporary Large-scale hybrid urban environments make this theatricality even more sophisticated and dramatic.

Assessment

Assessing qualities of a space regarding catalyst includes the following aspects:
• extending duration of stay – indicator: comfort
• increasing possibilities of interaction – indicator: the degree to which the space support triangulation - the presence of spectacular spatial element or activities

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[11] PPS is a non-profit planning, design and educational organization which has been very active in place-making and building sustain public spaces. It was founded in 1975 to expand on the work of William (Holly) Whyte, author of The Social Life of Small Urban Spaces. (source: http://www.pps.org)
2.2.2.4. Overview of urban space qualities

As a conclusive result of these previously addressed characteristics and qualities, an assessment framework/model has been developed, which may function as an analysis tool that helps to measure the complex characteristics of contemporary urban spaces. The assessment framework comprises three meta dimensions – capacity, accessibility, and catalyst. Each general dimension includes several sub-dimensions: for capacity-available space and time; for accessibility- attraction of land use, comfort, engagement, discovery/display; and physical, managerial, symbolic, communicational barriers; for catalyst – comfort and triangulation, which are measured with specific indicators. To make the assessment process possibly feasible, this research selected indicators that can be possibly accounted objectively and adopts a three-level evaluation table. Besides the table of “checklist” for characteristics and qualities of urban space, a diagram chart has been developed, which allows direct understandings from visualized characteristics of an urban space, as well as comparison.
<table>
<thead>
<tr>
<th>aspect</th>
<th>sub-aspect</th>
<th>assessment / indicator</th>
<th>criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPACITY</td>
<td>open time</td>
<td>number of daily open hours</td>
<td><strong>hours / day sqm</strong></td>
</tr>
<tr>
<td></td>
<td>size of space</td>
<td>area of space</td>
<td></td>
</tr>
<tr>
<td>ACCESSIBILITY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU land use</td>
<td>diversity of land use: types of uses</td>
<td>types of land use within 5-min walking distance from urban space (residential, office, commercial)</td>
<td>0  mono functional land use</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1  2 or more types of land uses</td>
</tr>
<tr>
<td></td>
<td>diversity of land use: users</td>
<td>types of user groups within 5-min walking distance from urban space</td>
<td>0  adjacent uses for homogeneous high-income social group</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1  adjacent uses generally for high-income groups</td>
</tr>
<tr>
<td></td>
<td>density of surrounding uses</td>
<td>dominant building pattern of surrounding urban environment</td>
<td>0  low-rise pattern (1-6 storey)</td>
</tr>
<tr>
<td></td>
<td>magnet land uses</td>
<td>number of magnet land uses e.g. public use or services around or within urban space</td>
<td>0  non public service/amenities available</td>
</tr>
<tr>
<td></td>
<td>protection against motorized traffic</td>
<td>degree of pedestrianization</td>
<td>0  space is overlaid by motorized traffic / not suitable for pedestrian traffic</td>
</tr>
<tr>
<td></td>
<td>protection against crime - security</td>
<td>availability of security measures e.g. security personals, CCTV, self-policing layout etc.</td>
<td>0  not exist</td>
</tr>
<tr>
<td></td>
<td>protection - night-time lighting</td>
<td>availability of night-time lighting</td>
<td>0  no night-time lighting available</td>
</tr>
<tr>
<td></td>
<td>protection against bad weather</td>
<td>degree of shelter within the space</td>
<td>0  non or very limited shelter (providing shading)</td>
</tr>
<tr>
<td></td>
<td>relaxation - natural element</td>
<td>availability / amount of natural elements in or around space (natural light, green, water etc.)</td>
<td>0  non - very limited natural elements</td>
</tr>
<tr>
<td></td>
<td>relaxation - clean and maintained environment</td>
<td>degree of maintenance of urban space</td>
<td>0  not maintained</td>
</tr>
<tr>
<td></td>
<td>relaxation - human-scale interface</td>
<td>availability / amount of human-scale interface within urban space</td>
<td>0  non-human scale/overscaled</td>
</tr>
<tr>
<td></td>
<td>relaxation - staying possibilities</td>
<td>available / amount of elements for seating, leaning or lying down</td>
<td>0  no seating</td>
</tr>
<tr>
<td></td>
<td>relaxation - air-control and optimization</td>
<td>availability of air-control (micro-climate) and optimization facilities/mechanism</td>
<td>0  not available in the space</td>
</tr>
<tr>
<td></td>
<td>amenities/services e.g. food, drink, toilets</td>
<td>availability / amount of amenities/services e.g. food, drink, toilets provided within or around urban</td>
<td>0  non available</td>
</tr>
<tr>
<td></td>
<td>passive engagement</td>
<td>availability of supportive spatial layout between staying space and view / focal points</td>
<td>0  spatial layout does not support passive engagement</td>
</tr>
<tr>
<td></td>
<td>active engagement</td>
<td>existence of special element/ visual focus / special activities within space</td>
<td>0  (spatial layout of) minor part supports passive engagement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1  (spatial layout of) major part supports passive engagement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0  none present</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1  one or two minor installations, statues or fountains</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2  major interactive installations; free performances/activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC comfort (protection &amp; relaxation)</td>
<td>protection against motorized traffic</td>
<td>degree of pedestrianization</td>
<td>0  space is overlaid by motorized traffic / not suitable for pedestrian traffic</td>
</tr>
<tr>
<td></td>
<td>protection against crime - security</td>
<td>availability of security measures e.g. security personals, CCTV, self-policing layout etc.</td>
<td>0  not exist</td>
</tr>
<tr>
<td></td>
<td>protection - night-time lighting</td>
<td>availability of night-time lighting</td>
<td>0  no night-time lighting available</td>
</tr>
<tr>
<td></td>
<td>protection against bad weather</td>
<td>degree of shelter within the space</td>
<td>0  non or very limited shelter (providing shading)</td>
</tr>
<tr>
<td></td>
<td>relaxation - natural element</td>
<td>availability / amount of natural elements in or around space (natural light, green, water etc.)</td>
<td>0  non - very limited natural elements</td>
</tr>
<tr>
<td></td>
<td>relaxation - clean and maintained environment</td>
<td>degree of maintenance of urban space</td>
<td>0  not maintained</td>
</tr>
<tr>
<td></td>
<td>relaxation - human-scale interface</td>
<td>availability / amount of human-scale interface within urban space</td>
<td>0  non-human scale/overscaled</td>
</tr>
<tr>
<td></td>
<td>relaxation - staying possibilities</td>
<td>available / amount of elements for seating, leaning or lying down</td>
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<td></td>
<td>relaxation - air-control and optimization</td>
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<tr>
<td></td>
<td>amenities/services e.g. food, drink, toilets</td>
<td>availability / amount of amenities/services e.g. food, drink, toilets provided within or around urban</td>
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<tr>
<td></td>
<td>passive engagement</td>
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<td></td>
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<td>1  (spatial layout of) major part supports passive engagement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0  none present</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1  one or two minor installations, statues or fountains</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2  major interactive installations; free performances/activities</td>
</tr>
<tr>
<td>(AE) engagement - (passive &amp; active)</td>
<td>1,5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(AD) discovery and display</td>
<td>discovery unusual space</td>
<td>degree of contrast of apperance with surrounding context or distinctive from similar categories</td>
<td>0  non or unobvious contrast</td>
</tr>
<tr>
<td></td>
<td>discovery unusual space - flexibility</td>
<td>availability of change mechanism e.g. flexible, adjustable design within space</td>
<td>0  not available</td>
</tr>
<tr>
<td></td>
<td>discovery unusual activities</td>
<td>availability / amount of animation programs within space</td>
<td>0  non present or selten</td>
</tr>
<tr>
<td></td>
<td>discovery different people</td>
<td>existence of amenities for different social groups to display themselves</td>
<td>0  none present</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1  temporary: available through culture-oriented programs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2  (part of) space permanently caters to alternative uses or user groups (subcultures)</td>
</tr>
</tbody>
</table>

Table 2.1 Assessment tool for urban space qualities
Source: illustrated by author
A visualization tool is developed so that the result of the assessment of a specific urban space can be visualized and more conveniently compared with that of other spaces, an example is shown below:

![Visualization Tool Example](image-url)
2.3. **External features of urban space**

The previous framework addresses the urban space qualities structured by the rule through which face-to-face interaction is formed. As the definition of urban space in this research emphasizes both face-interaction and that between possibly diverse groups of people, concepts proposed by scholars about spatial typologies with similar characteristics have also been reviewed. These include concepts of e.g. “Single-minded” and “open-minded” spaces by social scientist Michael Walzer(1986), loose space, specialization of space, “liminal space”, “Inclusive space” etc.. Especially, this review provides notions about some external features of urban space, which help to identify and classify possible urban spaces in large-scale MXDs.

“Specialization” refers to the transformation of space towards particular human activities (Zeidler, 1983). People specialize spaces as specialization and adaption to function enable more effective solutions to functions and allow a more efficient use of the environments. However, specialization renders a species unable to cope with or adapt quickly to such changing environment (Zeidler, 1983). Highly specialized space – spaces made for particular activities- are likely not unable to embed other activities and people. As Lefebvre also addresses, when space is determined and demarcated, it “necessarily embraces some things and excludes others”(Lefebvre, 1991, PP-99). Therefore, it is reasonable to say that the urban quality of an urban space is significantly influenced by the degree to which a space is (supposed to be) functionally specialized or determined - the more a space is specialized (for particular type of human activity), the harder that it can become a place for interactions of large amount and diverse groups of people.

2.3.1. **Loose space**

The notion of “loose space” has been proposed by Franck and Stevens (2007, pp-23) to refer to an ideal type of inclusive urban space. Loose space is defined by them as space which does not have a prescribed use or users - it is the lack of a committed, determined function that encourages greater potential for a diversity of occupants and activities (ibid.). Tight space, by contrast, is fixed, physically constrained or controlled in terms of the types of activities that can occur there. While spaces of commercialization tend to prescribe and homogenize urban activities and identities, and “place people in the role of passive consumer rather than active creator or participant”, “loose space is a space apart from the aesthetically and behaviorally controlled and homogeneous “themed” environments of leisure and consumption where nothing unpredictable must occur.

2.3.2. **External features of possible urban space**

The notion of loose space also addressed some types and examples of loose spaces. From these notions, several major features of space characterized by variety uses and users can be identified:

1) **Spaces comprising various circulation routes or land uses** – A greater variety of streets and land uses stimulate the emergence of loose space (Frank and Stevens, 2007). Mixed-use neighborhoods have been addressed as a possible example as they do not have a “tight, singular relation of form to function”. Besides, “urban environments which are composed of many different, densely interconnected and overlapping circulation loops provide more opportunities to turn ... and allow individual spaces and people to be encountered in different sequences, undermining the possibility of strict control over movement (Alexander 1965; Dovey 1999), while encouraging the “messy vitality of the metropolitan condition”(Frank and Stevens, 2007, pp-6).
2) Spaces intended for public use e.g. streets, plazas, and squares — spaces intended for public use, even though often conceived to serve particular kinds of activities and actively overseen by municipal authorities, they are often open to a variety of uses beyond the ones intended (ibid).

3) “Left-over spaces” e.g. empty lots, abandoned buildings, tunnels, spaces under lifted highways — spaces which are usually publicly owned, yet often lack conventionally appealing features and therefore do not have intended/officially assigned uses. These leftover spaces open for new uses and new meanings (ibid). The existence of such spaces may sometimes be temporary, in the process of continuous urban development and regeneration, and may be involved in large-scale MXD projects.

4) Temporary loose space through events

Arguing that ‘the looseness and tightness of space are related conditions, emerging from a nexus of the physical and the social features of a space’, Franck and Stevens (2007) points out that loose space can become tight space and vice versa due to changes in the ‘form, regulation and use’ of a given space and proposed some activities through which loose spaces can be created. Importantly, they point out that both physical features and activities of people a space can contribute to the making loose space: while confirming that certain physical features such as flexible and porous designs, connectivity and use of elements and symbolism can contribute to loose spaces, they address particularly people’s activities as a way through which spaces can be “loosen”, and in most of the times, ‘people create looseness’ — and through the lack of rigid controls, rather than by changes to the materiality of a space. This point is much address recently by Smith (2016), who investigated the function of organized events as a particular way of loosening space. He identifies four key mechanisms: 1) Events provide opportunities to introduce new rhythms to a space by encouraging a decelerated pace and a varying tempo of movement, which allow people to interact more easily; 2) Events can produce interactivity- during street events people are more likely to stop and talk to each other. This might be essentially related to the fact that events provide “stimulus” for “triangulation”. As is observed by Stevens and Shin (2014), staging festivals on closed roads increases face to face encounters.; While large, planned events are sometimes seen as passively consumed spectacles that restrict space, some scholars including Stevens and Shin (2014) and Morgan (2008) suggest that structured events can stimulate a whole series of ‘secondary activities’ or “fringe events”, including lots of spontaneous social interactions (see Smith, 2016). As such, an event may allow interactions in an area much larger than its official venue; 3) Recirculation – event may, assisted by the enclosure of roads and the disruption of normal flows, change the way people circulate in a space, thus provides new possibilities for different users to interact; 4) Finally, events help to change the sort of uses and users of a space. Events may encourage different activities not normally seen and attract “people from minority groups who would not otherwise come”, and thus “enhance participation from a wider range of people” (Smith, 2016). In short, events have the potential to temporarily transform the spaces they occupy — physically, socially and symbolically, introducing related changes in regulation, different behaviors, rhythms, flows and people in a space. Therefore, a space’s possibility hosting events should be also given much attention, as this is a critical mechanism through which temporary urban qualities and urban spaces can be created.

These notions offer a way of identifying possible urban space typologies within mixed-use developments: we may identify them through identifying spaces that comprise various circulations or multiple uses, spaces intended for public use, while remembering possible leftover space, and paying attention to spaces that may become temporary urban spaces through hosting events. We may classify urban spaces according to the degree to which the uses and users of a space is preset, this will be discussed in-depth in Chapter IV.
Chapter 3. Large-scale MXD as a Process of Urban Space Making and Shaping
Chapter 2 has identified the core value of contemporary urban space and aspects of its qualities. Besides, a tool has been developed, through which the re-framed urban qualities can be accessed. On this basis, we may begin to investigate the mechanism of modern large-scale MXD projects in making and shaping these redefined qualities. As has been addressed in the first chapter, one critical scope adopted by this research is to recognize large-scale MXD as a process of urban space making and shaping, as the (potential) urban spaces of our investigation are made and shaped in the process where the whole a large-scale MXD is created and operated. Therefore, the investigation must start from a comprehensive understanding of the characteristics of large-scale MXDs, and the internal logic and external factors that influence the process of large-scale MXD.

First, this chapter provides a literature review on the basic theories that contribute to a better understanding of the essence and characteristics of large-scale MXDs. Second, literature is reviewed regarding the development process and logics of large-scale MXD, and critical mechanisms and factors that may influence urban space qualities. Third, four types of potential urban spaces are proposed by this research, which can be involved in large-scale MXDs. Finally, this chapter develops an analytical framework for the mechanisms and factors linking the process of large-scale MXD and possible urban space qualities of space within it, which guides and serves the following empirical study in the case of Beijing.

3.1. Understanding large-scale MXD
3.1.1. Definition
Brief history
Mixed-use was common in traditional patterns of human settlements in both western and eastern contexts (Zeidler, 1987; Schwanke, 2003). Since the beginning of the 20th century, the industrial revolution, Modernism movement, and functionalism planning ideas and zoning practices has led to separation of land uses into different parcels, which undermined possibilities for mixed-use structures in this period. Issues of Modernism planning ideology such as suburbanization and decline of city center have been gradually recognized and criticized. In this background, mixed-use structures came back to the city – yet with a fully different scale, which has been enabled by new technologies such as steel and concrete, elevator, escalator, air conditioning etc., and fueled by market ambitions. The completion of New York’s Rockefeller center in 1939 manifested the (re)birth of mixed-use structures in modern times as counterattack of the modern functionalism planning ideology. Following it came the intensive development of large-scale MXDs since the 1960s in the USA and Europe. Since the 1980s, with the economic boom of several Asian countries and regions, development of major MXDs place in fast-developing Asian urban contexts, especially in Hong Kong, Japan, and Singapore. Until the late 1980s, first modern large mixed-use structures appeared and began to boom in Chinese cities. Meanwhile, the concept if MXD is becoming increasingly popular in the global urban world in both fields of real estate industry and urban development.

Definition
With first projects started in the late 1980s, the modern MXD is much of an imported concept in China, and much influenced by non-local experiences and established models, especially that from American and other regions of Asia e.g. Hong Kong. In the Chinese context, such developments are ambiguously defined. Mostly of its definitions have been provided by the real estate industry. Regarding the situation in China, this research follows the definition that mixed-use development (MXD) is “a real estate project with planned integration of some combination of retail, office, residential, hotel, recreation or other functions” (ICSC, NAIOP, NMHC & BOMA, 2007), mixed-use development is viewed as “essentially an aspect of the internal texture of human settlements” (Rowley, 1996, PP-86). Combining these notions, large-scale MXD to be discussed in this research has the following characteristics:
• Real estate project - It is a real estate project;
• Multiple uses - It must comprise at least two primary uses i.e. uses that are substantial enough to attract their own markets;
• Coherently planned - Each use component must be developed in conformance with a coherent plan;
• Large-scale - It must reach a considerable scale i.e. having more than 100,000 sqm total floor area[^1]

3.1.2. Models for describing MXD

Mixed-use structures demonstrate numerous physical forms. To reach a better understanding of it, it is fundamentally important to develop a proper way through which they can be described and classified. Literature has been reviewed that propose ways and description models for the numerous physical manifestations of mixed-use developments. The Urban Land Institute (ULI) and scholars such as Andy Coupland (1997) provide a basis for a general understanding of mixed-use development, mainly in the American and European context. Importantly, two conceptual models have been developed and consistently referenced in the literature. The first comprehensive conceptual model was developed by Alan Rowley (1996) while the second by Eric Hoppenbrouwer and Erik Louw (2005) as an expansion and modification of Rowley’s ideas in a more systematic way (Rabianski, 2009), both based on the view that mixed-use development is essentially an aspect of the internal texture of settlements. Starting from this, key features of settlement texture and other influential aspects are proposed and integrated in these models.

Accordingly, the physical form of a mixed-use development can be seen as a function of its uses, scale, location and urban texture. Besides, three major external factors have been proposed, that influence the form of mixed-use development: public policy and regulations, property markets and cultural ideas and values (Rowley, 1996; Hoppenbrouwer and Louw, 2005). These notions serve as important references in this research in developing a theoretical approach to understanding and describing mixed-use structures in Beijing. Following parts present key features and aspects of mixed-use structures, which are seen of great significance in defining their physical forms, and possible ways of classification.

3.1.3. Essential characteristics and major contextual influences

Understanding the essence of contemporary large-scale MXDs and the roles they are supposed to play is the starting point of understanding the relationship between MXD and urban space. As it is the essence and roles of large-scale MXDs that determine their goals and characteristics, as well as the actors and factors shaping them.

Importantly, literature suggest three major aspects of contextual influences that shape large-scale MXD projects: 1) public policy and regulation e.g. land use planning, subsidies; 2) property market and 3) cultural ideas and values. "Property development occurs within a three-part framework comprising: 1) the resources for development, derived from both the private and public sectors and the economy generally; 2) the politico-juridical rules which limit the construction of development opportunities; and 3) the cultural ideas and values that people hold about what they should build, what they should occupy and what kind of environment they should seek (Healey and Barret, 1990). This implies the three major roles a contemporary mixed-use project plays: A large-scale MXD is simultaneously: 1) a real-estate product, 2) an urban area/project and 3) an artifact designed by men within a specific social and cultural context. These essential characteristics also indicate three groups of major actors: “The processes of city building are initiated and carried out by three main sets of interests: (1) profit-seeking private developers and investors; (2) public authorities; and (3) ‘voluntary’ organizations, groups and individuals (Ambrose,
1994, pp-37), while “the motives of these parties are varied and frequently contradictory, calling for balance and compromise” (Rowley, 1996).

3.1.3.1. Large-scale MXD as real-estate product
As a product or commodity, financial gain is usually the main goal of most MXDs, especially of those entirely developed by private entities (Schwanke, 2003). To achieve its marketability as a product, an MXD project must be feasible for its makers and be made and shaped in response to the market potential determined by the supply-demand relationship within a certain geographical region. Therefore, the potential market demand (need for space for certain activities of certain people) is a fundamental factor in enabling and shaping MXD projects: The macro economy trend and market potential of a defined region and time determines the possibilities of large-scale MXDs and their profitable use components and consumer groups. Simultaneously, as a product, it must serve the needs of potential consumers – offering “selling points” desired by them to achieve marketability.

Large-scale MXD is characterized by both strong potentials and risks, both are essentially related to its unusual scale and multi-use nature. Because of the complexity due to the scale and multiple uses, large-scale MXD is a demanding task for developers. Therefore, it can only be successfully developed by developers with sufficient experience and capacity. Only large, experienced and diversified developers (or joint entity of smaller developers) will likely undertake large projects (ibid.).

On one hand, the size and multi-functionality of large-scale MXD may result in the economies of scale (through size and shared usage of facilities) in both phases of development and operation, they also provide possibilities of making a more unique place and more competitive product with better market performances through unusual combination of uses and their market synergies, as well as through unique urban design and operation, which also allows a long-term profitability of the project. Besides, as MXDs may also achieve some goals of urban authorities such as urban revitalization, densification, tax-revenue or place-making, they may be favored by city authorities and have more
chances in the approval process in project initiation. On the other hand, the difficulties and disadvantages confronted by developers of large-scale MXDs also resulted by its very nature – its size and involvement of multiple use components. Overall, the disadvantages are all related to the huge complexities brought by these natures in all aspects i.e. the initiation, financing, planning and design, construction, management, operation, and marketing.

### Table 3.1
Characteristics of large-scale MXD as real-estate project
Source: summarized by author based on Schwanke (2003)

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>place-making, synergy, economies of scale, operational efficiency, impact on community</td>
<td>complexity in all aspects, the developer team’s job is much tougher, a broader, deeper expertise required</td>
</tr>
<tr>
<td>more rapid development of the site’s potential through offering multiple uses/product lines-enabling a faster absorption schedule, thus increasing the value of investment and reducing land carrying costs</td>
<td>financial complexity and risky: calls for extraordinary captial resources, higher front-end costs, heavier upfront negative cash flows; takes longer than single use projects and more financially risky</td>
</tr>
<tr>
<td>differentiating products and encouraging superior design through combination of uses and provision of superior amenities or usual places, making the product more competitive</td>
<td>Complexity and difficulties in planning and design; higher construction costs</td>
</tr>
<tr>
<td>economies of scale in development through shared infrastructure and economies of scale in operation (management, maintenance, marketing)</td>
<td>Complexity and difficulties in management / maintenance, addressing needs of multiple stakeholders</td>
</tr>
<tr>
<td>superior project performance (e.g. higher rents or prices, higher occupancy) - can be acheived by either the creation of a special place or synergies of uses supporting each other</td>
<td>Complexity and difficulties in marketing /promotion</td>
</tr>
<tr>
<td>greater long-term appreciation in land and property values -special place through innovative mix of uses and urban design</td>
<td>Difficulties finding and acquiring suitable uses, assembling land and parcel, negotiation through zoning regulations, requiring more political patience</td>
</tr>
<tr>
<td>meeting some goals of urban development e.g. achieving higher density or contribution to community - support of city authorities</td>
<td></td>
</tr>
</tbody>
</table>

#### 3.1.3.2. Large-scale MXD as urban project

First, created as a project within the city, the making of large-scale MXDs is inevitably influenced and constrained by the local regulations and policies set by public authorities e.g. city government and urban planning sectors.

Second, as sometimes large-scale MXD is also viewed as an opportunity of achieving public objectives, public sectors can also actively engage and intervene in the making of MXD projects. Public sectors aiming for urban development is increasingly viewing MXD as an opportunity for significantly improving the urban landscape in both urban and suburban environments: 1) MXD is considered a feasible and effective approach in creating a new physical urban environment on a large scale to overcome blighting influences of adjacent areas; 2) MXD can be used to achieve higher densities, creating more amenities (functional infill), as well as open spaces and vitality (improving spatial qualities) e.g. creating new places in suburban areas; 3) MXD can stimulate the economy, generate jobs and increase the areal tax base. Densely packed newly established uses attract workers, visitors, and business, which boost the economy while also increasing the value of surrounding land and property; 4) With the concentration of land uses, MXD can be used to avoid undesirable growth patterns e.g. sprawl, costly expansion of infrastructure e.g. roads, sewers, water systems etc., and reduce the use of private cars while promoting public transportation, pedestrian-oriented traffic, and other public amenities (Schwanke, 2003; Coup-land, 1997). Much of these advantages are in accordance with contemporary planning.
ideas such as smart growth. Therefore, creating more attractive urban environments is often the primary objective for most public sector involvement in MXD (Schwanke, 2003). Large-scale MXDs are thus actively shaped by public sectors to fulfill these objectives in various ways.

Third, regarding the complexity of large-scale MXDs, participation or support of public sectors is sometimes necessary to make the project feasible. The roles and interventions of public sectors in their participation in an MXD project are determined by their objectives, needs and the costs and benefits of alternative actions of participation (ibid.). Although the public sector can play a “pivotal role” in MXD (Schwanke, 2003), it is important to recognize that the degree of public sector’s involvement varies in different geographical and political conditions, as Schwanke (ibid.) points out, in cities where governments are very pro-business, “the need to renew city centers through MXD is left to property owners or private developers, which creates a climate not always conducive to development” (ibid.).

Overall, as an urban project, large-scale MXD can be significantly shaped by public sectors. The role and involvement of public sector can vary in different conditions. The interventions of public sectors on an MXD can be passive or active. Passive interventions usually include regulatory planning, specific plan and approval process, while active interventions include providing planning guidance, land/site preparation, infrastructural improvement, supporting project component or being a major development entity.

The following table summarizes possible interventions of public sectors on MXDs:

<table>
<thead>
<tr>
<th>passive - regulatory activities and tools</th>
<th>active - development incentives and tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory plan/Zoning ordinance</td>
<td>Planning guidance</td>
</tr>
<tr>
<td></td>
<td>providing zoning incentives, possibly including the creation of a mixed-use classification, providing more flexible zoning categories in the zoning code</td>
</tr>
<tr>
<td>Specific plan / design guidelines</td>
<td>Land/site preparation</td>
</tr>
<tr>
<td></td>
<td>land assembly</td>
</tr>
<tr>
<td></td>
<td>landcost writedown/tax incentives</td>
</tr>
<tr>
<td></td>
<td>land preparation</td>
</tr>
<tr>
<td></td>
<td>supportive zoning (incentive / flexible zoning)</td>
</tr>
<tr>
<td>Approval process / community participation</td>
<td>Infrastructure improvement</td>
</tr>
<tr>
<td></td>
<td>provision and financing of public infrastructure: improving streets or roads, providing open space or parks, parking structure or transit stations</td>
</tr>
<tr>
<td></td>
<td>Supporting project component</td>
</tr>
<tr>
<td></td>
<td>investing in a project as one of the owners through provision of major public facilities e.g. convention center, arena, cultural facility, city hall, library etc. and/or supporting operation</td>
</tr>
<tr>
<td></td>
<td>Acting as major development entity</td>
</tr>
<tr>
<td></td>
<td>local governments become principle owners and/or master developers of the project, usually taking on primary leadership for the area, using a variety of tools and resources. Many other public agencies e.g. transit agencies, may also get involved. 1) review/selection of the development proposals 2) participating amending the zoning code 3) ensure ongoing management 4) serve as the developer’s advocate</td>
</tr>
</tbody>
</table>

Table 3.2
Possible interventions of public sector in MXD
Source: summarized by author
3.1.3.3. Large-scale MXD as man-made artifact

Artifacts made by men are both functional and meaningful. Beyond functionality, they also involve another dimension that gives the artifact an importance in the realm of cultural identity or meaning (Hillier, 1984). This dimension is reflected by the influences of cultural ideas and values on large-scale MXDs.

• Global and local culture - MXDs are shaped by value and preferences of their makers (directly) and users (indirectly) formed in their cultural backgrounds. Direct influences come from the cultural background and value of critical makers of large-scale MXD projects, which include developers/investors, architects/designers, and public authority. In the condition that foreign developers and/or architects are involved, the global culture may conduct a strong influence in shaping the MXD project. Indirect influences come form the cultural background and value of intended users of MXD projects, which usually related to the local cultural formed through history - regarding people’s preference of how a building or space should look like, and how it is used.

• Personal preference of makers - importantly, the developer’s personal and ego gratification can also be a driving force in many cases of MXD projects, for the reason that such development allows the developer to have a greater and lasting impact in shaping the city (Schwanke, 2003). Therefore, the personal preferences of makers e.g. developers and architects can not be ignored, as they may also significantly shape large-scale MXD projects.

• Landmark nature - Primarily thanks to its scale, large-scale MXDs are born as landmarks with a potentially strong image and visual impact. Through height or size in contrast with their surroundings, it acquires the potential of becoming a landmark – a huge symbol transmitting messages and expressing meanings shaped by its makers. Whether its makers are aware of this or not, the landmark feature of large-scale MXDs is bound up with their existence. Addressing this, Koolhaas introduced the term „automonumentality“ – a structure beyond a certain critical mass or size that automatically becomes a monument, a symbol. In S,M,L,XL’s dictionary entry “Automonument”, Koolhaas quotes his own argument from Delirious New York: the monument “merely is itself and through sheer volume cannot avoid being a symbol – an empty one, available for meaning as a billboard is for advertisement” (Koolhaas, 1993). Especially, he also addressed the disconnection between its external appearance and internal activities – when the distance between core and envelope exceed a critical mass (see “Lobotomy”) – and therefore the freedom of big architecture in arranging its envelope and internal world. Because of the potentially large impact caused by these features of “automonumentality” and landmark, image and symbolic meaning are usually considered of crucial importance in large-scale MXD by both its makers and other related organizations.

• Symbolic sensibility - The landmark nature of large-scale MXD leads to its symbolic sensibility. On one hand, makers tend to take advantage of its landmark nature to achieve desired image and effects that help to achieve their objectives. They may be planned or created at representational locations and time occasions: For private developers, images are shaped to generate attraction and profits; For public sectors/governments, large-scale MXD may be utilized to create an image of milestone for political success, attraction, or statement e.g. symbolizing a “modern world city”; For architect, large-scale MXD can be flagship project with eye-catching designs or experiment of various spatial/social ideas. On the other hand, because of the potentially large impact of large-scale MXD on the surrounding context, they tend to be strongly influenced by the symbolic needs of the context of urban areas where cultural meaning is sensible. The existing or conceptualized symbolism or image of an area are critical factors that may strongly influence the design and image a large-scale MXD project within it.

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2 Landmark form is best expressed through both pure and relative height giving the potential to express eternity. (Clerici, Minorowicz, 2009)
3.2. Large-scale MXD as the process of urban space making and shaping

3.2.1. Development process of MXD

Aiming to clarify the various mechanisms that influence the process of large-scale MXDs and possible urban spaces within them, the investigation of the process of large-scale MXD has been conducted based on the review of two important books. The first book - Mixed-use Development Handbook by ULI (2003) - provides a systematic introduction about mixed-use development in both American and global contexts. The second book, written by Chinese scholar Dr. Wang Zhendong (2012), provides an insight on the development process of mixed-use buildings in specific context of China. In spite of contextual differences, four logical stages can be identified regarding the making process of a mixed-use development project:

1 - Initiation: this stage determines the framework development condition of a large-scale MXD, which involves the identification of development entity, objectives, the site, and the potential of developing various uses on that site. (Schwanke, 2003, PP-31). The process continues to the next stage when a mixed-use project’s potential of achieving the desired objectives is believed by the development entity;

2 - Conceptualization: this stage determines the fundamental development concepts and approaches to achieve the development objectives. The development concept includes interrelated dimensions of: 1) use concept – the mix (type) and scale of uses and intended user groups; 2) spatial concept – initial spatial configuration; 3) management concept - determine management structure and tasks; 4) marketing concept and 5) financing and phasing concept. The resulted development concept or program must be marketable, feasible and financeable, and also be able to receive public approval. As the whole concept is set, the role of each specific space within the development is determined as well.

3 - Implementation: this stage involves the specific strategies and activities in the aspect of financing, design, management and marketing to fulfill and realize the concept of the development, which include: 1) the development entity’s determination of major tenants for the office and retail components, and major operators for hotel components (ibid. PP-235); 2) Detailed design of individual use components and common spaces, as well as the preparation of design documents for construction; 3) Determining the management strategies; 4) marketing activities during development.

4 - Operation and use: the stage starts after the completion of construction. It involves 1) the conduction of operation, management and maintenance activities, 2) marketing after completion e.g. opening events and promotions by both the whole project and tenants. Besides, this stage may also involve renovation and redesign of a large-scale MXD project. The stage of operation is also the phase in which using activities are involved – the users (tenants, external people, organizations) begin to shape urban space with their activities.
Image 3.3
Overview: development process of large-scale MXD
Source: illustration by author
3.2.2. Initiation

The stage of initiation involves the determination of the development entity, objectives, and site for a large-scale MXD project. Many mixed-use projects involve both a landowner (often a public entity) that is looking for new uses for a site and a private developer that is looking for a site for a mixed-use concept. In other cases, a development entity might be searching for a site for a mixed-use project but may not be certain about the exact mix of uses. Thus, the development process often follows a convoluted path (Schwanke, 2003). Critical site-related features determined in this stage include: 1) the site condition i.e. its size and shape; 2) the surrounding context (transportation and pedestrian network, land use, form and density of surrounding urban patterns, building culture, and existence of magnet land uses or public facilities or infrastructure), 3) regulations and policies attached to site or project (may include financing, space, function, management, marketing, operation etc.); and 4) market potential (profitable uses and target users). Critical aspects related to development entity determined in this stage include the nature of the development entity (public/private/joint) and its objectives. Together, the site, the development entity and its objectives form the framework development condition of a large-scale MXD project.

### 3.2.2.1. Determining the development entity and objectives

**Development entity** - Development entity of a large-scale MXD is the entity that initiates the project. A mixed-use project usually involves numerous players from private and public sectors. Accordingly, the development entities of mixed-use projects can be generally categorized as landowners, public section organizations, and private developers (real estate companies and major tenants). Each of these entities has different objectives. Internal logic and external condition in determining development entity:
1) First, as is discussed previously, the development entity must be capable enough to conduct the complicated large-scale MXD projects. Therefore, the development entity is restrained by available capable developers in a regional in the time where the project is initiated. Only large, experienced and diversified developers will likely undertake large projects (or in some cases by a team composed of several smaller developers, see Schwanke, 2003). 2) Second, the development entity must be capable to achieve the objectives of the MXD. Therefore, the development entity can also be influenced by the urban regional development plan and goals attached to the site of the large-scale MXD: For instance, when an MXD project is planned as part of a significant urban development plan of an area with special public or governmental objectives, it may require much involvement of the public sector, which increases the possibility that the public sector becomes joint developer or directly acts as the development entity of the MXD. Therefore, site-related regional planning and development goal may also influence the type of development entity of large-scale MXD within the region.

Development objectives - the development objectives of a MXD project are largely determined by the nature of development entity, while accounting the regional development objectives assigned to the site of MXD through planning ordinance and/or other policies. Private and public development entities may have significantly different objectives in large-scale MXD (ibid.):

Private developers and objectives - Private developers and property companies are primarily motivated by profit. “They are in the business of seeking out profitable development opportunities and continuously looking for good sites in strong market areas that can support new development”(ibid.). Financial gain is thus always a primary objective and concern of private developers. Typically, the ways that an MXD makes financial profit involves selling (whole or part of) the development or holding it for long-term financial returns after project completion. However, on the other hand, the developer’s personal and ego gratification has also been a driving force in many cases of MXD projects, for the reason that mixed-use development allows the developer to have a greater and lasting impact in shaping the city (ibid.). As such, the objectives imposed on an MXD by private developers account both financial gain and personal objectives and ego or personal preference of developers. Besides, the size, capacity and nature of the private developer also affect the objectives and nature of the project. Objectives of private development entity through large-scale MXDs may include:

- Financial gain: 1) selling part or all of the projects shortly after development; 2) holding the property for a long term; 3) other ways of financial gain;
- Developer’s personal and ego gratification;

Public developers and objectives - Because of the critical role the public sector can play in initiating the project, its objectives are often the primary shapers of the development. One characteristic of the public sector is that profitability is not always the primary determinant in establishing mixed-use projects. Mixed-use projects often fit nicely with redevelopment objectives, as they both usually involve the creation of lively urban environments. Creating more attractive urban environments is usually the primary objective for the most public sector in mixed-use development (ibid.). Objectives of public sectors through large-scale MXDs may include:

- Urban revitalization – to enliven/redevelop an area that is underused or needs revitalization;
- Suburban place-making – to establish a sense of place and identity in newly developed areas;
- Economic development and tax revenue – to stimulate the economy, generate jobs, and increase the tax base;
- Smart growth and mobility – concentrating higher-density MXD around transit stations to avoid undesirable growth patterns e.g. urban sprawl;
Besides, developers and cooperating architects from different cultural contexts may have different ideologies, objectives, and paradigms in the creation of large-scale MXDs. Therefore, the cultural background (international/local) of developers may also play an important role in shaping an MXD.

3.2.2.2. Determining the site

Overall, the site of a large-scale MXD must support the objectives of its development entity. For most MXDs initiated by private developers, this usually means the feasibility and marketability of MXD projects developed on site. To achieve the desired feasibility and marketability, sites of MXD are usually expected to have the following characteristics:

1) Size and density - The site of large-scale MXD must allow considerable size and density of development - The sites of large-scale MXDs are usually substantially sized and/or allow for relative high-density development to accommodate multiple uses. A large amount of space required for the site can be either supported by its significant acreage or substantial allowable density. Small sites can also be available for MXDs when high development density is allowed. Very generally speaking, central city sites are usually smaller, allowing higher density and with higher land price, while suburban sites are usually larger, with lower planned density and land price.

2) Accessibility and exposure - The site for mixed-use projects is expected to have excellent access and good exposure, as large mixed-use facilities are likely to generate considerable amount of auto and pedestrian traffic, which necessitates that the site to be proximate to existing travel patterns and access points. Site access and proximity to streets and/or transit are considered fundamental. Convenience connection to the urban transportation network is definitely a marketing advantage for real-estate projects. Moreover, it is particularly important for large-scale MXDs, as they necessitate relative stronger transport infrastructure and connections to support the traffic flows generated by the population density they embrace. The existing or promised access to the transport network is one critical criteria in determining a possible site of large MXDs. A large MXD, as may be concluded by citing Koolhaas (1993), “gravitates opportunistically to locations of maximum infrastructural promise”.

3) Jurisdiction favoring mixed-use - The sites must be located in a jurisdiction that is predisposed to favor such development and allows flexibility or mixed-use zoning (ibid). The site parcels of a mixed-use development must be zoned with or allow mixed or multiple uses. The sites or locations of large-scale MXDs are largely influenced by the regional-level planning ideas and activities, especially land use plan and zoning which define where such land parcels are available.

4) Market potential - The site/location of an MXD must have, or be promised with market potential - Such potential can be enabled besides proper land value the short supply of certain use spaces in the time when the project is initiated, and/or large demand in the near future promised by growth of economy, urban development, population and/or potential consumers for certain use activities in a defined region. The market analysis assesses multiple market potentials, which involves the processes of data collection, field research, and statistical analysis to determine supply and demand for each potential use. The result of the site-based market analysis serves then as one critical reference/factor in determining the final program of the project.

External condition influencing the site of large-scale MXD:

1) Land provision in regional planning - As large-scale MXDs must be created on land parcels allowing such developments, the location (site) of MXD is largely framed by parcels allowing such type of development in the regional plan.
2) **Transportation network** - The existing or planned transport network influences the location of MXD sites: The site for mixed-use projects usually have excellent access and good exposure to the transport network, and can thus be influenced by this factor.

3) **Market potential** - The market potential of spaces for certain use activities in a region, which is caused by current short supply and/or large demand in the future (which is usually promised by economic and/or population growth), creates possibilities for large-scale MXDs to emerge within the region.

**Types and characteristics of sites**

As has been addressed previously, possible locations of MXDs are various, ranging from dense central city areas to suburban business districts to master-planned communities and districts (see Schwanke, 2003):

- **Central city sites** are usually involved in (re)development of underused areas in the city center, the site is usually small due to high land values and difficulties in assembling the large site. The project may be involved as part of a special (redevelopment) plan.

- **Transit station sites** are usually near or over subway/light rail transit stations, which is characterized by excellent access, higher density zoning, or zoning encouraging a variety of uses. Such sites may be involved in the improvement plan of regional transportation hub.

- **Industrial sites** include the site of e.g. underused railroad or other industrial holdings in or near the central city. Such types of sites may be frequently involved in contemporary plans developed for cities undergoing the functional transformation.

- **Suburban sites** are usually involved in developing the underused but well-located site into suburban centers. Large-scale MXD provides a possible solution for the market demands on offices and hotels, and for the public sectors’ demand for residential and retail uses.

Within the context of urban planning, MXDs frequently happen in conditions of 1) boosting urban centers comprising commercial and civic core; 2) urban revitalization — MXDs are planned as strategies to revitalize blighted/underused central urban areas with functional infill and creation of attractive places; 3) Suburban place making — MXDs providing a focus of growth, establishing centrality with strong identity and sense of place. While such notions suggest the types of MXD sites in a western context, careful investigation is needed within the specific context of Beijing.
3.2.3. Conceptualization:
In the process of conceptualization, the development team of a large-scale MXD works out a development concept or development program under the framework development condition as a result of the project initiation stage. The development concept consists of interrelated aspects of use, spatial configuration, management, and marketing concept, as well as the financing and phasing plan for the development. The whole development concept must be marketable, feasible, financeable, following the development objectives and respond to the site condition and related markets.

The key aspects of the conceptualization include:
1) use concept – determining the types and scale of uses, and intended user groups;
2) spatial concept – determining the initial spatial configuration of the project - the overall design concept, massing, and positioning of use components, service spaces and organizing spaces, arranging external and internal circulations, entrances and access points.
3) management/maintenance concept: determining the structure, and the management tasks of each space or area within the project;
4) marketing concept: developing marketing material and marketing strategy for the whole project and use components.
5) financing concept: the financing plan for the whole project and each component and aspect.
For each aspect, the conceptualization follows the general logic:

- **Framework development condition as a basic condition**
The conceptualization of each aspect of the development program is conducted within the overarching framework development condition. That is, the conceptualization of each aspect are restrained by the conditions related to site, development entity in a given time and context, and serves the development objectives of the project. The activities of conceptualization in each aspect is influenced by the framework development condition.

- **Interrelated aspects**
The conceptualization of each aspect is interrelated with other aspects of the development program. Therefore, the generated development program is a coordinated and compromised result of the conceptualization of use, spatial configuration, management/maintenance, marketing and financing aspects of the project. The whole concept must be technically, politically and juristically feasible, financeable and marketable. The activities of conceptualization of each aspect are influenced by the other aspects.

- **Project- and component level**
As is especially characterized in MXD projects, the conceptualization of each aspect always involves considerations on two levels: the project level and the component level. For the development entity, the success of the project as a whole is fundamental and can positively contribute to the success of its components and parts, while vice versa, the functionality and success of each component is also necessary for the functionality and success of the whole project. Therefore, the conceptualization always involves the intention of achieving a maximal success on the project level while guaranteeing the functionality and pursuing maximal success of each of its components.

3.2.3.1. **Use concept**
The use concept determined in this process includes:

- types and scale of uses (including cornerstone use);
- intended user groups (target market) for the MXD project;

**General logic**
First, the conceptualization of the uses of large-scale MXD is conducted within and restrained by the framework development condition i.e. the conditions related to the site, development entity and development objectives. Second, the use concept is conceptualized in accordance with the other aspects i.e. use, space, financing, and marketing. The use concept must be supported by the spatial configuration, management, marketing, and financing, while also affecting them. Third, the use concept accounts both the levels of use components and that of the large-scale MXD project as a whole.

**Uses in large-scale MXD and their characteristics**
Large-scale MXDs may embrace besides the four typical use components i.e. office, residential, retail and hotel also various other use categories e.g. entertainment/recreational, cultural/educational, and governmental/civic/infrastructural uses. Furthermore, while some types of uses may produce a considerable amount of direct revenue and primarily conceived as “money-making” use, other types of uses may be less or not directly profitable and primarily conceived to serve the development’s objectives through other ways rather than making direct profit from the market. As such, the various types of uses possible in an MXD can be classified as profit-oriented and non-profit-oriented uses. Apparently, non-profit oriented uses usually mean more financial burden and cost for the developer. Considering the feature if urban space addressed in the previous chapter, distinguishing between profit-oriented and non-profit-oriented uses is of great importance in investigating urban spaces within MXDs, as these two categories suggest different range of supported users – the profit-oriented uses inevitably specialize themselves for the groups of target consumers – the people who pay, while the non-profit-oriented
uses may provide less restricted spaces for wider range of users, which indicates potential urban qualities. The following table shows an overview of possible types of uses within an MXD project:

<table>
<thead>
<tr>
<th>Major Uses</th>
<th>Profit-oriented</th>
<th>Public service oriented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>commodity housing, live-work apartment, serviced apartment</td>
<td>social housing</td>
</tr>
<tr>
<td>Office</td>
<td>class-A office, class-B office, class-C office</td>
<td></td>
</tr>
<tr>
<td>Hotel</td>
<td>business/commercial hotel, leisure/resort hotel, convention hotel</td>
<td></td>
</tr>
<tr>
<td>Retail/Shopping</td>
<td>shops / stores, department store, shopping center / mall, power center, specialty center, outlet</td>
<td></td>
</tr>
<tr>
<td>Entertainment</td>
<td>F &amp; B services: restaurant, bar, tea house, live entertainment club, cinema, amusements and rides, athletic/health club, ice rink, amphitheatre, open air performing space</td>
<td>open playgrounds / sport fields / publi stadium</td>
</tr>
<tr>
<td>Recreational</td>
<td>exhibition facilities: art galleries, book store, small museums, performing art spaces: indoor or outdoor, international school</td>
<td>museum, library, opera house, youth club, cultural center, kindergarten, primary school, high school ...</td>
</tr>
<tr>
<td>Cultural and educational</td>
<td></td>
<td>museum, library, operahouse, youth club, cultural center, kindergarten, primary school, high school ...</td>
</tr>
<tr>
<td>Governmental/civic/infrastructural</td>
<td></td>
<td>civic and government - civic center, post office, convention center, medical - hospital, community medical center, transport infrastructure - transit stations, bus stops...</td>
</tr>
</tbody>
</table>

Table 3.3
Characteristics of uses in a large-scale MXD project
Source: illustration by author

Influences of framework development condition on use concept:

1) Nature and objectives of development entity: 1) the nature of the development entity can significantly influence the type of uses of a MXD: Profit-oriented uses are necessary for privately developed MXDs aiming for profits; while the involvement of public or institutional entities can be a very influential factor in introducing non-profit or public-service-oriented uses into an MXD: First, public entities, with objectives other than commercial and profit-making, may directly demand for (through policies or regulations) or initiate such uses. Second, non-profitable uses increase the financial burden in the development. Public and institutional entities may offer critical financial support for these uses to reduce the financial burden of private developers, which contributes to the emergence of such uses within privately initiated MXD projects. 2) Notably, although being generally profit-oriented, private developer’s personal ego and objective can also play a critical role in determining the type of uses of an MXD project, including non-profit-oriented uses.

2) Market potential - As the conceived profit-oriented uses of large-scale MXDs must be marketable to achieve the desired revenue, the potential market - which is usually identified by developer’s market analysis on the supply-demand relationship of certain spaces in a defined region and time period - is critical in determining the type, volume and target users/consumers of profit-oriented uses in an MXD project. The market positioning and target consumer are also much related to the development cost of the project. Given a limited financing capacity of development entity, high development cost, which usually characterizes large-scale MXD project, naturally drives to up-scale market and high-end users to achieve profit.

3) Site-attached planning regulations (land use types and volume)
The site-attached planning ordinance, typically the zoning plan and ordinance, regulates and predefines the available types of uses and their volume, or possibly also the intended user groups of the developed spaces within the site.
Internal logics in determining the use concept:

• Synergy for marketability

Market synergy, which is usually considered a unique feature highlighting MXD projects, refers to the fact that combining different uses may enhance the performance and profitability of all or certain use components of an MXD. Market synergy is always taken into consideration in determining which uses are to be mixed together into an MXD project. Literature suggest three general types of market synergy in mixed-use development, which are: 1) direct support (on-site market support) - users of a primary function also become user/consumer of other functions; 2) indirect support - uses benefit indirect from other uses, for example a component enhances the image of the project, which leads to faster leads-up and higher rents of other uses; and 3) place-making - a project of sufficient size, diversity and quality may create a new compelling address-becoming greater than the sum of its parts (Schwanke, 2003). ULI provides an overview on potential on-site market synergy (direct support) between uses, as is illustrated in the following diagram, retail space derives the most support from on-site uses, and may also support them. Therefore, retail is a critical use component, that is most frequently included in mixed-use projects, acting as “glue” or common roof comprising the other functions. The existence of synergy in combining uses in terms of direct/indirect support and place-making leads to two results: First, synergic uses are more likely to be mixed together in an MXD development. Especially, retail/entertainment use component is included as it can provide market support for almost all other uses and can also be simultaneously supported by them. Second, due to the market synergy, non-profit oriented uses may also be introduced into a Large-scale MXD to providing direct/indirect support and place-making, which ultimately contributes to the marketability of the MXD.

• Compatibility for marketability

Beside achieving synergy, the principle of compatibility is also considered critical in guaranteeing the market success of an MXD project. “Whatever the mix and scale of uses chosen, the uses must be compatible and appealing to similar markets. For instance, a first-class hotel operator is not likely to be attracted to a mixed-use project unless the office, residential, and retail portions of the project are planned to be equally upscale.”(ibid.) The principle of compatibility can bring conflicts within the project that are normally related to the retail portion (as the retail portion usually plays a major role in creating the image and identity for the project, however, is usually must appeal to multiple markets to be successful – which creates conflicts and problems of image); Regarding urban space qualities, compatible uses targeting similar markets indicate similar classes of users and may render a “homogeneous” rather than inclusive environment. This seems to suggest a potential conflict point for MXDs in offering ideal urban spaces which facilitate face-to-face interaction between diverse people and social groups, especially considering that lots of them tend to be positioned as high-end real estate product due to the high cost of development. As Francis (2012) describes, “too often built projects include expensive housing above commercial establishments such as Starbucks and other national chains. They frequently serve as a veil or mask for other agendas such as land speculation and gentrification”. This point should be taken a closer look at in the later empirical study.
3.2.3.2. Spatial concept

Determining the spatial concept includes:

- massing and positioning of use components, service (infrastructural) spaces and organizing spaces;
- arranging external and internal circulations, entrances and access points.

The conceptualization of the spatial configuration of large-scale MXD is conducted within and restrained by the framework development condition i.e. the conditions related to the site, the development entity and objectives. The spatial concept is conceptualized in accordance with the other aspects i.e. use, financing, management/maintenance and marketing. The spatial concept accounts both the spatial needs of use components and that of the large-scale MXD project as a whole.

Spaces of large-scale MXD and their characteristics

The specialization of functions through usage lead to a specific space, which allows their full potential to unfold (Zeidler, 1987). To facilitate different spatial and managerial conditions for different primary use activities intended, spatial boundaries are usually defined through physical measures. As such, large-scale MXD is commonly composed of individual use components and common spaces that link these components, and the project with its surroundings. Besides, service spaces e.g. technique/facility spaces, parking lots etc. can exist within both of these two (kinds of) spaces.

1) Individual use components – There is usually a clear difference of spatial and operational conditions between spaces inside and outside a use component, and among different use components themselves. The spaces of use components include that of both profit-oriented and public-service oriented uses. Each use component has its own spatial needs for achieving its desired role in the development; The spaces within the use components can be further categorized according to their extent of specialization. For example, stores within a mall are more specialized spaces where the specific buying activities take place, while the “common spaces” of the mall such as the atrium is relatively less specialized for embedding more diverse activities e.g. walking, resting, performance etc.

2) Spaces outside of use components – such spaces may involve outdoor spaces such as streets, plazas and squares, parks or other green areas, courtyards and roofed outdoor spaces, as well as indoor spaces like atria and lobbies. Part of the space outside use components plays the critical role in facilitating the major external and internal relationships, i.e. connecting different use components and the MXD with the surrounding environment. In this sense, spaces outside use components embrace what can be called the primary organizing space (space which organizes the relationship between primary use components), through which major internal and external connections are established.
Influences of framework development condition on the spatial concept:

Influence of site:

1) Site condition: the size, shape, and topography etc. of the site;

2) Surrounding context of the site, which includes:

- **Connection to transportation network**: As is addressed previously, convenient connection to the urban transportation network is definitely a marketing advantage for real-estate projects. Moreover, it is particularly important for large-scale MXDs, as they necessitate relative stronger transport infrastructure and connections to support the traffic flows generated by the population density they embrace. The access to transportation network both on site or in the adjacency can therefore significantly shape the spatial configuration of a MXD. “When transit is available, access for pedestrians from the transit station must be a top priority in the design” (Schwanke, 2003). In many cases, developers may actively invest considerable amount of money in improving such connections, for instance, through constructing bridges, underground tunnels that will link the project site with adjacent transit stations.

- **Surrounding uses and urban pattern (pedestrian environment and open spaces)**: The nature and condition of surrounding uses and urban patterns are also critical factors influencing the spatial configuration. To achieve the development objective, the spatial configuration of a MXD can be used to both introduce desired qualities through establishing connection to the surrounding environment, or prevent the undesired features of the environment through isolating the project from its surroundings and create its own. Schwanke (2003) indicated an important but somehow general distinction between urban/developed and suburban/undeveloped contexts, and suggests that the use of an enclosed plan versus a more open plan is often driven by the condition of surrounding pedestrian environment and open spaces (ibid.). In many cases, the sites of MXDs are located in an already existing or planned larger multi-use and pedestrian environment. Such urban environments tend to lead to a contextual design – and possibly become an extension of the urban fabric. However, suburban sites may not offer a pedestrian/community environment to connect with and enhance, which usually leads to the existence of a MXD as a free-standing island within the context with emphasis on automobile or public transportation rather than pedestrian connection. The surrounding environment is co-determined by the historical context and the urban development plan of the region where the MXD is situated.

- **Climate and environmental factors**: Local climate and environmental factors can also play an important role in shaping the spatial configuration (ibid.). Extreme climate and disadvantageous environmental factors necessitate more shelter provided through spatial design.

3) Site-attached planning regulations and policies:

Regulations on land use (Floor Area Ratio, building density, greening ratio, open space ratio, land use boundary etc.), building (building height, building interval, building setback depth etc.), and possible specific urban design guidelines, policies or incentives that influence the spatial configuration in terms of e.g. building layout, form, image, and open space etc..

Influence of development entity and objectives:

The preference of developer (which may involve both private and public sectors), as well as the architect and designers may also directly influence the spatial configuration and spatial appearance of the MXD project. This is much related to the cultural context of the project and value of critical stakeholders such as developers, architects and authority.
Internal logic in determining the spatial concept:

- **Maximal usage of site for profitability** - In most MXDs where profitability is set as a priori goal, the design and positioning of spatial elements are expected to achieve the maximal potential of the project – the site is usually maximally utilized to the extent allowed by planning regulations; Take advantage of possible elements surrounding site (e.g. parks, pedestrian flow etc.) to achieve marketability of MXD use components.

- **Project- and component level** - The planning and design of MXD involves considerations of two major levels: 1) satisfying demand of individual use component and 2) achieving an extraordinary spatial performance of the overall project.

1) **Massing and positioning of individual use component**

On one hand, the spatial needs of each individual use components must be satisfied to guarantee their feasibility, functionality, and marketability. The desired features of typical uses are summarized below:

**Residential**
Features demanded: security, privacy, views, amenity, styles
Positioning and massing characteristics:
1) Residential uses in separate buildings/areas
2) Residential over retail
3) Residential in a mixed-use tower: usually placed on the highest point for views
4) Low-key entrance on quiet streets or courtyards
5) Oriented to optimize views

**Office**
Features demanded: identity
Positioning and massing characteristics:
1) Identifiable entrance while avoiding non-tenant-related traffic through the lobby;
2) Positioning: prominent placement - building volume tends to be positioned near major streets with an optimal address to be highly visible, monumental and identifiable;
3) Massing: tends to take a tower/towers form as the overall height of the project add prestige to the address and contributes to the marketing;

**Hotel**
Features demanded: visibility, security, view, privacy
Positioning and massing characteristics:
1) Massing: can take form of a free-standing building or integrated part in the MXD;
2) Positioning: requires certain visibility. Hotels with strong brands tend to be made more visible to create image for the overall project. Increasingly becoming private spaces located at the edge of MXD projects;
3) Entrance: very prominent entrance on a secure street. Should be however designed not to invite local pedestrian traffic and not to serve as passageways for desired atmosphere and security problems. Besides, ideal entrance for hotel use must provide for auto access, arrivals, taxi drop-offs, which usually takes up considerable area, which makes hotel use further unsuitable for providing urban space (public realm);

**Retail/entertainment**
Features demanded: visibility, identity, access
Positioning and massing characteristics:
1) Provide access from all internal uses – usually centrally located, as stimulating amenity and “glue”- the connecting component of other use components;
2) Well connected (horizontally and vertically) with surrounding (pedestrian flow) area - for a larger off-site market. Vertically, usually arranged on near-ground levels;
3) Entrance: highly visible, usually plays the major role for image and identity;
4) Massing: Reduce the number of floors to enhance accessibility. Shaped in two major forms: mall or main street retail.

2) Arranging primary organizing space
At the same time, makers usually intend to grasp the chance of potential “spatial bonus” provided by large-scale MXDs, to achieve an extraordinary spatial performance of the overall project through the planning of the primary organizing spaces – which ultimately benefit the marketability of each use component.

First, primary organizing space must provide a good connection to the use components (organizing circulation between use components); They must be well connected to the surrounding pedestrian network (facilitating circulation between the development and external urban environment); They are crucial in organizing the external and internal connections/circulations and relationships: external - the development’s relationship with the surrounding environment; internal – the interrelationship of uses within the project, helping the orientation of visitors and users.

Second, primary organizing space or central organizing element is also a unique feature found in large-scale MXDs, that can play a critical role in defining a strong image and sense of place of MXDs, and provide “an overall theme and sense of fun and excitement (or lack of it) for the entire mixed-use development” (ibid.). When properly designed, they can become attractive people-oriented places, which is considered fundamental to the success of an MXD. Therefore, significant design efforts tend to be made on the primary organizing space of MXD to contribute to its market success. Especially, these spaces may achieve an extraordinary performance within an MXD environment: “the nature of a mixed-use development – including size and critical mass, numerous buildings and uses, and sizable development budgets – make it possible to create and justify larger, more dramatic, and more exciting public spaces and people places. In some cases, these spaces take on such importance that they become almost separate uses in themselves” (ibid.), they are potential attractions that cannot easily be provided in single-purpose projects and therefore viewed as chances by developers, although not directly revenue-producing. Take advantage of internal (scale) and external factors (open space, landscape, pedestrian network) to achieve the desired spatial features.

3) Feasibility of structure, building technology, and parking
Issues and restraints of structure and building technology: The spatial configuration of MXD is inevitably restrained by structural and building technology. Vertical composition is more complicated and expensive than horizontal. Constructing two or three different uses in one structure, one on top of another, is always more complicated and more expensive than dividing the uses into separate buildings, as the vertical composition may bring about issues including entrances, circulation system, column space, and HVAC, and issues of marketability regarding problems of tenants as well. Therefore, given a limited financial capacity of the development entity, a horizontal composition is usually preferred than vertical. Besides achieving the feasibility of structure and building technology, parking issues should also be solved in the spatial concept. Therefore, the parking issue also influences the project’s spatial configuration.

General types of spatial composition and structure
Three broad categories of physical and structural configurations have been identified by ULI (2003), which include mixed-use towers, integrated multi-tower structures and mixed-use town centers/urban villages and districts. 1) mixed-use tower: a single structure, typically of considerable mass and height, whose uses principally are layered vertically. 2) Integrated multi-tower/multicomponent structure: individual buildings and towers architecturally connected by a common atrium, concourse, shopping complex and/or underground parking structure that integrates all or most of the project components at the
lower levels in a common base. 3) mixed-use town center, urban village, and district: predominantly made up of a variety of individual buildings which are organized around streets, parks, plaza/squares or other open spaces. Such projects are often developed on large sites and mostly suburban sites. Countless variations are possible regrading the spatial configuration of large-scale MXDs.

3.2.3.3. Management concept
The management concept of a large-scale MXD project includes:
- the management structure - the allocation of management responsibilities in the project;
- the management task of each space or area within the project;

Management structure
The management tasks of MXDs involve, besides the management of individual components, also the management of common areas between the components within the development and shared facilities. Therefore, the management of MXD is much about balancing the various operational needs of individual use components and that of the development as a whole. The management structure allocates the manager and management responsibilities of the project and its components and spaces. With the evolution of both large-scale mixed-use and joint public/private developments in the recent decades, they have been the testing grounds for a variety of operations, management, and maintenance techniques (Schwanke, 2003), where various management solutions have been developed. Literature also suggest the general tendency from dividing a project into separately managed components or spaces towards more centralized management structure. Following are several typical management structures of MXD projects:

1) Direct management by the developer - the developer owns and manages all use components, with a subcontract to other entities when specialized expertise is required. This is the most straightforward and common way of management in strictly private projects.

2) Separate management entities or associations - a distinctive operation/management/maintenance entity is created, which is separated from the principle parties but representing their interests. The associations can be set up in various ways, typically categorized into that of owners of residential and non-residential use components. Accordingly, a master association may enhance the communication and understanding between different property owners and in long-term foster a greater sense of community (ibid.).
3) **Divided management** - management responsibilities are divided among the project’s participants of specific components or geographic sectors. The divided management seems to be considered disadvantageous as the perceived need for more central management increases through time. However, divided management (and lack of central management) may be necessary in case of various ownerships resulted by, for example, separately sold properties or developer’s inability in providing centralized operation. Divided management may lead to poor management/maintenance and under-use of common areas, and preclude possibilities of joint events and promotion that can be more easily achieved through a central management structure.

4) **Delegated management** - in case of numerous owners, responsibilities for common areas or a specific management/operations function are delegated to an involved party, usually the developer but occasionally another participant in the project. Delegated management usually happen in the cases where public sectors participate in a project with its own objectives, and usually involves unusual contract/agreement regarding funding, development, and management of certain project parts between private and public sectors or institutions. Such agreements can meet the concerns of both public sectors or institutions that want to ensure certain qualities in a development, but not willing to be a developer to minimize public burden(ibid.). Through such public-private agreements, in many cases, the creation and development of public spaces and facilities in an MXD may be delegated to private developers, and tightly integrated with the fabric of mixed-use development, while they are managed and maintained by the public sector or under its instruction and supervision.

5) **Area-wide management structure** - An area-wide/district management system is created for a mixed-use district with a large number of separate ownerships. The interested parties in a district with a large number of separate ownerships develop area-wide management system that endeavor to program development as well as manage existing spaces. District management has evolved rapidly in recent years. Cases of area-wide management usually occur in specially defined areas such as downtown or a designated arts or historical districts, and typically BIDs (Business Improvement Districts) in an American or European context (ibid.). In a Chinese context, the planned CBDs (discussed in Chapter IV). District management can provide a wide range of services from public safety and sanitation services to a variety of other activities that are intended to enhance the physical and social qualities of all the properties. Especially, district management may enable marketing, improvement of streetscapes and special events that are coherently coordinated, and enable their influences in a much larger scale beyond boundaries of individual projects.

Image 3.10
Typical management structure of MXD
Source: illustration by author
General logic
First, the conceptualization of the management plan of large-scale MXD is conducted within and restrained by the framework development condition i.e. the conditions related to the site, development entity and development objectives. Second, the management concept and tasks of each component or space are conceptualized in accordance with the other aspects i.e. use, space, financing, and marketing. The management concept must be supported by the use, spatial configuration, marketing, and financing, while also affecting them. Third, the marketing concept accounts both the management needs of use components and that of the MXD project as a whole.

Influences of framework development condition on management concept:
1) Public development entity: As public and private sectors usually have different goals, the management of MXD may be significantly influenced by the involvement of public component, participation or interest. The involvement of the public sector can be conducted through two different ways: the public sector as a development entity or through policies and regulations assigned to the site or region of MXD. On one hand, issues may occur when the public sector, who sometimes views the cost of management and maintenance as a financial burden and fail to provide the level of services desired by private entities aiming to make the development competitive. On the other hand, as the public sector is often driven by public interests and political concerns, the involvement of public sector may lead to alternative management structures, agreements and results e.g. delegated management or district management that balance the goals of both private and public sectors.

2) Site-attached policies and regulations: Site-attached policies and regulations can also be adopted by the public sector to control the management aspects of development on a site or specific region, especially regarding the management of common areas, infrastructure, and public/civic use components.

Internal logic in determining management concept:
1) The management of MXD account both the management of individual use components and the common or “shared” spaces and amenities. The management of MXD is supposed to allocate the operating responsibilities and costs to the various entities, and satisfy the operational needs of each use in an optimal way in the overall management plan (Schwanke, 2003). To simplify the management activities, the boundary of management is usually defined by the physical boundaries of use components. As intended uses and users are different in different components and between use components and areas beyond them, very often are the managerial boundaries within an MXD defined by the physical boundaries of use components. This is also suggested by the division between management of use components and shared or “public” areas of MXD.

2) Considering the complexity of large-scale MXD itself, a possibly straightforward way of management e.g. strong central control is mostly preferred (ibid.). A centralized management structure is efficient, especially regarding issues of common areas and services, shared facilities and infrastructure, and organization of joint events.

3) Separated ownership and management responsibilities resulted from selling the property to different owners possibly preclude the possibilities of central management and lead to a divided management structure.
3.2.3.4. **Marketing concept**

Marketing is essentially about creating and conveying features of product valued by customers\(^3\). Different from the marketing of single-use structures, the marketing of an MXD project involves two dimensions – the dimensions of marketing individual use components, as well as the marketing the overall project; The conceptualization process determines the marketing concept of the MXD project, which includes:

- Determining the selling points of the project and its components;
- Conveying the selling points - marketing communication;

**General logic**

First, the conceptualization of the marketing plan of large-scale MXD is conducted within and restrained by the framework development condition i.e. the conditions related to the site, development entity and development objectives. Second, the marketing concept and tasks of each component or space are conceptualized in accordance with the other aspects i.e. use, space, management, and financing. The marketing concept affects the use, spatial configuration, management, and financing, demanding certain features in these aspects to achieve marketability. While the marketing concept and activities are also restrained by the use, spatial configuration, management and financing of the project and its components. Third, determining the marketing concept of the project accounts both the marketing needs of use components and that of the large-scale MXD project as a whole.

**Direct influences of framework development condition in determining the marketing concept:**

1) Market potential attached to the site;
2) Nature of Development entity / public sector: the public sector can support marketing and promotional activities of MXD projects. The public sector can play a strong role in the marketing process in terms of directly supporting the organization of marketing activities.

**Marketing concept:**

**Determining the selling points of the project - market positioning**

Determining the features of a product valued by customers so that the product can be purchased by them is also termed as market positioning. The concept of (marketing) positioning was initially created by Ries and Trout (1980), referring to the positioning of the product in the mind of the prospect. Accordingly, positioning is relevant in today’s over-communicated world, where a typical consumer is overwhelmed with unwanted advertising, and has a natural tendency to discard all information that does not immediately find a comfortable (and empty) slot in their mind (Trout, 1969). A unique market position makes a product distinguished and differentiated from that of competitors and significantly enhances its marketability. A successful positioning of a product can be made in three general aspects:

1) **Market needs**- satisfying the needs of target consumers on the product category;
2) **Key strengths/differentiation of product**- utilizing and enhancing the unique strengths to create a differentiated position; Use components in an MXD project can take advantage of the unique features enabled in a MXD environment to increase its competitiveness;
3) **Competitor’s weaknesses / unoccupied market positions**- offering features of the product category that the competitors do not provide also contributes to successful market positioning. As a result, to survive the competition, the intention of “making something new” form the existing product category is always embedded in the process of product development.

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\(^3\) Marketing is defined by the American Marketing Association as “the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.”\(^4\) The term developed from the original meaning which referred literally to going to market with goods for sale.
Conveying the selling points - marketing communication

Marketing communication refers to the means adopted by the companies to convey messages about the products and the brands they sell, either directly or indirectly to the customers with the intention to persuade them to purchase. Key marketing communication disciplines or tools include advertising, sales promotion, public relations, personal selling and direct marketing (Fill, 2014). First, in certain marketing communication tool e.g. advertising, the mediated communications to potential customers are essential. For example, advertising involves the transmission of messages of product to potential customers through various mass media including traditional media e.g. newspapers, magazines, television, radio, outdoor advertising or direct mail, and new media e.g. blogs, social media, websites, text messages or search results. Second, marketing communication can be also achieved through direct and immediate communication, which is usually referred to as experiential marketing, engagement marketing, participation marketing, event marketing or live-marketing. Essentially, event marketing involves face-to-face contact between sellers and their customers at special events such as fairs, exhibitions, performances and fun event etc. The face-to-face contact promotes the trust of customers on the seller and his product and helps to build up a long-term relationship between them, consumers can be engaged to purchase while they’re in a willing, participatory position. In addition, for a real estate development, events are also an effective way to promote its public relationship and image. When events are involved as marketing communication strategy, physical space is also needed as physical support for it. Physical space is necessary as an event venue and can play a critical role in supporting or restraining the marketing events and activities.

Developing the marketing concept for the entire MXD project:

A successful marketing concept of an MXD project - the creation of selling points through proper market positioning and conveying the selling points through tools of marketing communication - must be supported by the use, spatial, management and financing aspects of the development, and may thus demand certain features in these aspects. Aspects of the marketing concept and their possible demand or influence on other aspects are summarized in the following table:

<table>
<thead>
<tr>
<th>Marketing Concept</th>
<th>possible demand/influence on management</th>
<th>financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. creating selling points</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) market needs</td>
<td>• the functional (type of uses and users), spatial and managerial features of use components are developed to meet the demand of potential market and target consumers;</td>
<td></td>
</tr>
<tr>
<td>2) key strengths of MXD project</td>
<td>• critical mass; • synergy between uses, shared facilities; • public facilities or services provided;</td>
<td>• location; • spatial features in the context; • sense of place, overall image; • spatial synergy between components; • primary organizing space;</td>
</tr>
<tr>
<td>3) competitor weakness</td>
<td>• Innovative uses and combination;</td>
<td>• Innovative spatial design;</td>
</tr>
<tr>
<td>II. marketing communication</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) mediated communication e.g. advertising etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) immediate communication e.g. event marketing, PR events etc.</td>
<td>• event use component; • supportive functions;</td>
<td>• primary organizing space; • common space within use component; • supportive spatial design;</td>
</tr>
</tbody>
</table>

Table 3.4
Aspects of marketing concept and possible demands
Source: the author

Determining and creating selling points - market positioning

• Market needs: the functional, spatial and managerial features of use components must be developed to meet the demand of the potential market and target consumers;
• **Key strengths / differentiation of product:** developers tend to take advantage of some features which are only available in an MXD project to enhance its marketability, these features include: In terms of use, key strengths can be provided by 1) the critical mass and density, which leads to efficiency and productivity and economy of scale; 2) the functional synergy between uses and facilities; 3) other public facilities or services, such as civic/public uses, public transportation facilities available in/near the project, largely thanks to the involvement of public sector in the development. In terms of spatial configuration, key strengths can be provided by 1) the strategical location of the development e.g. location in an urban center or region, or adjacency to transportation network; 2) the favorable spatial elements existing on site or in the surrounding context e.g. park or attractive urban open spaces and landscapes; 3) the spectacular overall image and sense of place enabled by the scale and complexity of large-scale MXD. Especially, the primary organizing space as a unique spatial element of MXD projects. In terms of management and financing, key strengths can be provided by a supporting management structure and strategies and financing model. The support of public sector in management and financing of an MXD project may also be desired as an attractive point for tenants in the marketing process.

• **Competitor weaknesses/unoccupied market positions:** essentially, achieving selling point in this aspect demands for innovations which makes the MXD or its use components different from the product category where the competitor’s products occupy. In terms of use, attractive selling points can be achieved by innovation in uses and unconventional combinations of uses. In terms of spatial configuration, differences can be created through innovative spatial design. Correspondingly, management and financing strategies must be developed to support the implementation of desired innovative strategies.

**Ways of marketing communication**
First, mediated communication e.g. advertising is essentially about facilitating the contact and relationship with the various channels and platforms of broadcasting. This involves both the establishment of channels - major mass media institutions and organization (both private and state media) and increasing the effect of the message on the public and potential consumers by associating the product or project with influential occasions, people or organizations. Involvement of the public sector can be supportive in providing public events and organization of public media. Second, immediate communication requires space allowing the marketing activities as physical support. In terms of use, event use components or supportive functions are necessary. In terms of spatial configuration - physical spaces must be provided, which are able to contain marketing events. Such spaces may include spaces that are specifically created for event functions e.g. an event room/building, or, in many cases, spaces that can be temporarily used for event activities e.g. common spaces within use components, or the primary organizing space of the MXD project. Such spaces are required for flexibility to achieve the change of use activities with time. Management structure and financing must support the desired event marketing activities. Large-scale joint events necessitate central management. Besides, the involvement of the public sector can be supportive and necessary through financing and organization of events. Marketing activities are therefore conducted both within the individual components by their marketing team and operators, as well as in the common areas beyond the component by project marketing teams, or through joint promotion.

**Space’s contribution in marketing**
There are two general dimensions through which space can make its contribution to marketing: First, physical spaces are the media where the desired selling point features are interpreted; Second, space plays the role of physical support for the marketing communications - especially immediate communications. In addition to offering “selling-point features”, spaces such as an open pedestrian plaza or indoor atrium may act as venues for the various events and activities. Actually, the increasing need for spaces for event marketing has been reflected in the planning and design in recent years, and in not
only mixed-use but also single-use developments. There is a shift towards more spaces in large-scale MXDs and their use components that are conceived as spaces supporting events and organized activities.

It is reasonable to think that the more a space contributes to these dimension of marketing, the more likely it gets involved and communicated to the public in the marketing process of the project. Based on the previous notions, spaces with much involvement in the marketing include: primary organizing space (both as selling point and supporting marketing communication), common space within use components (both as selling point and supporting marketing communication), space with innovative uses or use combinations, spaces with public use and services, existing favorable spatial elements, and event use component.

3.2.3.5. Financing concept
This process determines the financing concept, which includes:
• Determining the financial model - the development cost and estimated revenue to achieve the profit goal of the project, and allocating the financing sources and strategy for the development and operating cost, and ways of revenue production; The profit goal of the development entity determines the relationship between development cost and expected revenue. Essentially, the financial concept aims to achieve the profit goal through balancing the cost (development and operating cost) and revenue production of the project.

Financing development and operating cost
Development cost involves aspects of land cost, hard and soft construction and contingencies, and Infrastructure (Schwanke, 2003). Operating cost involves the cost for personal, material, service, technology and energy in management, maintenance, marketing and other activities involved in the operation process of the MXD. Because sites for MXD projects must appeal to multiple markets, they are usually well located and very expensive (ibid.) Usually, projects with higher construction costs mandate higher pricing on the revenue side. Infrastructure costs are a function of the density and quality. A higher-density project requires fewer infrastructure per unit square meter and therefore reduces costs. Besides the revenue, sources of financing generally include that of the public sector or lending institutions and private investors.

Ways of revenue production
The two general ways of revenue production include selling off the developed spaces or holding them for long-term profit. Selling: selling (components of) an MXD project guarantees a sizable return in short-term and cash flow, which minimizes the financial risk for developers. However, concentrating on short-term profit, selling (component of) a MXD project possibly leads to issues in the long term. The resulted separated ownerships may preclude possibilities of continuous and comprehensive interventions in space, use, management and marketing aspects, e.g. comprehensive design, central management, and
maintenance, or large-scale joint events. **Holding:** in comparison, holding (component of) an MXD project provides possibilities for continuous and comprehensive interventions and profits in the long term. However, comparing to selling, holding a project only brings limited revenue streams in short-term, demanding more amount or sources of financing to support the development and operating cost for the relatively long period before profit can be made.

The sufficient funding, which can be achieved by financing from public sectors, promotes the emergence of non-profit or public/civic spaces within an MXD project. The way of revenue production may significantly affect the shaping of urban space qualities, as it influences the ownership of spaces and organization which enable or limit the making and shaping activities leading to urban space qualities. Generally, increasing the source funding (possibly through public financing sources) or reducing the development cost can promote the chances for long-term ways of revenue production and therefore the emergence of urban spaces which are less profit-oriented.

**General logic**
First, the conceptualization of the financing plan of large-scale MXD is conducted within and restrained by the framework development condition i.e. the conditions related to the site, development entity and development objectives. Second, the financing plan is conceptualized in accordance with the other aspects i.e. use, spatial configuration, management/maintenance, and marketing: it must be feasible and support the use, spatial, management and marketing features of the MXD project and its components, while also affecting these features. Third, the financing concept accounts both the financing plan needed for individual use components and that of the whole MXD project.

**Influences of framework development condition on financing concept:**
1) **Nature of development entity:** the involvement of public development entity can significantly shape the financing model of a large-scale MXD project. First, with public objectives, public development entity is usually less profit-oriented and can allow ways of long-term revenue production. Second, when an MXD project is considered qualified, public sectors can provide public or governmental financing sources, especially for public/civic use components and infrastructures of the project. The public financing helps to cover the increased operating cost for a long-term way of revenue production of an MXD project and reduces the financial risk of private developers. It thus enables the adoption of a long-term way of revenue production through e.g. holding the project.

2) **Financing capacity of development entity:** as is addressed previously, large-scale MXD projects are difficult to finance because of their scale and complexity. The development entity’s capacity in finding various financing sources - establishing equity partnership and relationship with various investors, lending- and public financing institutions - influences also the way of revenue production. Developers with strong financing capacity are more affordable for less profitable and long-term ways of revenue production.

3) **Financial market conditions and environment:** Financial market conditions and environment e.g. interest rates, the cost and availability of equity, construction and permanent financing significantly affect the ultimate financing decision (Schwanke, 2003). Notably, policies and regulations can play a critical role in shaping the financial market conditions and environment for a project. Such influences need particular attention, especially in a context where government and its policies conduct strong interventions on the market.
Internal logic in determining the financial concept
Possibilities for variations between components and aspects
Coherent financing an MXD project provides possibilities of varying the profitability and ways of revenue production of different use components in different aspects, while keeping the same profit goal for the entire development. Possibility is provided for changing the profitability and way of revenue production of a use component (made more favorable for achieving urban space qualities) through adjustment of the financing strategy and/or other aspects (spatial configuration, use, management, marketing) of other use components of the project while maintaining the same profit for the entire development.

Financing through phasing
Feasible financing of an MXD project can also be achieved through properly phasing the development. For example, components which generate a large financial return in a short time - such as residential uses (for sale) - can be arranged in the first phases to finance the remaining development. Correspondingly, the use, spatial configuration, management, and marketing features of the component must be adjusted to make the phasing idea feasible.

3.2.3.6. Role/core function of defined space within large-scale MXD
The stage of conceptualization determines the relationships between components/spaces, or the role and core functions of each specific space/component in the entire project to achieve the development objectives. For a specific space within a large-scale MXD project, the conceptualization process essentially determines the role it is supposed to play in the MXD project - its core function to achieve the development objectives: determining its core use activities and users; its size, position within the site, and physical and visual connections with other spaces and on-site circulation; its manager and management tasks; its intended quality and function for marketing, and role in marketing communication; its way of financing and revenue production.

3.2.4. Implementation, operation, and use
Based on the development concept, the stage of implementation and operation/use determines the reality of a space. In the process of implementation, specific activities are conducted by the developer’s team as well as the tenants and owners of the MXD project, including the detailed design, programming (uses), operation (management and marketing). In addition, the activities of internal and external users based on the given situation are also involved in this stage. Rather than being totally passive and guided by the established rules, activities of using can also be an act, a making and operation that shape a space (de Certeau, 1984). Together, the activities in the implementation and operation/use process finally lead to the reality and ultimate urban qualities of a space within a large-scale MXD project.

Importantly, for a specific space, the result of activities in detailed programming, detailed design, management, and marketing must support the core function of it, which is determined in the development concept. Therefore, the development concept of the entire project, and the role of a specific space within the concept co-determine the condition for activities to be conducted in the implementation process.

3.2.4.1. Detailed design
The detailed design includes the design of envelope of the space and elements within it:
• The envelope of a space: the appearance of the ground surface, facade, roof or ceiling;
• Elements within spaces: appearance (scale, form, material) and position of elements e.g. furniture(seats, shelters, playing facilities etc.), sculptures, fountains, green elements, architectural elements(stairs, escalators etc.), and technical elements (lights, sound equipment, billboards, screens etc.).
Detailed programming

The detailed programming includes:
- determining the specific functions and activities available within the space, which can support its core function/its role in the whole development;

The detailed programming may bring new uses or available activities to a space. First, secondary uses may be introduced which support the primary use activities conceptualized for the space. Second, other uses and activities may also be introduced which benefit the project in other ways while not affecting the core function of the space. Besides the developer and owner of space, new uses may also be introduced by designers, marketing activities and spontaneous activities and events by (external) users.
### 3.2.4.3. Management and maintenance activities
Key aspects of the management activities of MXD include (ibid.):

- Use standards and rules – defining rights and regulations of use activities; assign responsibilities and liability for accidents or damage; and open hours and access control;
- Security - providing security and safety services;
- Maintenance of amenities – such as parking management and shared parking, maintenance of utilities and HVAC, trash disposal, snow removal, noise/odor control etc.;
- Event management - providing support for events and promotion, especially joint promotions;
- Design approval – controlling on and approval of signage, physical changes and maintenance responsibilities;
- Financial administration – allocating costs for maintenance, assigning costs for utility systems.

The management structure, which can be significantly influenced by the involvement of public sectors, influences the type of manager, management objectives and management activities for common spaces or components defined for public use. District management may lead to public sector’s area-wide management of open spaces in a district, and support district-wide events; Law-defined public spaces usually involve public sector manager or private manager in case of delegated management - which leads to management activities supporting public use of the space and public sector’s financial support for these management activities.

### 3.2.4.4. Marketing activities
The specific marketing activities in the implementation process focus on marketing communication. As is introduced previously, marketing communication involves both mediated and immediate communications, and in most cases, both these two forms are bound with each other in the communication process.

- **mediated marketing communication** e.g. advertising - using techniques and strategies to communicate messages to the public and potential customer (print media, radio, television to Internet websites).

- **immediate marketing communication - events**
  Joint promotion can be allowed through a central management structure. Many actors can contribute to the emergence of events within a space. Actors include private sectors e.g. project developer, tenants and organizations with subcontracts; public sectors e.g. government or public authorities; and other entities and organization such as NGOs and other social organizations. As has been addressed in Chapter 2, an event may temporarily change the use, spatial and managerial conditions of a space, and therefore creates possibilities for introducing more urban qualities into a space.

The marketing activities of a mixed-use development begin from the early stage of development and last till after project’s completion and involve multiple sectors ranging from developer, tenants of individual use components, public sectors and institutions. The various types of events range from early-stage community activities to opening and on-going events e.g. topping-out ceremonies after projects completion.
### Early-stage marketing

**Goals**
- Establishing early image
- Attracting major tenants/operators for office, retail and hotel component

**Activities/strategies involved**
- Branding
- Establishing on-site/off-site marketing centers

**Marketing during development**
- Promoting the project to press and communities
- To create positive image and attention
- Aggressively leasing individual use components
- Creating general public awareness
- Marketing directly to potential customer corporation/association

**Marketing after project**
- Achieving full occupancy at a maximum rents to achieve an attractive stabilized income stream
- Hotel: toward establishing a distinct identity
- Organizing on-going promotional events
- Marketing use components
- Promoting the whole project’s public relationship

<table>
<thead>
<tr>
<th>Potential urban spaces within large-scale MXD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type I. Common space within use component;</strong></td>
</tr>
<tr>
<td><strong>Type II. Public/civic use component;</strong></td>
</tr>
<tr>
<td><strong>Type III. Primary organizing space;</strong></td>
</tr>
<tr>
<td><strong>Type IV. Law-defined public open space.</strong></td>
</tr>
</tbody>
</table>

### 3.2.4.5 User’s activities

In this stage, the users’ activities are also involved, which may lead to changes in the established conditions within the space. The user’s activities include spontaneous activities and self-organized events of both internal external users of spaces of a large-scale MXD project.

### 3.2.5 Potential urban spaces within large-scale MXD

The previous part provides a comprehensive understanding of the characteristics of large-scale MXDs and the process and activities that shape a large-scale MXD project. Previously in Chapter II, notions have been drawn from the theory of specialization and loose space about the external features of potential urban spaces. Accordingly, potential urban spaces are usually characterized by unspecific users and use activities, including types such as spaces comprising various circulation routes or land uses; publicly-owned, designed and maintained spaces; “Left-over spaces” and temporary loose space through events etc. (see Chapter 2). Combining this notion with the understanding of large-scale MXD learned in this chapter, four types of potential spaces can be identified within mixed-use structures, which are:

- **Type I. Common space within use component;**
- **Type II. Public/civic use component;**
- **Type III. Primary organizing space;**
- **Type IV. Law-defined public open space.**

![Image 3.13](image3.13.png)

Four types of potential urban spaces within large-scale MXD

Source: Illustration by author
I. Common space within use component

Examples:
lobby/atrium/terrace/courtyard within residential, office, hotel or retail uses components, atria, and galleria inside shopping centers etc.

Explanation:
Common space within use component refers to space which is located within a use component, however conceived to support less specialized activities e.g. circulation, stay, leisure or events. These spaces are usually conceived to promote the marketability of use component - besides adding spatial qualities such as natural light, promoting visual connections and open space for activities, such spaces are usually conceived as a necessary venue for promotional events. As such space is primarily conceived to serve the use component in which it exists, its users are normally constrained within the users of the component - however, events that frequently happen within such spaces bring about potentials for them to be more inclusive and acquire urban qualities.

II. Civil/public use component

Examples:
cultural facilities e.g. museum, art gallery, performing space, recreational e.g. sports halls and fields, park, public transportation facilities, other services e.g. post office etc.

Explanation:
Civil/public use component refers to use component of MXD, which is intended for public/civic use activities and users. Normally, public/civic use components are less profitable in view of real-estate development. Therefore, such spaces are more likely to be included in an MXD project when public the sector is involved - in cases of public development entity, public-private partnership etc. However, in some cases, public/civic use components can also be provided entirely as a result of personal wills of the private developer. Public/civic use component is potential urban space for its inclusive purpose - open for all urban users.
III. Primary organizing space

Examples:
streets, open-air plazas and pedestrian areas, and enclosed atria, galleria, entrance plaza; shared lobby or terraces; connection spaces on different levels etc.

Explanation:
Primary organizing space refer to the space through which the major internal and external circulations of an MXD are established. A primary organizing space builds the connection between the project and its urban environment, as well as that between its use components. Primary organizing space’s potential as urban space is indicated in two key aspects: First, it connects multiple users and use activities, and comprises multiple circulations of both internal users and external visitors, this creates opportunities for various encounters while making strict control impossible; Second, as a unique type of space found in MXD structures, such space may also play a critical role as a spectacular event venue.

IV. Law-defined public open space

Examples:
urban plaza/street spaces/public green spaces etc.

Explanation:
Law-defined public open space refers to spaces defined and required by site-attached zoning-by laws or other specific planning regulations, which is intended for public users and use activities. Such spaces are usually defined by planning authority for public purposes. In the Chinese context, one notable mechanism of enabling law-defined public open space in private development is the “Daizheng” mechanism. The development entity is responsible for the site preparation, relocation, and construction of the space. The space is then taken back by the public sector, who takes charge in its management. (see more explanation in chapter 4).
PROCESS OF LARGE-SCALE MXD

urban development as context of MXD

time, region

current situation

urban planning

public policies

property market

determining site

objectives of developer

planning attached objectives

determining development entity and objectives

Framework development condition

• site condition
• surrounding context
• site attached regulations
• market potential on site

development entity and objectives

Site

determining

financing concept

determining

use concept

determining

spatial concept

determining

management concept

determining

marketing concept

feasible & financeable concept of MXD

role / core function of specific space within MXD

user’s activities

detailed programming

detailed design

management activities

marketing activities

actual space
URBAN QUALITIES OF SPECIFIC SPACE

BP - connectivity to mass transportation network

AU - density of surrounding uses
AU - diversity of land use: types of uses
AU - diversity of land use: users
AU - magnet land uses (space for public/civic use)

Cp - size of space
BP - connectivity to pedestrian network around site
BP - restrictions on spatial boundary (height difference)

BP - visibility from major pedestrian flow
Cp - open time
AC - amenities/services e.g. food, drink, toilets
AC - protection against motorized traffic
AC - protection against crime - security measures
AC - protection against bad weather
AC - relaxation - natural element
AE - passive engagement
AD - unusual space - flexibility

AC - protection - night-time lighting
AC - relaxation - clean and maintained
AC - relaxation - human-scale interface
AC - relaxation - staying possibilities
AC - relaxation - air-control and optimization
AE - active engagement (focal point - event or element)
AD - unusual space - distinctive spatial appearance
AD - amenities/chances for different groups to display
AD - unusual activities - animation programs
BM - access control
BM - behavioral control: subjective rules
BM - degree of policing
BS - degree of symbolic implication
BC - advertising through mass media
BC - broadcasting through social media
BC - broadcasting through third-party platforms

Cp - Capacity
AU - Land use
AC - Comfort
AE - Engagement
AD - Discovery
BP - Physical barrier
BM - Managerial barrier
BS - Symbolic barrier
BC - Communicational barrier

Image 3.18
Analytical framework for investigating large-scale MXD as process of urban space making and shaping
Source: illustration by author
3.3. Summary - an analytical framework

Based on the previous investigation regarding the process of large-scale MXD, an analytical framework is developed, which illustrates the contextual factors, stages, and logic of large-scale MXD process and their possible influences on the urban qualities of spaces within it (see diagram above). The analytical framework summarizes the aspects of factors and activities in the stages of large-scale MXD process, and their possible influences on the urban qualities of spaces within large-scale MXD. The framework suggests the following key points:

- Activities of each stage of the three main stages (initiation, conceptualization, implementation/operation and use) directly influence certain urban qualities of a specific space within a large-scale MXD, while the result of these activities provides an operating condition for activities in the next stage.

- Activities in the stages of initiation and conceptualization can directly influence the qualities of a specific space, which are related to the relationship between the space with its context (which includes the context surrounding and within the site of the large-scale MXD), while the stage of implementation, operation and use directly influence the qualities related to the functional, spatial, managerial, animation/events and communicational features of the specific space itself; Some urban qualities can be directly shaped by activities of multiple stages;

This analytical framework will be used to guide the following part of the empirical study on the cases of large-scale MXDs in Beijing.
Chapter 4. Beijing as Context
Chapter 2 and 3 provide theoretical review addressing both contemporary urban space qualities and the characteristics, development process and various mechanism of large-scale MXDs that may shape urban space and qualities within them. This provides a guideline and basis for the empirical investigation in Beijing. Literature review suggests three general aspects of contextual factors that influence MXDs - property market, public policies and regulations, and cultural ideas and values. As the beginning of the empirical study section, this chapter investigates the post-reform urban development of Beijing as the specific context of large-scale MXD projects, as well as the development history of large-scale MXDs of Beijing, aiming to identify the specific contextual factors which influence the making of large-scale MXDs, and conditions in which large-scale MXDs have been created. Besides examining the development of large-scale MXDs in the context of Beijing’s post-reform urban development, this chapter also identifies four typical development conditions of large-scale MXDs in Beijing - each of them provides a different framework development condition - which suggests a possible classification for further investigations.

4.1. Introduction
4.1.1. Brief introduction of Beijing
Geographical location - Located in northern China, Beijing is the capital city of the People's Republic of China. The city is governed as a direct-controlled municipality under China’s national government. The north-west side of Beijing is surrounded by mountains while the plain stretches towards northeast, east and southwest.

History - Beijing has a long history which can be traced back to more than 3000 years ago. The city has been the political and cultural center of China for much of the past eight centuries and one of the oldest capital cities of the country.

Population and urbanization - As one of the most urbanized and populated cities of China, Beijing’s urbanization ratio reached 85% in 2017, with a population of more than 20 million.

Climate and environment - The climate in Beijing is characterized by clear seasonal differences. In recent years, air pollution has become an environmental issue arousing much attention and concerns.
4.1.2. Overview of urban transformation

China’s implementation of Reform and Opening-up Policy in 1978 has laid the foundation for the country’s rapid economic growth afterwards, triggering the country’s process of globalization and modern real-estate industry. China’s first modern large-scale MXDs began to emerge in the late 1980s and fast boom since Deng Xiaoping’s speech in southern China calling for deepening reform and boosting economic growth (Wang, 2009). The first large-scale MXD in Beijing, the CWTC I (China World Trade Center, phase I), was opened in 1990. Since then, there has been a tendency of an increasingly growing number of MXD in Beijing (see chart). As can be seen, the post-reform Beijing, (or more precisely that since the 1990s) has provided the general context in which large-scale MXD projects in it have been created.

To understand this context, two important points need to be recognized in advance: First, Chinese cities have been undergoing dramatic changes in the post-reform age. The context to be investigated is, therefore, a changing one. Second, all activities leading to the urban transformation have been made in response to the pre-reform city as a historical result, therefore, to understand the post-reform transformation and urban situations, the influences of pre-reform urban development on the post-reform urban situation must also be addressed. The city’s historical legacy serve as the basis and critical reference to the activities of transformation, which includes two main historical stages: the imperial or pre-industrial age (before 1949), and the Socialist age (1949-1978).

Three key aspects of influences of pre-reform urban development on the post-reform urban situation have been investigated, which are:

1) The planning philosophy, function and spatial structure of the city[1];
2) The physical and use patterns of urban spaces;
3) Building culture.

[1] The pre-reform city structure and planning ideology has far-reaching influences on the post-reform urban planning and development. As Rowe (2011) point out, “one notable consequence of successive planning efforts...is the persistence of both organizational and material aspects of Beijing’s physical layout, or rather, a persistence of its idealization” [Rowe, 2011]
4.2. Pre-reform urban development

4.2.1. Imperial age

Traditional philosophy and urban planning
With a planning philosophy centering “the unity of cosmos and human”, the city was considered as a micro-cosmos while the layout of a city is an artificial simulation of the astronomic phenomenon, emphasizing the order of space and society, and the central status and absolute power of the emperor and strict hierarchy. Characterized by a top-down planning model, the planning of a city has been an important task of the governing class. Since very early, planning of a city has become a highly developed profession – planning and constructing a city is like that of a whole building complex, much influenced by the capital city planning principles and standards of “Li” (Rites of Zhou), which was established in Shang Dynasty (ca. 150 BC).

Key planning principles of traditional Chinese cities include:
• A symmetrical overall layout which highlights the central axis and central positioning of the palace in the city;
• Grid division of land parcels, rectangular (residential) blocks;
• Road network following principles of “Jing-Wei-Tu” standard\(^2\);
• Strict hierarchy in building forms according to status (fractal pattern);
• Using walls to define spatial boundary both within the city and city/environment;
• Planned and regulated marketplaces, low social status of merchants;

Urban structure and pattern
As a result of such planning principles, the city of Beijing has been created with a symmetrical layout with the emperor’s palace in the middle, emphasizing a central spiritual axis.

On one hand, as sufficient open spaces exist within the walls of building complex for its owners to communicate with similar social groups, providing spaces for interactions between different social classes or groups has been actually outside the attention of city makers (arguably users as well) and excluded from planning intentions. This eventually resulted in internal oriented urban patterns from homes of ordinary residents to palace of emperor, leaving the space outside of them as traffic or leftover spaces; On the other hand, the relative low status of merchants and strongly suppressed and restricted market places and commercial buildings failed to be developed into large spaces of social gathering and interaction.

\(^2\) three different widths of streets defined in the planning standard
Use pattern: informal and temporary
As a result, spaces of social interactions have emerged with great informality – First, they happened largely in spaces that are conceived for other functions e.g. streets, tea houses, opera houses, brothels, or temples. Besides, they also showed an event-oriented characteristic regarding usage of space – happening temporarily, reflected by various markets and temple festivals. All of these spaces reflected the characteristics of informality and temporariness – social interaction between different groups happened in spaces primarily conceived for other activities, and a temporary transformation of spaces was usually involved.

Street and street market: Beyond facilitating transportation, the streets also acted as major urban spaces of traditional Beijing through embedding commercial/entertainment functions (shops, vendors) and facilitating various types of markets. The notion of “market” in the Qing Dynasty actually referred to segments of streets where commercial activities were more concentrated. Their types include regular market (from 9’o clock in the morning till dusk), dawn market, night market or “ghost market” (after midnight).

Temple market and festivals: Temples also served as critical urban spaces for gatherings and social interactions. Temple markets were held on certain days of each month, while temple festivals occurred only on a few most important worship days of the year and allowed more sizable and festive activities. For the city residence, temple markets and festivals were far more than worship, markets, and entertainment - rather, they provided important occasions of social interactions, women went to temples on temple festival days, as it was the only time and place they were allowed to go out and enjoy social time outside their homes. Besides temporariness, temple markets and festivals also demonstrated a mutual contract between users and space owners – in these situations, temples would open to salesmen and allow them to set up stalls, tents, umbrellas, tables, and chairs to do their business. The enclosed space of temples provided a good shelter against the sandy wind, it also helped to create a more intense atmosphere for entertainment and consumption. Moreover, different courtyards of temples could even be taken advantage of in containing different goods or performances which do not fit together; For the temples, the market or festival – with all the temporary spatial settings - could enhance their attraction for more visitors and possibly more donations. Actually, each temple market had their own specialties to sale or perform (Kwang, 1986).
Building culture: traditional architecture

A distinctive traditional building culture has formed in the long imperial history, which further reflects the coherent planning principle of order and hierarchy. Some major features include: 1) Courtyard and horizontal layout — courtyard was adopted in traditional Chinese architecture as the basic spatial unit. To achieve a larger scale, multiple courtyards were added up in a horizontal direction, usually along an obvious north-south central axis. "Sitting north and facing south" has been considered as an optimal position where the buildings of the most important persons was usually placed; 2) Defined scales and styles to represent status — different scales/heights of buildings and building elements have been defined to represent different status of users. Aspects include scale/height of the overall building, the number of columns -“Jian”, the height of the podium, and the scale/style of roof etc.; 3) Symbolic shapes and elements — some shapes have been considered as optimal forms in traditional Chinese culture and preferred in architectural design.

Image 4.8
Spatial layouts of some typical traditional building structures
Source: Hua Xia Yi Jiang (Li, 2005)

Image 4.9
Shapes commonly adopted in architectural planning/design
Source: Hua Xia Yi Jiang (Li, 2005)
4.2.2. Socialist time (1949-1978)

Planning goal, philosophy/principles, and activities

The founding of the People’s Republic of China in 1949 marked a new phase of planning activities and urban transformation of Beijing. The 1953 plan emphasized the role of Beijing as a major industrial base besides political, economic and cultural center. In addition, according to the new government’s goal, Beijing would be transformed into a socialist city appropriate for collective lifestyles of socialism. Through land reform, the public ownership of land was achieved. Aiming to realize a socialist ideology, the planners and architects of the newly funded republic viewed the planning and design activities an important chance to reshaped the social lives through spatial interventions.

Planning activities and principle include:
- Preserving the mono-center structure - The new plan determined the further development of the city based on the established core of the imperial times;
- Developing the spiritual axis - In addition to the historical north-south axis, a new west-east axis - the Chang’an Avenue - has been introduced as new axis symbolizing the modern aspect of the city - the cross of these two axes was planned with Tiananmen square and a series monumental building clusters around it;
- Industrial zones and expansion - Following the First Five-Year Plan, more than a hundred of factories would be built in industrial zones in the center and on the outskirt of the city at the time, which caused the expansion of urban area;
- Planning for a motorized transport system;
- Danwei – become the basic spatial and social units that compose the city.

Urban structure and pattern

“Danwei” - Danwei compound as a spatial unit for creating a mono-classic society. Through the process of socialist construction, a spatial and social unit have emerged and dominated the city of socialist age – the “Danwei”. Within merely 8 years, Danwei has become the basic spatial, economic and organization unit of Chinese cities. Danweis have been created with two key purposes: 1) representing and regenerate the order of a socialist country on a micro urban level; 2) Facilitating and promoting a socialism collective lifestyle of members of Danwei. Till 1957, more than 90% of the population has been included into various types socialist Danweis of the city (Bray, 2014).

The formation of Danwei space has been influenced by both the traditional Chinese spatial practices and the Utopia ideology. The spatial characteristics of Danwei include: 1) Middle or small-sized Danweis usually combined working spaces e.g. factory, office/man-
agement buildings, schools together with residential buildings together within a walled compound, while large Danweis usually have a separate residential compound next to it. Actually, the size of some large Danweis can even be identical with to a small town (ibid.). 2) Walls were adopted to define the domain of Danweis – marking their management areas while creating a collective lifestyle inside of it. Through Danwei, Chinese cities have been transformed into collections of self-supporting compounds rather than continuous networks. 2) Highly symbolic layout – arranging important buildings along a middle axis to emphasize the significance of the socialism regime within Danwei, in large Danweis, a secondary axis may exist next to the main. The courtyard layout of buildings and facilities has been adopted to represent the idea of equality and collective labor of socialist life.

Use pattern: collective

Life inside Danwei - As has been mentioned before, Danwei was also a basic unit through which society was organized. This is reflected in its assigned functions - besides being places of working and production, Danweis, as state-owned enterprises, were designated with functions including providing social welfare, daily goods and accommodation, the administrating the workers’ union, hiring and educating workers in aspect of social and economic organization, and providing urban infrastructures for their own members. Social structure: A Danwei provided a common identity of people assigned to it – a classless society of urban proletariat, and a collective lifestyle. Regarding the activities or usage of spaces, the collectivism lifestyle was stressed through shared facilities ranged from kitchens and toilets, to dormitory, clinic, bathhouse, assembly hall, sports fields, kindergartens and primary schools etc., and organized study and leisure activities. On one hand, study classes (“Communism Schools”) were organized to educate workers about politics, technology and management, and reading and writing skills after work. On the other hand, a leisure culture has been developed to allow members of Danwei to spend their leisure time in a collective manner.
**Political activities**

Huge political-oriented open spaces (represented by the Tiananmen square), grand public monuments and the construction of wider roads together with monumental landscapes have been created in the socialist age of the city. Such spaces were dominantly used for collective political events, which have been a major part of daily life in the Socialist age.

**Building culture: “National Style”**

In the search of the uniqueness of Chinese architecture in the modern age, Experiments have been made in the local architectural practice to combine modern architecture and construction with characteristics and elements of traditional Chinese architecture. The Chinese building culture in the Socialist times has been also greatly influenced by the Modernism, Beaux-Arts architecture styles and monumental architectural forms from the Soviet Union, forming a “National Style”.

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*Image 4.13*
Plan of Tiananmen Square  
Source: illustration by author

*Image 4.14*
National-Day parade along Chang’an Avenue and political use of Tiananmen square  
Source: http://jfqu53.club/forum.php?-mod=viewthread&tid=31733

*Image 4.15*
Two Imaginaries of LIANG Sicheng on modern architecture of China  
left: a 35-storied high-rise building  
right: a small plaza at street corner representing the "national style"  
Source: The Complete Works of Liang Sicheng (Volume 5)
4.2.3. Summary
As a result, the pre-reform urban development of Beijing has been formed as the context where large-scale MXDs began to emerge, which was characterized by the following features:

1) city function and spatial structure:
   Top-down planning system
   A centralized top-down planning system has continued in the post-reform planning practice;

   Mono-centric structure
   The pre-reform development set up a mono-centric structure of the city as a basis of further urban development;

   Historical places
   As areas with great cultural sensibility, the historical core and the “two spiritual axes” formed in the pre-reform times have profoundly influenced further planning activities and urban development of the city;

   Transformation of city function
   The nature of the city has transformed from consumption city in imperial age to city of industrial production in the socialist age. The industrial zones on the outskirt of the city provide potential sites of new development in the post-reform age;

2) Physical and use patterns of urban space:
   Large land parcel
   The large land parcels and public ownership of land created potentials for large-scale urban development, including large-scale MXD projects;

   Internally-oriented urban pattern, wide streets, fragmented pedestrian environment
   From courtyard houses to Danweis, the basic urban patterns in both the imperial and socialist time have been characterized by an internal-oriented and walled-in nature. The car-oriented planning has led to the fragmentation of pedestrian networks. The monumental and open spaces have been created for political events rather than daily uses. Overall, the pre-reform development of Beijing has resulted in urban patterns characterized by internal-orientation and unpleasant pedestrian environment (wide streets), and lack of people-oriented open spaces, especially in areas outside the historical core.

   Culture-specific use pattern of urban space
   A cultural-specific use pattern of urban space has been formed as a historical result, which is characterized by informal, temporary and collective use activities in spaces of the city. As is demonstrated later in this research, such use patterns have continued to influence the use activities of urban spaces in the post-reform age of the city.

3) Building culture:
   The building culture formed in the imperial and socialist time influenced the architectural practice of post-reform architectural practice.
4.3. Post-reform Beijing as the context of large-scale MXD

4.3.1. Characteristics

Four major interrelated mechanisms have been suggested in addressing the complex process of China’s post-reform urban transformation, which are: urbanization, marketization, decentralization, and globalization (Wu, 2005).

Urbanization - Post-reform urban development of Chinese cities are characterized by unprecedented pace of urbanization. The urban population of China grew from 20 percent in 1980 to 36 percent by 2000 (or 456 Million). In Beijing, the urbanization ratio has increased from 55% in 1978 to 86.5% in 2017. Meanwhile, in company with the growing population has been the dramatic expansion of urban area, and forming of a multi-centric metropolitan region. Rural lands and environments on the urban outskirt have been replaced by new urban developments, involved the expansion of both built-up areas and city infrastructural network. The urbanization was not merely a result of economic development, rather, it has been considered as a means of boosting economic growth.

Marketization - economic marketization is characterized by the change from the planned economy to market economy. In the early and mid-1980s, Soviet-style mandatory planning was gradually discarded in favor of “guidance planning” to establish a planned socialist commodity economy, and further a “socialist market economy”. Marketization has facilitated the local states to accelerate local accumulation through directing and participating in the market (Wu, 2005). One of the most critical responses was establishing the property market. Land development since Reform has supported city finances, which in turn has financed the construction of infrastructure (Wang, 2014). While answering the need of local states for rapid accumulation, this triggered the real-estate industry in China and its profound changes in urban landscapes. The marketization also released potentials of economic growth and prosperousness, which was suppressed in a planned economy, increased buying power, and upgrades of consumption as a result of accumulated wealth.

Decentralization - decentralization is characterized by increasing fiscal autonomy i.e. decreasing financial support of the central government on local states. Such reform has been conceived to motivate local governments in promoting local economic growth and expand their revenue base. As a result of this is what usually referred to as “local state corporatism” or “entrepreneurization of government”. First, inter-city competitions have been heated for attracting (foreign) investments; Second, spatial development was utilized as a critical way for governmental finance and stimulation for economic revitalization in disadvantageous global conditions e.g. financial crisis.

Globalization - The intention of opening-up to promote international trades, attract foreign investments and establish competitiveness has been emphasized in the city’s 2004-2020 master plan, which aimed to transform Beijing into a “world city”. The globalization resulted in 1) increased involvement of international capitals – property developers, making paradigms, technologies; spaces for international affairs and workers; 2) influence of global styles, international architects dialog and interplay of vernacular and international building culture; and 3) new lifestyles of leisure and consumption etc..

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3 Source: China National Bureau of Statistics and Beijing Municipal Bureau of Statistics
4 Decentralization, Marketization and Globalization: The Triple Process Underlying Regional Development in China, (Wei, 2001)
4.3.2. Property market

Modern property market and real estate industry of China was initiated by the economy and land policy reform. It has thus a relatively short history and a strong socialist characteristic. In the 1980s, in order to release the potential of land value which was formally constrained by planned-economy land policies - summed up as “assigned by government, free of charge, unlimited duration and no transfer” (Ye et al., 2013) - the reform of land policy and establishment of land market was considered critical and urgent, especially when considering the vast financial demand for the mass construction of urban infrastructure triggered by the economic reform. On 9th September 1987, the first agreement-based assignment of the right to use state-owned land was publicly conducted in Shenzhen, marking the birth of modern China’s land (Land Use Right) market. Great market demands have been generated by both domestic and international users. On one hand, the local economic growth and increased buying capacity have led to demands for housing, office and commercial projects. In addition, the increasing international activities also generate demand for properties e.g. hotel, apartment, and conventional facilities. Regarding the development of large-scale MXD projects, the short history and strong socialist characteristics of China’s property market is reflected in the following aspects:

• Planned characteristics of the property market
  1) As has been set by the country’s constitution, all land in China is collectively owned with two types of land ownership: the land in urban areas is owned by the state, while the land in suburban and rural areas is owned by the rural collective entity. In the situation of urbanization, the rural land can be requisitioned for urban development through land expropriation process, in which a compensation for land requisition is paid to the rural collective entity by the state;
  2) The land transaction is significantly regulated by the master plan and land use administration plan of the city. Because of the public ownership of land, the governmental planning controls the land provision and acquisition, and thus the possible locations for MXD projects; According to the PRC Law of Land, the land use right of land parcels with commercial purposes must be transacted through the public process of bid invitation, auction or listing, and follow the land use administration plan;
  3) The government’s will and policies play a critical role in shaping the demand in the property market. First, policies can be used to restrain or promote the provision of certain types of land parcels e.g. residential or commercial use in real estate development; Second, the government can attract foreign investments through providing an attractive built environment, which usually involves new planned urban districts; Besides, new areas of development conceived in the master plan also indicate great market potentials of real-estate developments.
  4) Local government has actively participated in the real estate development through acting as a development entity
For these reasons, the property market is critically influenced by policies and planning activities of local government.

• Changing nature of development entity of large-scale MXDs
Due to the relatively young land market and real estate industry, the local developers were at the beginning neither experienced nor capable for complex large-scale MXD projects. Therefore, large-scale MXDs have been initially developed by joint ventures of state enterprise and international developer, while local developers have been focusing on housing developments. The participation of local developers in large-scale MXD projects gradually increased afterward.
4.3.3. Public policies and regulations

Preserving the established top-down planning system, the post-reform urban development and planning interventions were to serve the following main tasks:

1) “World city” - The Masterplan 1990-2010 claimed that Beijing should be a city “open in all aspects”, while the Masterplan 2004-2020 “world city”: Policies and spatial planning have been implemented to serve the increasing need for international communication and business activities in the city, and to boost investments of global companies regarding the heated inter-city competitions. Emphasis has been put on both the creation of new international areas and development of the city’s historical identity.

2) Urban expansion - planning activities have been made to frame a spatial structure for the growth of the city regarding the rapid urbanization. While boosting the existing city center, the master plans emphasized the transformation towards a polycentric structure and regional development. The spatial structure determined by the master plans greatly influenced both the urban growth and real-estate development including large-scale MXD projects.

3) “Livable city” - The Masterplan 2004-2020 claimed that Beijing should become a habitable city. The focus of urban planning activities gradually shifted from quantitative to qualitative development, involving planning ideas, activities, policies and regulations regarding urban space qualities e.g. TOD and New Urbanism Planning concepts.

4) Industrial transformation - The change of city function form secondary industry towards tertiary industry has provided chances for new urban development; While the development of commercial centers has been emphasized, former industrial zones in central city area were canceled or relocated to outskirt areas to make space for service industry e.g. business and commercial developments.

- “Headquarters economy”

The policy of “headquarter economy” was developed and launched by the city government as a special development strategy, which refers to the pattern of a city’s economic growth through attracting international enterprises to establish their regional headquarters in it, which could stimulate the growth of service industry and general economy of the city. In 1999, Beijing Municipality issued the first governmental documents of encouraging transnational corporations’ establishment of regional headquarters in the city[5]. Since then, a series of governmental provisions were issued between 1999 and 2013. As an encouragement strategy, multinational companies that establish their corporate or regional headquarters in Beijing would receive a maximum subsidy of 10 million yuan ($1.46 million). Senior managers would be qualified for household registration in Beijing and company leaders would receive a maximum bonus of 1 million yuan ($146,413). The policies of “headquarters economy” has promoted the transformation process of Beijing into a cluster of multinational company headquarters. The number of foreign headquarters has significantly increased (see chart), which led to increased demand for office properties in the city. On the other hand, the policy was also supported by urban planning activities. In the master plan, areas have been particularly planned or recognized as “headquarters districts” to promote the concentration of global companies within the

<table>
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<th>year</th>
<th>number of global companies’ regional headquarters</th>
<th>number of fortune 500 global companies’ regional headquarters</th>
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<td>22</td>
<td>19</td>
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<td>2009</td>
<td>58</td>
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<td>48</td>
</tr>
<tr>
<td>2015</td>
<td>268</td>
<td>52</td>
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</tbody>
</table>


Table: 4.1
Source:
<China Business Times, 22/01/2002>
China Development Observation, 2009
<Beijing Daily, 18/02/2016>
city. These areas usually involve planned key business and development districts aiming for international companies and organizations. Besides, infrastructures and spaces have also been created to serve the need for international communication and events. Infrastructures include the new terminal of the international airport and railway station. The arrangement of new international places e.g. the Olympic Park and development has much referred to the two spiritual axes to enhance their representativeness and the identity of the city.

• **Transformation of spatial structure - towards a polycentric structure and regional development**

Planning efforts have been made for the transformation towards a polycentric structure and regional development. The 1991-2010 Masterplan proposed a 4-level hierarchical spatial structure consisting of city area, 14 satellite cities, key townships and normal townships. The city area is composed of the central city area and peripheral clusters which are structured in a pattern of dispersed components. In order to promote the transformation towards a polycentric structure through enhancing new centers, the 2004 Master Plan proposed a 3-level spatial structure of Beijing consisting of the city area, new towns and townships. The new towns were planned as populated urban areas that are largely independent from the city area. Among the 11 new towns, 3 were defined as key point new towns, and one of them - Tongzhou - was planned as the sub-center of the city in 2015. The establishment of 11 new towns based on the existing 14 satellite cities was considered as the key push for achieving the planned polycentric structure. The new towns have been planned to accommodate a considerable amount of urban population and therefore indicate great chances of real estate development. Besides, the new master plans also emphasized the development of a metropolitan region (Regional plan of Beijing, Tianjin, and Hebei province) of Beijing and cities in neighboring provinces, in which the new towns should function as critical junctions in the metropolitan network.

Source: Beijing Municipal Government
All the masterplans of Beijing emphasize the importance of the historical center and two spiritual axes of the city. The historical core and axis has largely determined the planned spatial structure: The master plan 1991-2010 proposed a structure of dispersed components centering the traditional center; The master plan 2004-2020 proposed a spatial structure of two axes, two belts, and multiple centers; The master plan 2016-2035 proposed a spatial structure of two axes, two cores, multiple centers. Importantly, the master plans also set up a hierarchical structure of the city, which determined areas of different planning goals. Accordingly, the city is structured into the city area, new towns and townsships. The city area is further structure into the central city area, peri-urban areas and the city green belt between them. To promote the regional development and polycentric structure, a dramatic increase of population has been planned in new town areas.

- **Development of mass urban transportation network and TOD**

The 2004-2020 Masterplan set up the goal of increasing the ratio of public transportation up to 50% of the total transportation activities of the city, within which the metro and rapid ground-surface public transportation take up more than 50% of total public transportation. Especially since 2000, a great expansion of public transport network and facilities has been achieved for the 2008 Olympic Games, which included the construction of 6 new subway lines (totaling 146km), a new No.3 terminal of the International Airport, the Beijing South Railway Station (finished in 3 years), and construction and expansion of transportation hubs etc. The total length of Beijing’s metro lines has increased from 200km in 2008 to 608 km in 2017 by more than 200 percent, with a planned total length of 1000km in 2021.
The idea of transit-oriented development (TOD) has been adopted in the new master plans. According to the 2004-2020 Masterplan, the public transportation - particularly the rail transit network - should play a critical role in promoting the transformation of the city’s spatial structure. Metro lines were conceived as a framework for major urban spatial development. In comparison with the urban development in central city and peri-urban areas, the creation of coherently planned New Towns in suburban areas allows a more thorough implementation of TOD idea thanks to fewer restrictions from the surrounding context. The establishment of metro lines connecting suburban areas and the central city were prioritized, and New Towns and major developments have been established along these transit corridors. Besides allowing mixed land use and high-density development around transit lines and stations, the TOD in New Towns also usually involved the provision of public facilities and services.

- **Key business districts**
  Characterized by a high level of governmental planning attention and intention (reflected by specific plan) and strategic positioning in the city, core areas and districts (represented by CBD, Olympic Park, development zones etc.) have been determined in the city’s masterplans to accommodate international business and trade activities. These areas were also conceived as a representative branding element of the city, usually planned with modern and international styles, and accompanied with promotional policies for global enterprises.

- **Regulatory activities**
  **Regulatory plan** - As a basic way of control by the planning authority, the zoning or regulatory plan and by-laws regulate all developments within the city. The regulatory plan, which is attached to the project site, provides control through qualitative indicators, texts, mapping and/or attached design guidelines on the following aspects:
  1) land use: types (intended and compatible), size/density, and boundaries of each use;
  2) building: height/volume, interval, setbacks, more detailed control provided by design guidelines;
  3) public facilities and utilities;
  4) environmental protection and traffic activities;
  Critical quantitative indicators include plot ratio, building density, and greening rate, building heights etc.

  **Specific plan** - While the regulatory plan provides basic control on all the projects, specific plans are usually adopted in key (re)development areas where the public sector pays more attention and intends to have stronger control. In such cases, international design competitions were usually held to form a master plan and establish strict design guidelines, which refine or modify the specifics of the zoning district, and establish the ground rules for specific approvals as development proceeds.

  **“Daizheng” and delegated public space** - The “Daizheng” public space is a mechanism within the special background of China’s land policy. Essentially, “Daizheng” refers to the process that the private developer requisitions land for urban development from the rural collective entity. “Daizheng” spaces are public spaces or facilities (e.g. public green space, streets, public parking lots etc.) planned by the planning authority, yet constructed by the private developer within a development project. In cases that rural land is required for the urban development project, the developer may be delegated by the government to conduct land requisition from the rural collective entity. Besides implementing the land requisition process, the developer will also take charge of land preparation, relocation of residence, and design and construction of the planned public spaces and facilities in the requisitioned land. After the “Daizheng” space is finished, the government takes over the space for further management and maintenance. “Daizheng” land is usually included in the total land as a requisite for a development project. Correspondingly, the government
usually makes a compensation through e.g. land price write-down to motivate the developers. The “Daizheng” mechanism may benefit both the developer and the government: For the developer, such mechanism allows a coherent plan for the development project and its surrounding environment and infrastructure and guarantee that the surroundings are ready when the product comes into market, which may promote the marketability of the real estate development; For the government, the “Daizheng” mechanism also promotes the construction of urban infrastructure within a short time, and demonstrates its political achievements. “Daizheng” mechanism is commonly involved in case on development in peri-urban or suburban areas, where the requisition of rural land is needed. Besides, the public sector may also delegate private developers to take charge of the construction of public spaces or facilities.

Zoning incentives - incentive policies have also been adopted in urban planning to promote the provision of open urban spaces in private development. For example, most new town plans have included the incentives for additional development floor areas when quality open space is provided by private development projects.

- Planning guidance promoting MXD
  Mixed-use zoning category - According to the land use planning standard, a land parcel with code B allows space generally for commercial uses. Sub-categories include commercial use (B1 - retail shopping, market, catering, hotels), office use (B2 - office for insurance and financial services, art and media, research and design, and other activities such as trade, consulting etc.), recreational and entertainment use (B3 - entertainment facilities e.g. theatre, cinema, amusement park etc. and recreational functions e.g. ice rink, golf field etc.). Especially, a new category - mixed-commercial use (B4) - has been created to allow combinations of uses within the B category. In 2013, a mixed-use zoning code F was introduced to the land use planning standard. Mixed-use land (with zoning code F) allows combinations of general categories of land uses to be developed on it. For example, a land parcel with code F1 allows combinations of residential use with other uses such as office, commercial, educational, cultural, tourism and transport uses while in this combination the residential use should take the major part (60% - 70%) of total development floor area. Land parcel with code F2 allows the same mix of uses, while presetting the ratio of residential use at (30%-40%). Land parcel with code F3 allows any reconcilable mix of uses other than residential. The mixed-use land zoning was relatively recently introduced and much involved in the transit zones of new town areas.

Mixed-use district - besides the zoning categories supporting mixed land use and MXD projects, special purpose zoning districts have also been conceived in the urban planning, where the combination of multiple land uses was emphasized. Mixed-use districts were planned in two situations: 1) master-planned key business districts and 2) transit-oriented development zones of new towns. First, key business districts have been planned with multiple land use to provide an attractive environment for foreign investors and workers; Second, following the idea of TOD, zones around metro stations have been planned to support dense and multiple uses in suburban new towns.

4.3.4. Cultural ideas and values
The influence of Beijing’s post-reform urban development in terms of cultural ideas and values consists of the following aspects of 1) The local historical context primarily represented by the old city core, the two spiritual axes, and the local building culture; 2) The cultural influence of globalization which has been caused by the increased practice of international developers and architects in local real-estate projects. Besides projects initiated by international developers, many local developers have also invited foreign architects to design their projects, which has brought about international building- and lifestyles to the city; and 3) Personal preferences of developers another aspect of influence has been generated from the developer or architect’s personal preferences and values.
4.4. Development history of large-scale MXDs in Beijing

4.4.1. Overview

The development of large-scale MXDs in Beijing is characterized by three major phases: late 1980s to 1999, 2000-2008 and afterward. These phases are defined by some major historical events including the establishment of China's real-estate market in 1987, 1990's Asian Olympic Games Beijing, the successful bidding for XXIX Olympic Games in Beijing and entering the World Trade Organization in 2001, the hosting of the Olympic Games in 2008, and the world financial crisis in 2009. These phases have been also accompanied with three masterplans of the city.

4.4.2. Late 1980s - 1999

The 1990-2000 stage saw the wakening real estate market and urban regeneration in the city. The 1990 Asian Games stimulated the city’s real estate market and development to satisfy the increasing need of space for international affairs and business activities. A series of large projects have been planned and constructed, such as the National Olympic Center, Athlete’s Apartment, Beijing Continental Grand Hotel, Central Television Tower and China World Trade Center in response to the expanding international activities promised by the opening market and accelerating process of globalization. It was also in this stage that the first large-scale MXDs began to emerge in Beijing. All MXD projects created in this stage were monumental high-end projects aiming for foreign affairs and business – two of them (Henderson Center, New World Center) were titled as 10 Grand Buildings of Beijing in the 1990s. They also represented the highest level of service, consumption, and international events and activities. Meanwhile, numerous market housing projects have been developed by local developers. Many of them are located in peri-urban areas, forming the start of urban sprawl and commuter-town characteristics in these areas.

Large-scale MXD - development entity and architects

Regarding the complexity and high financial risk of MXD projects, the young and inexperienced local developers were neither capable nor willing to conduct such developments. For them, residential developments were obviously less risky and preferable. Meanwhile, experienced developers in Hong Kong saw the market chance for developing hotel, office and commercial properties in the city. As a result, most large-scale MXDs emerged in this stage have been jointly developed by the municipal government and experienced developers from Hong Kong and Singapore. Among the totally 7 Projects opened in this period, 5 have been developed by joint ventures of Hong Kong developers and Chinese government or state-owned enterprises, 2 have been developed independently by Hong Kong property tycoons (Henderson Center and New World Center). Almost all the projects were designed by Hong Kong architects, with obvious Hong Kong characteristics. 2 were designed by Japanese office Nikken (Jing Guang Center and CWTC Phase I & II).

Locations of MXD projects

1) Central city area - All projects emerged in this early stage are located in the central city area within the third ring road;

2) Access to international visitors and consumers: airport corridor, embassy district, spiritual axis - MXDs have been developed at representative locations with high exposure to international visitors and consumers. MXD projects have been developed at representative locations e.g. the Changan Avenue as the city’s axis of modernization, as well as on the corridor linking the international airport and city center, or in adjacency to the established number one embassy district. Within the background of industrial transformation, the relocation of factories in the former industrial zones created chances for new massive developments. Although there are several industrial zone around the city, the “east-suburb industrial zone” was the first where MXD has been developed thanks to its strategical positioning between the city center and airport, as well as its adjacency to the embassy district to the east of the city center. In 1990, Beijing’s first large-scale MXD - the China
World Trade Center (CWTC) was created here, a decade later, this area was transformed into the central business district (CBD) of the city.

3) Connection to public transportation network - The locations of MXD projects show a good connection with public transport network: First, most (5 of 7) MXD projects have been created near existing metro stations. Second, MXD projects also emerged as (re)development of the railway station area e.g. the Henderson Center and COFCO Plaza near Beijing railway station, and transit station with connection to the international airport.

Image 4.23
East Gate Plaza near metro junction

Image 4.24
Spati	distributi	on	of	large-scale	MXDs
late 1980s - 1999
Source: Illustration by author
4.4.3. 2000-2008

The Masterplan 2004-2020 determined the goals of transforming Beijing into a “world city and a livable city” while proposing a spatial structure of “two axes, two belts, multiple centers” for the growth of the city, which emphasized the development towards the outskirt of the city. This stage saw intensive development of key business areas including the CBD (central business area), Finance Street and Zhongguancun Business District; the development of central city commercial centers; urban planning and construction for Olympic Games including the construction of Olympic Park, and the expansion of metro network and transit hubs.

Market needs for space and the involvement of foreign actors in large-scale MXDs have been stimulated by the deepened process of Beijing’s globalization, which was marked by China’s entering the WTO (World Trade Organization) in 2001 and successfully bidding for the XXIX Olympic Games in 2000. Meanwhile, large Chinese real-estate companies (e.g. Wanda, Yintai, China Resources, SOHO China) began to emerge as development entity of large-scale MXDs after growing up through developing residential projects in the past decade. These developers gradually shifted their focus towards commercial and mixed-use properties. The development of commercial projects was also fueled by intensive investment and involvement of international retail operators in the local market.

the Olympic Park has been planned as an extension of the “traditional” north-south axis. While iconic developments have been created along the Chang’ An Avenue. The government showed its open political attitude through major public landmark projects e.g. CCTV Headquarter, National Opera, the national stadium etc. International “star architects” have been invited by local developers to design real-estate projects, which was at the same time part of the branding strategies (example: Commune by the Great Wall). More space of personal interpretation was enabled as a result of the environment for developers and architects to conduct “pilot” and experimental projects.

Large-scale MXD - development entity and architects

Development entity: With the economic development, the opening of the market with China’s entry to WTO, and the city’s preparation for 2008 Summer Olympics, this period witnessed in increased engagement of China mainland investors and developers in large-scale mixed-use projects of Beijing. More than half of the projects (17 of 32) have been developed by private developers from China mainland. 9 projects were developed by state-enterprises, 5 by joint ventures of Hong Kong and local companies, 1 independently buy Hong-Kong-based Swire Properties.

Architects: The wave of transnational architectural practice has been dramatically reflected in large mixed-use projects of this period: only 6 of all 32 projects were designed by architecture offices of China mainland, while the rest 26 all by international architects, taking up more than 70 percent. In perspective of the local municipality, architectural landmarks could be take taken advantage of in satisfying the need for demonstrating the country’s open-attitude toward the world. From a developer’s perspective, the heated competition between property companies necessitated the identity, or branding of their real-estate products – in which the “locally initiated globalization” (Wu Fulong, 2007) contributed as part of the driving force behind the transnational architectural landscape. As a result, this stage saw the cooperation between international “star architects” and certain local property developers (example SOHO China). Besides “giving a brand” to the products, the architects in some cases were also given the freedom to conduct “pilot projects” - social-spatial experiments with intentions of creating an alternative spatial and social pattern regarding the enclosed nature of the city. (example: linked hybrid, Jianwai SOHO).
Locations of MXD projects

1) Central city area and peri-urban areas - Most of the large MXD projects (28 of 32) developed in this period are still located within the central city area defined in the 2004 master plan. Meanwhile, a trend of expansion of MXD projects towards the outskirts of the city can also be observed - 3 projects have been developed in peripheral areas (Wangjing, Shijingshan). Two MXD projects have emerged in Wangjing (Jiuxianqiao) area thanks to the area’s gateway positioning and connection to the international airport.

2) Master planned key business districts - An obvious concentration of large-scale MXD projects can be seen in key business districts conceived in the city’s master plan. Key business districts have been planned as representative urban areas with high development density and up-scale users and market, and therefore indicate a great market potential for commercial real estate projects. Shortly after 2000, planned key business districts such as the CBD, Financial Street, and Zhongguancun all entered the stage of rapid construction. Especially, in CBD showed the most intensive concentration of large mixed-use structures - about one-third of the large MXD projects opened between 2000 and 2008 are located within the CBD.

3) Access to international visitors and consumers: airport corridor, embassy district, spiritual axis, major streets - Besides the obvious concentration in planned key business areas, large-scale MXD projects in this stage have also emerged in areas with good exposure and accessibility to international visitors and consumers, including areas surrounding the No.2 embassy district, Wangjing district between the international airport and city center. Besides, the two spiritual axes still were the most representative spaces of the city, where iconic MXD projects have been developed (e.g. Oriental Plaza and Pangu Plaza on the two axes).

4) Connection to public transportation - transport hubs and metro network - Locations of MXD projects in this stage show a good connection with the public transport networks and junctions. Most MXD projects are located in adjacency to metro stations. Especially, the two major transport hubs of Beijing - Xizhimen on the west and Dongzhimen on the east, have been planned and created as large-scale MXD project embedding transport components.
4.4.4. 2009-2016
Responding to the global financial crisis and its impact on China’s economy, especially the dramatically decreased export, the central government issued in 2009 a set of strategies to expand the domestic demand and boost domestic consumption with the goal of keeping the country’s GDP above 8 percent. Urbanization and mass construction have been utilized as an important part of these strategies. First, this stage saw intensive development in the peri-urban area and new town areas. Particularly, in 2015, a subcenter of Beijing’s in Tongzhou New Town was planned to promote the polycentric structure and regional development of the city. Second, new key business districts have been planned and constructed, which include the expansion of CBD, Dawangjing Business District, the Business District in Tongzhou. Third, the urban metro transportation network has been further expanded. Especially, the concept of TOD has been introduced and adopted in most new town developments. Besides, in response to the planning goal towards qualitative redevelopments, regulations promoting the quality of urban spaces e.g. mixed land use and incentive policies have also been adopted in new town developments.

In 2010, A new wave of commercial real-estate development was caused by the state through strict suppression policies on the overheated market housing prices, and provision of commercial-use land. As the inner city lands gradually get fully developed, many available land parcels were located in peripheral or suburban areas. Local developers increased the proportion of commercial development. Besides, enterprises, both private and state-owned, inside or outside the real-estate industry, have greatly invested in developing commercial properties. The extensive involvement of local private developers also significantly contributed to the participation of local architects and the emergence of middle-end MXDs in suburban areas in accordance with the spatial transformation proposed in the master plan. The result of this wave is the over-development of shopping facilities and drastic competitions between retail developers and operators. The uneasy situation has been further exacerbated with the rise of Internet shopping. Developers and operators began to seek for breakthroughs of commercial functions and transforming overdeveloped retail space to other uses. Recent years witnessed the growing proportion of leisure, entertainment, education and culture functions in mixed-use projects. With the government’s advocation of “business and innovation” since 2015, the trend towards collective working spaces and “innovation hubs” have been observed.

Large-scale MXD - development entity and architects
Development entity: This stage saw even more engagement of developers from China mainland – both private and state-owned, in developing large MXD projects. From 2009 till April 2017, totally about 50 projects have been developed or under construction in Beijing. About 80% (40 projects) have been/are being developed by Chinese development entities, among which about a half (21 projects) by private Chinese real-estate companies and a half by state-owned development entities. Architects: More large-scale MXD projects have been designed by local architects. With one-third of the opened projects independently designed by architects from China mainland. 22 out of 50 were or being developed by local architects, 28 developed by international architecture/planning office, or joint teams of local and global architects. In spite of that, iconic MXD projects in e.g. key business districts have mostly been developed by state-owned enterprises in cooperation with international designers.

Locations of MXD projects
1) Concentration in the central city area, expansion in peri-urban areas and new towns
This stage saw an obvious expansion of large-scale MXD projects into the peri-urban and suburban areas. More than half (27 of 50) of large MXD projects developed or being developed in this stage are located in peri-urban areas or new towns. First, large-scale MXD projects further emerged in peripheral areas, taking up more than one fifth (11 of 50) of the total large MXD projects developed in this stage. Most peri-urban MXD projects
have been shaped into retail-oriented commercial/leisure centers. Second, in this period, large-scale MXDs have been developed as local centers of New Towns. Developed under the TOD planning ideas, new town MXD projects often include large residential spaces, middle-end retail and community open spaces, being well connected to transit stations. Third, central city area also saw further development of large-scale MXD projects (16 of 50). Central city MXDs in this stage were developed near CBD area, as well as commercial areas around the embassy district in accordance with the redevelopment of existing inner-city commercial areas. (Example: projects in Sanlitun e.g. SOHO Sanlitun, Gongsan Plaza, Tunsanli etc.)

2) Access to international visitors and consumers: airport corridor, embassy district, spiritual axis. First, the peri-urban area such as Wangjing has rapidly developed as the territory of large MXD projects thanks to its positioning and access to international consumers. The international access has influenced the arrangement of new key business districts. The development of MXDs in central city area has been influenced by connection to the international airport and embassy districts.

3) Master planned key business districts - MXD projects of this time period show a concentration in the planned key business districts, which include the Dawangjing Business District in the peri-urban district Jiuxianqiao, and the Central Business District of Tongzhou New Town. Dawangjing Business District (“Greater Wangjing”) was planned in 2010 as “Beijing’s second CBD”. In the same year, a riverside Business District for Tongzhou New Town - the planned subcenter of Beijing – was approved. Large MXD Projects have been planned with considerable scales and landmark identities within these districts to highlight characteristics and representativeness of world-class business districts. (e.g. Canal One, Greenland Center). The establishment of key business districts such as Dawangjing Business District in the peri-urban area Jiuxianqiao, and the New CBD of Tongzhou New Town has contributed to the concentration of landmark MXD projects in these areas.

4) Connection to public transportation - transport hubs and metro network
Most of MXDs in this stage have been created in adjacency to the metro transportation network. Exceptions can be found in peri-urban areas, where MXDs may not be well connected due to the lack of public transport provision and coherent planning. Particularly much attention of TOD has been paid in the overall planning and development of new town areas. As a result, MXD projects in new town areas are mostly well connected within the metro transportation network. In several cases, transit hubs e.g. bus central stations have been integrated within large-scale MXD projects.
Image 4.37  
Spatial distribution of large-scale MXDs  
2009-2017  
Source: illustration by author
4.4.5. Summary
Overall, the development of large-scale MXD projects in Beijing demonstrates a rise of local development entity and decrease of involvement of joint venture of state-enterprise and foreign developer. However, the state-international joint venture and state enterprises have taken charge in most large-scale MXD projects in important city areas e.g. key business districts. Besides, the investigation also shows an increasing engagement of local architects in large-scale MXD projects after 2008. However, most key projects have been planned by international architects.

Characteristics of the spatial distribution of large-scale MXDs
The investigation shows that the development and spatial distribution of large-scale MXDs in Beijing have been greatly framed by urban planning. The government’s urban planning activities have acted arguably as the most influential factoring shaping the emergence and spatial distribution of large-scale MXDs in the city. Two critical reasons can be learned from the previous investigation: First, because of the specific situation of China’s land market - which is characterized by public land ownership - the master plan and land administration plan has strong control over the land provision for large-scale MXD projects and provision of other services (e.g. land preparation, relocation etc.) and infrastructure; Second, beyond merely regulating activities, the government’s master plan and policies can also significantly shape the property market: Market demands can be created through newly planned (re)development areas or districts within the city, such demand can be further enhanced through policies such as the provisions for “headquarters economy”. The urban planning and public policies’ strong influence on the property market makes it the most determining contextual factors shaping large-scale MXDs, and a suitable attribute in the classification of MXD projects in the context of Beijing.

Besides, following factors have been identified, which have significantly influenced the spatial distribution of large-scale MXDs in the city:

- **City areas structured by the master plan - central city area, peri-urban area, new town**
  Along with these three stages, the territories of large MXD projects in Beijing has gradually expanded from central city area to peri-urban areas, to new towns. All large-scale MXD projects are located within the areas structured by the city’s master plan, and the spatial distribution has developed in accordance with the development of the city towards a polycentric structure and development of the metropolitan region.

- **Master planned business districts** - Obviously, large-scale MXDs have been densely created in master planned key business districts e.g. CBD, Dawangjing and Tongzhou CBD. Up to 2017, nearly 30% (26 of 88) of Beijing’s large-scale MXDs are located within key business districts. The establishment of such districts has promoted the emergence of large-scale MXD projects;

- **“International” places** - spaces which are more accessible for international users (e.g. corridor connecting international airport and city center, embassy districts, two spiritual axes) also show a strong influence on the spatial distribution of large-scale MXDs. These areas also influenced the urban planning e.g. locations of key business districts.

- **Public transportation network** - the spatial distribution of large-scale MXDs is closely related to the metro network of the city. More than 80% (73 of 88) of large-scale MXD projects are located within close distance (less than 500m) to metro stations.
Based on this understanding, this research identifies four typical situations, in which large-scale MXD projects in Beijing have been developed, which is also a possible way of classification of MXD projects. These situations are:

1) **master planned business district**; (26 projects)
2) **central city area**; (38 projects)
3) **peri-urban area**; (15 projects)
4) **new town area**. (9 projects)

This classification largely follows the spatial structure proposed in the city’s master plan, as the locations determine largely the framework development conditions. First, the different areas structured by the master plan are planned with different goals, activities, and policies. Besides, the real estate market is much related to the geographical locations within the city.
4.5. Four typical contextual conditions

4.5.1. Master planned business districts

4.5.1.1. Context

Master planned business districts, typically represented by planned areas named as CBD (Central Business Districts) in a Chinese context, are iconic urban districts that are coherently planned primarily for business functions. It is important to realize that such planned business districts are resulted by the special Chinese context with special meanings and functions. Zacharias and Yang (2016), in their study of Chinese CBDs, has distinguished the Chinese CBD with business districts commonly seen in western cities: while both of them indicate highest order economic activities and critical economic function in the city, the most distinctive characteristic of the Chinese planned business districts is that, rather than naturally grown or market-driven, they are “almost exclusively a city government planning project, financed largely by the city and for its own purposes. The private sector is invited to the table, as it were, but is ultimately a bit player in a much more ambitious geopolitical play.” (Zacharias and Yang, 2016) The planned business districts can be seen as “an outcome of a distinct policy-led phase of urbanization“ ... They do not so much emerge from economic transition as they are intended to accelerate it.” On one hand, these districts were planned for promoting the economic transition or tertiarization of economy and accommodating business activities, especially within the specific context of post-reform globalization (global positioning) and intensified inter-city or regional competition of big Chinese cities. On the other hand, they were also conducted with great representative values[6] (ibid.). As such, master planned key business areas involve high attention of the government and public sectors.

Historical development

As master planned key business districts are all planned as areas with special purposes, they do not necessarily have a close connection with their surrounding environment. However, areas of master planned key business districts have two common features: First, they are all located at strategical locations within the development plan of the city or metropolitan region; For instance, the CBD is located on the way between the airport and Tiananmen Square as center of the city; Dawangjing is positioned as a “national gateway” because of its connection to international airport. The Business District of Tongzhou is located in Tongzhou New Town - the newly planned subcenter of Beijing and critical junction of the metropolitan development plan. The positioning of Zhongguancun and Finance Street may also be linked to the consideration of building up centers balancing the spatial structure. Second, a large amount of land has been available in these areas to allow sizable development - these areas were therefore usually industrial zones or rural areas before the master plan was made. Master planned key business areas can be located in central city area, peri-urban areas or new town areas.

Planning/public sector interventions

Planning goal:
- accommodating highest order economic activities, supporting international trade and headquarter economy
- building up iconic urban area with rich representational values and the city’s image as a “world city”

The key purpose of planned business districts is to accommodate high order economic activities to serve the tertiary industry e.g. financial and trading services, and import-export activities within the context of the accelerating globalization – spaces for foreign business. Besides, planned business districts have been planned in response to the heated inter-city or regional competition for investments – for example, the CBD of Beijing has been planned with obvious intention of counter-balancing the powerful growth of cities in the south, attracting international corporation, making Beijing a key corporate headquarters city for more competitive power together with supporting policies. The city

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government is quick to claim the presence of Fortune 500 companies in these districts.

Master planned business districts have also been planned as icons demonstrating the desired image for Beijing as an emergent “world city”. Planning efforts therefore also put emphasis on modern and international styles, skylines of high-rise building clusters, as well as representative open spaces. The green cores of these plans are often likened physically to Central Park in New York City, but more obliquely to post-Revolutionary Tiananmen Square in Beijing as representations of power. These spatial concepts are now the core feature of the CBD development plans (ibid.).

Planning intervention - regulatory activities and tools:
- specific masterplan
- systematic open space
One of the most important regulatory activities in key business districts is the development of specific master plans, which was usually achieved by holding international competitions and governmental planning activities. The content of the master plans covers: 1) Overall planning philosophy and image: international style, advanced traffic planning, diversity and mixed-use (24-hour vitality); 2) Land-use: The plan determines the whole area as a mixed-use district, with specifically defined percentage of uses; Office and business functions have been usually planned as dominant uses of these areas; mixed land use category has been adopted; 3) Spatial pattern: The masterplans adopted dense street grids and smaller block sizes when comparing to the surrounding context, which also leads to denser pedestrian networks that are integrated with green and open spaces. 4) Transportation: public transport facilities have been emphasized and sufficiently provided; 5) Green and open space system: green and open space systems have been carefully integrated into the master plans, which usually takes the form of a continuous system combined with pedestrian networks.

Planning intervention - development incentives/tools
- mixed-use zoning code, mixed-use district
- promoting public transportation
- headquarter economy policies
First, the planning of key business districts emphasizes a mixed-use characteristic of master planned business districts. Multiples uses have been planned in these areas. In addition, mixed land use zoning code has been adopted to allow flexible land use configurations. Second, special planning efforts have been made to improve the accessibility and public transportation of these districts. Besides strategical positioning, major planning activities include: 1) Setting up particular public transportation lines e.g. metro lines and stations, which usually involved the planning of transit areas and station between various transport systems (e.g. bus metro and cars); 2) Integrative development of public transport facilities e.g. TOD; 3) Setting up goals about public transportation coverage and usage; 3) setting up multi-level pedestrian network and connections e.g. underground pathways, bridges, and skywalks to enhance the area’s internal and external connection to prioritize pedestrian traffic. Third, key business districts usually are also promoted by policies e.g. Headquarter economy policies to enhance their desired functionality.

Involvement of the public sector:
- Involvement in development: as the development entity or supporting components
- Involvement in management / operation
Local government has been highly involved in the development of key business areas. Frequently, the government became part of the development entity of these districts or projects within these districts. The public sector may also participate and conduct its influence through supporting components or other aspects of large-scale MXD projects e.g. land preparation.
Area-wide management systems (AWMS) are widely adopted for the management of the common space and facilities in key business areas. For example, one special management entity of Beijing CBD, the Administrative Committee of Beijing Central Business District (ACBCBD), has been established by the city government for the areal management tasks.

**Property market**
- Land price: very high land value
- Target users / profitable uses: very high-end market, international consumers

As targeted developments, the composition of the population is highly determined by the masterplans. Most master planned business areas are positioned as high-end mixed-use district with office as dominant use. The planned population or users’ composition in these areas are mostly high-end and homogeneous. Users are expected to be employees and leaders of international companies, national headquarters, state enterprises. (example: the Central Business District of Beijing)

**Cultural ideas and values**
- emphasis on global, modern characteristics, spatial form - Density height and skyline (requirements on image and icon) influence of global architects (international style)
- high-rise towers and skylines;
- influence of local context (e.g. the spiritual axes)

As these areas are often defined as landmark or gateway areas, guidelines have been provided by the masterplans to ensure the desired images and identity of these areas. Major aspects include the guidelines on 1) entire urban image: building heights (building height zoning) to form the desired skylines and visual impacts – buildings were required to reach a determined height; 2) specific on architectural design including style, facade, materials etc, where “modern”, “international”, and “world-class” impressions have been emphasized.

**4.5.1.2. Framework development condition of large-scale MXD**

**Development entity**
- development entity: much involvement of public entity and joint developer
- architect: dominantly international

Development entity: 58% (15 of 26) of large-scale MXDs in planned key business districts have been developed by state-backed developers. 30% (8 of 26) of MXDs in planned key business districts have been developed by developers with International background.

Architect: large-scale MXDs in planned key business districts have been dominantly designed by international architects. 92% (24 of 26) of them have been developed by international architects.

**Site**

**site condition:**
- small block size, multiple parcels, very high density

**surrounding context:**
- strategically positioned; public transportation in the district; multi-level connections
- dense street network, small block size
- structured and continuous open/green space system
- high density environment planned for homogeneous high-end user groups

**site-attached regulations:**
- various regulation through specific plan;
- district management;

**market potential:**
- very high-end market, international users;
- profitable uses: office, hotel, retail, residential.
**Definition & Overall aim**

<table>
<thead>
<tr>
<th>CBD (Central Business District)</th>
<th>Finance Street</th>
<th>Zhongguancun West</th>
<th>Dawangjing Business District</th>
<th>Tongzhou New Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;International business center&quot;</td>
<td>&quot;National center of financial business&quot;</td>
<td>&quot;World class high tech &amp; business center&quot;</td>
<td>&quot;International center of business and innovation&quot;</td>
<td>&quot;modern and international New Town Center and business district&quot;</td>
</tr>
</tbody>
</table>

**Landuse**

- **Total GFA: 1.5 Mio sqm**
  - **Office:** 71%
  - **Apartment:** 15%
  - **Retail:** 4%
  - **Hotel:** 8%
  - **Cultural/Educational:** 4%

- **Total GFA: 4.5 Mio sqm**
  - **Office:** 71%
  - **Apartment:** 15%
  - **Retail:** 4%
  - **Hotel:** 10%
  - **Cultural/Educational:** 4%

- **Total GFA: 10 Mio sqm**
  - **Office:** 50%
  - **Apartment:** 25%
  - **Shopping/Entertainment/Cultural/Service:** 25%

**Street pattern / Urban texture**

- **Planning:** dense street network / small blocks
- **Planning:** Multi-level transport - underground pedestrian network & Parking
- **Planning:** 80% public transportation; Planned metro transit station
- **Planning:** Pedestrian prioritized (P-Public-bike-cars)

**Urban space / Open space**

- **Planning:** a continuous Central Park provides identity and address to every development block and recreational activities. The central park is connected with street greening.
- **Planning:** flexible green ratio - green area ratio for overall district instead of for each block
**Management and Operation**

| Administrative Committee of Beijing Central Business District | Finance Street Administration Commission | Administrative committee of Zhongguancun West | Administrative committee of Dawangjing Business District | Administrative committee of Tongzhou Business District |

**Traffic/Accessibility**

- Traffic and transport
- Supportive activities &

**Image and Form**

- Goal
- Planning activities & policies

Goal: Planning activities and policy
Urban design:
- Skyline/height zoning: height zones of 60m, 80m and 100-300m; strengthen and display the area's identity by arranging landmark skyscrapers along the "golden crossing".

**Planning**:
- Dense street network / small blocks
- Multilevel transport - underground pedestrian network & parking
- Extra metro lines and stations

**Urban design**:
- Skyline/height zoning: building height zones: 100-110m, 65-90m, 30-65m (R); the skyline goes down from west to east, and from the middle down towards north and south to emphasize the middle axis.

**Architectural design**:
- Guidelines on materials & styles

**Image and Form**

Goal: Planning activities and policy
Urban design:
- Skyline/height zoning: building heights: 80m; skyline gradually goes high from west to east

**Planning**:
- Dense street network (6km/km2) / small blocks
- Multilevel transport - underground pathways, street network & parking
- Planned metro line (line 3, 2 existing stations)

**Goal**
Planning activities and policy
Urban design:
- Skyline/height zoning: building heights: 100-150m, 220-250m (landmark skyscrapers); Landmark skyscrapers are positioned in the middle

**Architectural design**:
- Guidelines on materials & styles

**Image and Form**

Goal: Planning activities and policy
Urban design:
- Skyline/height zoning: building heights: 100-110m, 65-90m, 30-65m (R); the skyline goes down from west to east, and from the middle down towards north and south to emphasize the middle axis.

**Image and Form**

Goal: Planning activities and policy
Urban design:
- Skyline/height zoning: building heights: 80m; skyline gradually goes high from west to east

**Planning**:
- Dense street network / small blocks
- Multi-level transport - planned Art Bridge over expressway
- Car-free pedestrian network
- 60-70% public transportation; Planned metro transit station (M15, 2 metro lines) streetcar line and bus station

**Accessibility**

Traffic:
- Supportive activities &

**Planning**:
- Dense street network / small blocks
- Multi-level transport - underground pedestrian network & parking
- Extra metro lines and stations

**Urban design**:
- Skyline/height zoning: building height zones: 100-110m, 65-90m, 30-65m (R); the skyline goes down from west to east, and from the middle down towards north and south to emphasize the middle axis.

**Architectural design**:
- Guidelines on materials & styles

**Image and Form**

Goal: Planning activities and policy
Urban design:
- Skyline/height zoning: building heights: 100-150m, 220-250m (landmark skyscrapers); Landmark skyscrapers are positioned in the middle

**Planning**:
- Dense street network / small blocks
- Multi-level transport - planned Art Bridge over expressway
- Pedestrian prioritized (Public-bike-cars)
- 75% metro transportation; Planned metro transit stations (3 metro lines) and bus station

**Accessibility**

Traffic:
- Supportive activities &

**Planning**:
- Dense street network / small blocks
- Multi-level transport - underground pedestrian network & parking
- Extra metro lines and stations

**Urban design**:
- Skyline/height zoning: building height zones: 100-110m, 65-90m, 30-65m (R); the skyline goes down from west to east, and from the middle down towards north and south to emphasize the middle axis.

**Architectural design**:
- Guidelines on materials & styles

**Image and Form**

Goal: Planning activities and policy
Urban design:
- Skyline/height zoning: building heights: 80m; skyline gradually goes high from west to east

**Planning**:
- Dense street network / small blocks
- Multi-level transport - underground pedestrian network & parking
- Planned metro line (line 3, 2 existing stations)
4.5.2. Central city area

4.5.2.1. Context

Historical development

• function: the central city area has historically embedded the core functions of the city. Therefore, it is the most critical city part with much attention and involvement of the public sector. Because of its importance and centrality, the central city area also indicates high value and high-end market in terms of real-estate development.

• urban pattern: wide street, large blocks and fragmented open space

The central city area includes the city’s historical core and built-up areas generally within the fifth ring road. The historical core used to be characterized by low-rise and dense urban patterns. However, the industrialization and car-oriented urban planning since the socialist time have led to an urban pattern characterized by large blocks defined by wide multi-lane streets. Besides, the walled structures of former Danweis and gated housing communities further led to an enclosed pattern, which has led to insufficient and fragmented urban open space and undermines a continuous and pleasant pedestrian environment, especially in areas outside the historical core.

• The central city area is highly representative in terms of urban heritage and identity. Areas such as the historical core, the two spiritual axes, and numerous other historical areas have a high cultural sensibility and demand on the spatial development within them.

Planning/public sector’s interventions

Planning goal:

• optimization / concentration of core functions
• serving economic transformation (tertiary industry)
• representing traditional and modern culture

According to the master plan (2004-2020), the city area should “intensively reflect Beijing’s status as China’s political and cultural center, and its important economic functions, strongly demonstrating the rich history, tradition, culture, as well as a modern and international image of the country...The development of the city area should shift from expansion to optimization, promoting the concentration of core functions”. Major planning goals include: 1) Promoting functions of international communications in accordance with Beijing’s role as China’s capital city; 2) Promoting the modernization while preserving and enhancing the city’s historical and cultural heritage; 3) Promoting the economy through optimizing industrial/functional structure and layout, and thus the overall competitiveness of the city” (Beijing Master Plan 2004-2020).

Planning interventions - regulatory activities and tools:

1) Zoning of commercial land parcels - Serving the city’s economic transformation and development of tertiary industry, the master plan stressed the optimizing of commercial spaces and commercial centers. Most commercial land parcels (zoning code B) allowing MXD have been arranged along major streets or within commercial districts. In case that commercial land parcel is adjacent to a major street, large building setback is usually involved. Such arrangements predetermine the possible locations and configurations of (site for) large-scale MXD projects.

2) Public transportation and development of transport junctions - The planning emphasizes a dense public transportation network within the central city area, and development of critical traffic junctions, which promoted the chances and feasibility for large-scale MXDs and shaped their locations within the central city area; The majority of large-scale MXD projects in the central city area have been created near or with directly connection to metro transportation network;

3) influence of historical core, spiritual axis, embassy districts - planning regulations have been adopted to control the appearance of development involved in the areas of high cultural sensibility e.g. the historical core and spiritual axes.
Planning intervention - development incentives/tools:
• Involvement of the public sector
As an area with high importance and representativeness, the public sector can be involved as development entity, or through supporting component or aspects of projects within the area e.g. providing cultural facilities or transport facilities in case of transit hub development.

Property market
• land price: high-land value
• target users and uses: high-end market

Cultural influences
• contextual influences of two axis and historical areas;
• influence of international architects

4.5.2.2. Framework development condition of large-scale MXD
Development entity
Development entity: 37% (14 of 38) of central city large-scale MXDs have been developed by state-backed developers. 29% (11 of 38) of central city large-scale MXDs have been developed by developers with International background.
Architect: Central city MXDs have been largely designed by international architects. 60% of Central city large-scale MXDs have been developed by international architects.

Site
As a result of the previous planning, the central city area is characterized by relatively large blocks defined by wide streets. The sites of MXDs are typically parcels (sites are usually small due to high land prices) planned with commercial/financial uses (land use code: B), in most cases planned along major streets (e.g. Ring Roads) and allow high development density. While the large blocks indicate a suboptimal pedestrian environment in the central city area, the wide street(s) on the side of MXD site further function as barriers that limit its pedestrian connection with the surrounding context. Some commercial districts (especially that with historical patterns e.g. Xidan, Wangfujing, and Sanlitun) may offer a friendlier pedestrian environment. MXD sites in central city area demonstrate a good connection with the transport network – most of them are located adjacent to or within a short distance to metro stations.

site condition:
• the site is usually small, allowing high development density;

surrounding context:
• sites are usually located within short distance to metro stations;
• usually large blocks defined by wide streets (historical planning); fragmented and insufficient open space; usually adjacent to major streets, or located within commercial districts with a fine pedestrian network;

site-attached regulations:
• building setback in case of position near wide street;
• possible influence of historical core and/or spiritual axes

market potential:
• very high-end market: international and local customers
• profitable uses: office, hotel, retail, residential
4.5.3. Peri-urban area

4.5.3.1. Context

**Historical development**

- former industry zones, dominant residential clusters, informal rural settlements, green belt; complex composition of the population;
- fragmented and mosaic urban pattern - an absence of structured open space;
- unbalanced function, insufficient public transport infrastructure;

Since 1949, Industry zones have been established around the central city of Beijing of the time, including Shijingshan steel mill, Qinghe Textile Plant, Jiuxianqiao Industry Zone (developed between 1950-70s) etc. together with residential areas and dormitories of factories; Rural areas. Pronounced the shift development focus from the central city towards peripheral areas and stressing the idea of organic decentralization, the 1994 masterplan, for the first time, defined the names and boundaries of ten peri-urban areas of Beijing. These proposed peri-urban districts are distributed separately along the fifth ring road and separated from the central city area through a planned around-city green belt.

Peri-urban areas were planned to accommodate fast increasing population and release the stress of the city center. According to the plan, “peri-urban areas/districts are critical parts of city area, which should serve the decentralization of population and functions from the central city area”, these areas are supposed to take up 51 percent of the proposed development land, where nearly one third of Beijing’s residential spaces should be built. Replacing the former zones of manufacture, large economic housing areas and mass residential projects have been planned in these districts since the 1980s (e.g. Huilongguan, Tiantongyuan). Meanwhile, the heated real-estate industry also fueled the dramatic transformation in peri-urban areas towards residential clusters through the construction of market housing communities. Developers have taken the chance of land acquisition and market promised by planned development. Peripheral Areas witnessed the boom of massive housing projects and the emergence of numerous middle-class communities. Besides, with the accelerated urbanization, peri-urban areas have also become the “arrival cities” for floating population or migrant workers – stimulated by the market needs, informal settlements have been built up by rural residents and rent to the “newcomers” of Beijing. These settlements, or urban villages, have been mostly built beyond the attention of urban planning and management. The urban landscape of peri-urban areas eventually formed, is characterized by a mosaic pattern composed of Industrial zones, huge residential clusters (including both economic and market housing) and (informal) rural settlements and urban villages. These patterns are occupied by a complex composition of users ranging from migrant workers to residents of the new middle-class communities. Meanwhile, the development of infrastructure e.g. public transport in peri-urban areas was far behind the growth of them, which resulted in insufficient public transport infrastructure.

**Planning/public sector’s interventions**

**Planning goal:**

- re-balancing land uses and urban functions;
- provision of public facilities and infrastructure;

Regarding the existing issues, the 2005 Plan emphasis on a more balanced development
of local industry and business, residential spaces and public infrastructure in peri-urban areas. The key planning goals include improving the functionality of and spatial qualities of peri-urban areas and green belt – to change the current situation of single functionality and insufficient services and public infrastructure through encouraging multi-functional development/local employment and improving public infrastructure. The new plan involved the removal or upgrade of traditional industries and the development of new functions, services, and urban industry, as well as reclaiming the damaged green belt and provision of public green spaces.

Planning intervention - regulatory activities and tools
• regulatory plan
• possible “daizheng” or delegated green spaces or public facilities
Developments in peri-urban areas follow the regulatory plan of these areas. Besides, as the requisition of rural land was sometimes necessary, and reclaiming and fixing the city green belt and provision of public green spaces were usually part of the planning goals, “daizheng” or delegated public space regulations were usually attached to peri-urban developments. In these situations, the private developers took responsibility for the provision of planned public spaces or facilities.

Involvement of public sector
In case that public facilities are included in developments, public sectors can be involved in supporting these component or spaces.

Property market
• land price: high/middle land value
• target users and uses: high- and middle-end market
• uses of market potential: retail, office, hotel
In terms of profitable uses, the concentrated population and planned urban development in peri-urban areas with new functions indicated great market potential of retail, office and hotel spaces. While land prices in peri-urban areas are generally lower than that of the central city area, some land parcels may be transacted with extreme high prices because of the profitability they promise. The complex composition of the population in peri-urban areas often caused difficulties for of MXD developers in the market positioning of their products. Even though, in most cases, developers of large-scale MXDs tend to orient their product towards the emergent middle-class residents and position their MXD higher than the average capacity of the region, as these groups have the most consuming power and their growth was considered promised by the general economy.

Cultural influences
• little influences from local context, influence of makers;
Because of their location, peri-urban areas do not involve cultural sensible context. Developments in these areas are dominantly influenced by preference of their makers.

4.5.3.2. Framework development condition of large-scale MXD
Development entity
• Development entity: mainly developed by private developers (local and joint venture), dominantly by Chinese local developers
• Architects: international and local architects
Development entity: 67% (10 of 15) of large-scale MXDs in peri-urban areas have been developed by private developers. 93% (14 of 15) of MXDs in peri-urban areas have been developed by Chinese local developers.
Architect: half of the large-scale MXDs in peri-urban areas have been developed by international architects, while half by local architects.
4.5.4. New Town

4.5.4.1. Context

Historical context

The idea of establishing “Satellite cities” was pronounced by the 1957 city plan, which formed the foundation of the later “new town” development. As the urban sprawl in central city area continued, the 1993 Beijing plan increased the number of satellite cities to 14 to boost the shift of development focus from central city to suburban areas. Some early industrial parks have been established. The 2005 plan claimed the reform of spatial structure, which highlights the development of 11 “New Towns” based on the existing 14 satellite cities and surrounding counties, because: 1) the former “satellite cities and key townships” configuration have shown clear insufficiency in decentralizing the city’s population, taking over industries and business, and promoting urbanization and development in rural areas; 2) The improving traffic connection to suburban areas brings opportunities to these areas. New Towns became since then the central task of Beijing’s urban development.

Planning/public sector’s interventions

Planning goal:

- decentralizing the city’s population;
- taking over and concentrating industries and functions to become new independent centers;
- providing services and facilities to promote the urbanization process and development in rural areas, and to support the development of metropolitan circle;

New Towns are urban areas developed on the basis of the former “satellite cities”. They have been planned with the intention of accommodating population from the central city area and concentration of new industry and business. Particularly stressed, New Towns are sizable and relatively independent urban areas, which act as junctions in promoting the inter-city regional development. “New Towns are critical junctions along the two “development belts” of Beijing’s spatial development, they are also the “regional political, economic and cultural centers playing an important role in the integrated development of urban and rural areas.” The 2005 Plan defined 11 New Towns with totally 5.7 million population (the population of each New Towns ranges from 150,000-350,000, 60,000 and 700,000-900,000). “The development of New Towns should take full advantage of the existing satellite cities and planned large infrastructures. The goal is to build up New Towns into sizable, functional independent areas with advanced public infrastructures and services.
Planning intervention - regulatory activities and tools:
- regulatory plan
- involvement of “daizheng” or delegated green spaces

Key aspects in the regulatory plan of new town areas include: 1) establishing industrial parks and development zones based on current situations of new town areas to promote local business and jobs-housing balance; 2) emphasis on public transportation and transit-oriented development; 3) adoption of relative dense street grid and structured green and open spaces; 4) boosting public services and facilities (education, cultural, sport, social welfare etc.). Besides, “daizheng” or delegated green or public spaces are usually involved in new town developments.

Planning intervention - development incentives/tools:
- Mixed land use zoning code (F – mixed land use);
- Transit-oriented development (TOD)
- Zoning incentives

Transit-oriented development - especially metro-oriented development - has been emphasized in New Town development. The construction of metro lines connecting to the central city area has been prioritized. 1) Defining areas adjacent to public transportation (metro) stations as TOD zones. The TOD zones are areas of 500m or 1000m radius and centered at the stations/junctions of metro network; 2) Dense development - The TOD zones are planned with relative higher development density in the whole region (in Daxing, TOD zones are the top two of four density areas - FAR more than 2.0); 3) To-be-developed areas along public transportation are planned with dense commercial, office and residential uses, as well as large public facilities e.g. parking lots to encourage P+R (Park and Ride) activities. Mixed-use development is encouraged through assigning mixed-use zoning to TOD zones; Third, guidelines were created on urban design of TOD zones as important urban nods, as well as incentives for the provision of quality open spaces.

Involvement of the public sector
- Supporting components: public sector may support the management of delegated green spaces; the operation of developments, and the transport facilities etc.

Property market
- land price: middle land value
- target users and uses: middle-end market; residential, commercial and office uses

Because of the development promised by the city’s master plan, new town areas suggest great market potential a middle-end market. Target consumers include the workers and residence of the new industrial zones, the urbanized population of former rural residents in the area, new comers to the city and people moved from central city to the suburbs.

Cultural influences
- little influences from the local context: Because of their peripheral locations, new town areas do not involve cultural sensible context. Developments in these areas are thus dominantly influenced by the preferences of their makers in terms of cultural ideas and values.

4.5.4.2. Framework development condition of large-scale MXD

Development entity
- Development entity: much involvement of state-backed developers, dominantly developed by Chinese developers;
- Architects: mainly designed by local architects;

Development entity: 45% (4 of 9) of large-scale MXDs in in new towns have been developed by state-backed developers. 89% (8 of 9) of MXDs in new towns have been developed by Chinese developers.

Architect: large-scale MXDs in planned key business districts have been dominantly designed by local architects. 80%(7 of 9) of them have been developed by local architects.
Site

site condition:
- the site is usually large, regular, allowing high development density

surrounding context:
- the site is usually directly connected to urban metro station (thanks to TOD);
- coherently planned open and green space system, densely built environment;
- surrounding context may include rural patterns and/or new industrial zones.

site-attached regulations:
- TOD related regulations;
- possible “daizheng” or delegated green spaces;
- possible delegated public facilities;
- mixed-use zoning code (F);
- possible incentives for open spaces;
- management of delegated green spaces;

market potential:
- middle-end market, local customers;
- profitable uses: retail, residential, office.

4.6. Summary

The characteristics of the four typical contexts provided by Beijing’s post-reform urban development and the characteristics of the framework development conditions of large-scale MXDs in these types of context are summarized in the following table. Based on the notions of this chapter, the next chapter investigates the characteristics of large-scale MXDs developed in each of these of these four typical conditions and the urban spaces which have emerged within these large-scale MXDs, to reveal the relationship between the contextual conditions, the characteristics of large-scale MXDs and urban space typologies created.
<table>
<thead>
<tr>
<th>Master Planned Business District</th>
<th>Central City Area</th>
<th>Peri-urban Areas</th>
<th>New Towns</th>
</tr>
</thead>
</table>

**urban planning**
- (public sectors' interventions)
  - Planning goal
  - Regulatory authorities/Tools
  - Development incentives/Tools
  - Involvement of public sector (dev. entity / supporting part)

**connectivity to mass urban transportation**
- Coordinating transportation in the district; multi-level connections
- Structured and connected open/green space system

**surrounding urban patterns/pedestrian environment**
- Mixed-use district / zoning code; district management
- Involved as development entity

**site-attached regulations**
- Mixed-use district / zoning code

**attached market**
- Very high-end market, international customers
  - Profitable uses: office, hotel, retail, residential

**property market**
- Land value
  - Market (uses and users)
  - Very high land value
  - Very high-end market, international customers
    - Profitable uses: office, hotel, retail, residential

**cultural ideas/values**
- Local cultural context
  - Maker ideology (developer, authority, architects)
  - Planning authority / global architects
  - International architects

**site**
- Site size/density / geometry
  - Small block size, multiple parcels very high density

**site characteristics**
- Site is usually small / high density
- Site is usually large / irregular, lower density
- Site is usually large / lower density

**connectivity to mass urban transportation**
- Strategically positioned; public transportation in the district
- Insufficient open space in the environment; adjacent to major streets with bad pedestrian environment or located within commercial districts with fine pedestrian network

**surrounding urban patterns/pedestrian environment**
- Structured and connected open/green space system
- Insufficient open space in the environment
- Insufficient open space in the environment

**site-attached regulations**
- Mixed-use district / zoning code; district management
- Involved as development entity
- Mixed-use district / zoning code

**site management**
- Development entity
  - State-backed: 58%
  - International: 30%
  - Architect: International: 92%
  - Local: 8%

**market (uses and users)**
- Profitable uses: office, hotel, retail, residential
- Profitable uses: office, hotel, retail, residential
- Profitable uses: office, hotel, retail, residential

**very high-end market, international customers**
- High-end market, international and local customers
  - Profitable uses: office, hotel, retail, residential

**middle/high-end market, international and local customers**
- Profitable uses: office, hotel, retail, residential

**very high-end market, international customers**
- Profitable uses: office, hotel, retail, residential

**Table 4.4** Contextual factors and framework development conditions of large-scale MXD

Source: Illustration by author

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Chapter 5. Large-scale MXDs and Urban Spaces in Beijing
Chapter 4 explains Beijing’s post-reform urban development as the context of large-scale MXD projects. As a result, this research suggests four typical conditions, in which large MXD projects are created, which include: 1) master planned business district, 2) Central city area, 3) Peri-urban areas and 4) New Town. Each of these conditions is characterized by a specific set of contextual factors influencing the making of large-scale MXD projects under the main categories of public policies and regulations, property market, and cultural ideas and values. These different contextual influences have formed the framework development conditions of large-scale MXD projects, which lead to different shaping and making activities and therefore different typologies of MXDs and urban spaces. This chapter investigates the characteristics of large-scale MXDs within each typical development condition, and types of urban spaces emerged within these MXD projects. The aim is to find out the linkage between different contextual conditions and the types of potential urban spaces emerged through large-scale MXDs in these conditions.

5.1. Master planned business districts
5.1.1. Framework development condition

<table>
<thead>
<tr>
<th>Development entity</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Develop entity</td>
<td>site condition</td>
</tr>
<tr>
<td>state-backed: 58%</td>
<td>• small block size, multiple parcels, very high density</td>
</tr>
<tr>
<td>International: 30%</td>
<td>surrounding context</td>
</tr>
<tr>
<td>• Architect:</td>
<td>• strategically positioned; public transportation in the district; multi-level connections</td>
</tr>
<tr>
<td>International: 92%</td>
<td>• dense street network, small block size</td>
</tr>
<tr>
<td>local: 8%</td>
<td>• structured and continuous open/green space system</td>
</tr>
<tr>
<td>• high attention and involvement of government and public sectors</td>
<td>• high density environment with homogeneous high-end user groups</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Site</th>
<th>site attached regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• small block size, multiple parcels, very high density</td>
<td>• various regulations through specific plan</td>
</tr>
<tr>
<td>surrounding context</td>
<td>(including modern and international style)</td>
</tr>
<tr>
<td>• strategically positioned; public transportation in the district; multi-level connections</td>
<td>• district management</td>
</tr>
<tr>
<td>• dense street network, small block size</td>
<td>market potential</td>
</tr>
<tr>
<td>• structured and continuous open/green space system</td>
<td>• very high-end market, international consumers</td>
</tr>
<tr>
<td>• high density environment with homogeneous high-end user groups</td>
<td>• profitable uses: office, hotel, retail, residential</td>
</tr>
</tbody>
</table>

Table 5.1
Overview of framework development conditions of large-scale MXDs - Master-planned business district
Source: illustration by author

5.1.2. MXD characteristics
5.1.2.1. Functional characteristics
Target users
very high-end markets

Type of uses
Profit-oriented uses:
office: class-A office tower as the dominant use
Retail: high-end malls and boutique shops
hotel: (luxury hotel with an international brand)
residential: (serviced apartment) for international consumers

Other uses/involvement of public/civic functions: conference, exhibition, fitness clubs
Conference and exhibition functions are typical non-profit functions in large-scale MXD projects of master planned business districts, serving the planned goals of these districts of promoting international trade and business activities. Besides, high-end clubs are also embedded within MXD projects in these districts, which are often intended to serve the hotel users of these projects.
5.1.2.2. Spatial characteristics

• Vertical composition / multiple towers
The relatively small size of individual developable parcel, together with the desired density and height (regulated through a master plan), often led to small building footprints and vertical composition of use components – shaping MXD projects into mixed-use towers or complex with podium composition. In cases that an MXD project takes several adjacent small parcels, the spatial composition is usually shaped into a vertical composition (mixed-use towers or podium composition) on each parcel with linkages between these parcels in forms of skywalk, underground or/and street-level pedestrian system. (example: CWTC III A & B, Jingguang Center, Yintai Center)

• Permeability and tendency of pedestrianization
The adoption of small parcels, coherently planned open space and pedestrian system in MBDS usually lead to good permeability of developments inside these areas. Such environment allowed the spatial layout of MXD projects to create a productive response to it, taking advantage of the surrounding pedestrian network and representative open space system to enhance the accessibility, presence, and image of the projects. Some MXD projects, which have been planned and acquired land before the masterplan was made in 2000, (CWTC, Jianwai SOHO) have been developed on large parcels. Even though, adjustment has been made to enable connections to the (multi-level) pedestrian network. Besides, for projects that are developed on multiple parcels divided by streets, the intention of pedestrianization can be noticed – attempts are usually made to make the street pedestrianized for a better connection between project components and quality of the overall development (case: Fortune Plaza-skywalk, CWTC-underground, The Place, Jianwai SOHO, Greenland Center-street-level). In the creation of both permeable spaces and pedestrianization of streets inside MXD projects, contextual factors e.g. open/green space and (multi-level) pedestrian system have always played an important role as in shaping the spatial layout of MXD projects, increasing the potential that certain space of MXDs in MBD areas become a part of the continuous open space and pedestrian system.

• International style
The international style of building and urban design has been widely adopted in accordance with the areal plan’s planning goal. These influences include iconic highrise forms, modern and international style building elements and facades. Projects alone Changan Avenue are also influenced by the traditional building culture, which is reflected in symmetrical layout (CWTC, Yintai Center), and adoption of traditional symbols and geometries (CWTC, Yintai Center).

5.1.3. Urban spaces

Type I Urban space - Common space within use component
Middle support for type I urban space: Because of the small building footprint resulted by relative small parcels, large-scale MXD projects of master planned business districts generally do not usually contain sizable common spaces within use components (type I spaces).

Type II Urban space - Public/civic use component
High support for type II urban space: With the high involvement of public sector and representation of the city, large-scale MXDs in master planned business usually comprise components such as convention/exhibition facilities serving specific users if international trade rather than general urban users, while public or civic programs are provided by privately initiated large-scale MXDs e.g. art exhibition, sport, public viewing/performance etc., with some of these facilities created under the support of public sectors e.g. local government. (case: The Place)
Spatial structure of large-scale MXDs in master planned business districts - 3D diagram
Source: Illustration by author
Spatial structure of large-scale MXDs in master planned business districts - urban pattern (500x500m)
Source: Illustration by author
Type III Urban space - Primary organizing space
High support for Type III urban space: A permeable spatial layout is usually adopted to take advantage of the planned continuous pedestrian network and open space system in the surrounding context. Primary organizing spaces have been frequently arranged as an extension and integrated part of the areal pedestrian network and open space system to take advantage of the exposure and accessibility. Besides, as critical spaces which build up the image of a MXD project, primary organizing spaces have been frequently designed with spectacular, lively and attractive image, and often used as venues for various events (see the cases of CWTC, Office Park, The Place, Jianwai SOHO), transforming them into places of activities.

Type II Urban Space - The Place – a multi-functional basketball stadium has been established in the development of the Place. Named as “HooPlace” – “Beijing Urban Basketball center” was created under the support of governmental organizations including Beijing Basketball Association, Beijing Olympic City Development Association and the Sports Bureau of Chaoyang District. The space is intended as a venue for various matches, training, performances, exhibitions, education, and press conferences aiming for the communication of sports culture to the public.

Type III Urban Space - China World Trade Center (CWTC) - the CWTC is the earliest and most iconic large-scale MXD project in Beijing’s CBD area. The project consists of multiple towers distributed on several parcels. A major underground pedestrian zone was created, which connects all the project’s components. With multiple access points and direct connection to metro stations, the underground pedestrian zone is also an integrated part of the regional underground pedestrian network.
Type III Urban Space - Sino-ocean Office Park – an opening has been conceived to establish visual and physical connections to the planned central park and open space network of CBD. As the primary organizing space of the development, the space is highly physically accessible for both internal and external users, usually utilized as a space for various activities that highlight the entire development’s image and identity.

Type III Urban Space - Jianwai SOHO – a highly open and permeable layout has been adopted, together with a central networked pedestrian space with retail and commercial interfaces. Featured by 16 “small alleys”, this urban space of Jianwai SOHO is well visible and accessible from the surrounding pedestrian and open space system. Surrounded by densely packed functions e.g. office, retail and recreation, high vitality has been achieved in both day- and night times.

Type III Urban Space - The Place – one iconic central plaza serves as the project’s main attraction and place holding various events. The spacious canopied pedestrian zone provides the most spectacular feature of the development, as well as a famous place and scenic spot of city tourism of Beijing. With the Skyscreen and light show with strong visual stimulations, frequently organized events, as well as leisure activities, the space is characterized by a fancy and lively atmosphere. The canopied plaza connects the components of the MXD of both the north and souths wings, while functions also as space facilitating people’s circulation into the MXD.
5.2. Central city area

5.2.1. Framework development condition

<table>
<thead>
<tr>
<th>Development entity</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Development entity</td>
<td>site condition</td>
</tr>
<tr>
<td>state-backed: 37%</td>
<td>• site is usually small; allowing high development density</td>
</tr>
<tr>
<td>International: 29%</td>
<td></td>
</tr>
<tr>
<td>• Architect:</td>
<td>surrounding context</td>
</tr>
<tr>
<td>International: 60%</td>
<td>• sites are usually located within short distance to metro stations</td>
</tr>
<tr>
<td>local: 40%</td>
<td>• usually large blocks defined by wide streets</td>
</tr>
<tr>
<td></td>
<td>; fragmented and insufficient open space</td>
</tr>
<tr>
<td></td>
<td>• usually adjacent to major streets (a), or</td>
</tr>
<tr>
<td></td>
<td>located within commercial districts with fine pedestrian network (b)</td>
</tr>
<tr>
<td>• high attention and involvement of government and public sectors</td>
<td>site attached regulations</td>
</tr>
<tr>
<td></td>
<td>• building setback in case of position near wide street</td>
</tr>
<tr>
<td></td>
<td>• possible influence of historical core and/or spiritual axis etc.</td>
</tr>
<tr>
<td></td>
<td>market potential</td>
</tr>
<tr>
<td></td>
<td>• very high-end market: international and local consumers</td>
</tr>
<tr>
<td></td>
<td>• profitable uses: office, hotel, retail, residential</td>
</tr>
</tbody>
</table>

Table 5.2 Overview of framework development conditions of large-scale MXDs - Central City Area
Source: illustration by author

5.2.2. MXD characteristics

5.2.2.1. Functional characteristics

Target users
very high-end market, international and local customers

Type of uses
Profit-oriented uses:
Retail: middle-scale mall or shopping district
Office: class-A office
Hotel: luxury /business hotel with an international brand
Residential: serviced apartment or high-end housing

Other uses: public transport/convention / cultural facilities e.g. theatre, art museum
Large-scale MXDs developed as transport junctions usually involve public transportation facilities; Cultural facilities may also be included in projects initiated by state enterprises. Besides, public or civic uses e.g. art exhibition may be involved to enhance the identity and attraction.

5.2.2.2. Spatial characteristics
• Compact podium composition: As a result of relatively small site and high development density allowed, much of central city MXD projects take a podium composition, in which office, retail or residential (apartment) towers standing on a single podium of retail/entertainment functions. The positioning neighboring wide major streets further contribute to an enclosed pattern on the street level. A considerable distance of building setback is usually involved in the zoning ordinance of sites adjacent to main streets, which indicates potential open spaces on the street side. (case: raffles center, Oriental Plaza, U-Town, Xidan Joy City, SOHO Galaxy)

• Permeable layout in case of location in a pedestrian environment
While a podium composition is typical for central-city MXDs, a few of them have been created with a more open spatial layout with high permeability. This happens in cases that projects are located within an environment with existing good pedestrian connec-
tions - for most instances the redevelopment of existing (historical) pedestrian shopping streets/districts. (case: Taikoo Li, Sanlitun SOHO, SOHO Galaxy). Such environments usually provide a fine pattern allowing a continuous pedestrian flow and multiple pedestrian access points or connections to the site. In these cases, the street-level pattern of MXDs shows a layout consisted of separated and dispersed clusters with networked circulation routes. The separated clusters are primarily occupied with retail functions, eventually forming a shopping district environment. The street-level open space with main-street or networked configuration, allowing good pedestrian connection with the surrounding urban patterns, often conceived and function as the central organizing element of the entire development.

**Two layout patterns of residential component**

Central city large-scale MXD show two types of the residential component within them: First, in many cases, MXD is a further development of an existing residential project. It is located adjacent to the residential area created by the same developer. In this case, the MXD usually consists of uses other than residential (e.g. most typically retail, office), which serve both the users of existing residential development and the external market. The residential district usually takes the form of typical gated communities and planned on a separated parcel, with little spatial interplay with other components of the MXD. Second, in other cases, the residential component of an MXD stands on a retail podium. In this situation, the residential use often takes the form of high-end serviced apartment and spatially integrated with other use components of the development.

**Influence of local urban context:**
The configuration of central city MXDs have also been influenced by spiritual axis, historical core, and international style.

### 5.2.3. Urban spaces

**Type I Urban space - Common space within use component**

High support for type I urban space: Many central city large-scale MXDs are organized following a podium composition where towers stand on a relative massive podium. The retail/entertainment podium support the creation of type I urban space within it. Common spaces such as atria have been included as important spatial elements in the making process of MXD projects (case: Raffles city, Parkview Green, U-Town, Xidan Joy City, Sanlitun SOHO, SOHO Galaxy etc.).

**Type II Urban space - Public/civil use component**

High support for type II urban space: 1) public transportation facilities have been included as use component of MXD in cases of traffic-junction projects (case: West Gate Plaza, Guoson Center); 2) Cultural uses e.g. opera have been created in MXD projects initiated state-backed development entities (case: Everbright Center); 2) Public / civic use component e.g. art exhibition may be involved to enhance the identity and attraction of primarily the retail component (case: Taikoo Li Sanlitun, Museum in Parkview Green etc.).

**Type III – Primary organizing space**

High support for type III urban space: First, as most of the central city large-scale MXDs are located adjacent to major streets, entrance plaza as primary organizing space has been usually defined by setback control-lines and involved in MXD projects (case: Landgent Center, Raffles Center, We-life Plaza); Second, in case that central city MXDs are located within a favorable pedestrian environment (redevelopment of historical commercial area), primary organizing spaces are embedded as an extension or integrated part of the pedestrian network (case: Sanlitun – Sanlitun SOHO, Sanlitun Taikoo Li etc.).
Spatial structure of central city large-scale MXDs - 3D diagram
Source: Illustration by author
Type I Urban Space - Raffles Center – the central atrium of Raffles Center was considered as one of the most important spaces of the MXD in defining the identity and attraction for both the retail component and the entire project. Strategies adopted include the adoption of themed and highly distinctive spatial design – “the crystal lotus” as a major focal point of the atrium, as well as various animation programs and organized events inside the atrium. Events have been organized in accordance with major public festivals occasions.

Type I Urban Space - Parkview Green – the development of Parkview Green features a grandiose central atrium that stretches from the retail podium (B2 to L3) up till the top of the entire building volume. A transparent micro-climatic envelope has been adopted to allow a huge atrium that comprises all components of the MXD project and enables rich visual interactions between users of the hotel, office and retail components. Conceived as a unique attraction for the MXD, the atrium is characterized by its grand size, distinctive design, and frequently organized activities.
Type I Urban Space - SOHO Sanlitun – the spatial configuration of Sanlitun SOHO is characterized by office and residential towers standing on commercial podiums. The podiums were designed with several atria to allow natural light and visual connections between different floors. The atria, which are well visible for users inside the towers, are frequently used as event spaces for the commercial tenants. Especially, events are organized through the cooperation between tenants and social organizations to promote the popularity of the commercial section.

Type I Urban Space - Xidan Joy City – the atrium is characterized by “Asia’s biggest sky elevator” as a major focal point, and is usually animated through promotional activities. Besides, a common space was conceived between the 6th to the 8th floor. Named as “the Rose Garden” in response to the theme of the entire 6th level-“Dating”, the free space was designed with a rose-themed cozy atmosphere and planned with F&B services around it, making the development an attractive “dating destination” for young couples and groups.
Type II Urban Space - Sanlitun Taikoo Li – located in a central city commercial district, the Sanlitun Taikoo Li has been created with a multi-functional event space - the “Orange Hall”. The event space has been conceived to support the necessary functions and programs including exhibitions, ceremonies, fashion shows, promotional activities etc. Various public events have been held to attract general public attention and promote the public relations of the large-scale MXD project.

Type II Urban Space - Parkview Green – merging art into commercial space was one critical strategy to establish the project’s identity and attraction. Besides setting up artworks around the retail podium, an art exhibition center – “Parkview Museum” was introduced to development. Located on the 9th floor within the retail component, the museum consists of a reception space, a flexible common space that is frequently used as forum and café, two exhibition galleries and amenities.
Type III Urban Space - Raffles Center – primary organizing space in form of entrance plaza has been enabled by setback control line as well as the need of the street-level mall. The space, conceived to play the role of entrance plaza, comprises several functions such as greening, seating, hard ground, lighting and public viewing enabled by the LED screen on the entrance facade. It is usually utilized for events of the mall, while populated with casual activities (square dance etc.).

Type III Urban Space - Landgent Center – located along the East Third Ring Road of Beijing, the site of Landgent Center has been preset with a wide building setback distance in the regulatory plan. In response to the planned site condition, a vast pedestrian plaza has been created, which has become one of the major destinations of nearby residents, and a place where leisure activities of various social groups are organized and practiced.
Type III Urban Space - Oriental Plaza – located along the representative Chang’An Avenue - the “modern axis” of Beijing - the Oriental Plaza was created with an iconic entrance plaza on its south side. The plaza has been generated primarily by the planning requirement for a large 50m building setback along Chang’An Avenue. Taking advantage of the planned iconic open space, the entrance plaza has been made to create a strong visibility and identity for the large-scale MXD project. The primary organizing space has been designed with iconic stairs and a sizable fountain as major spatial elements. The plaza is equipped with various supporting technologies and frequently used as event venue of the project e.g. festival celebrations.

Type III Urban Space - Sanlitun SOHO – networked circulation and main organizing space located in the middle, as a result of a good pedestrian environment and composition of towers standing on dispersed podiums. The central organizing space has been conceived as a spectacular open space - a “valley” stretching from B1 to L4 with retail and numerous other commercial functions. Besides, the central space also embeds a skating ground - where activities are often held - enhancing its modern characteristic and appeal towards users of young generations.
Type III Urban Space - Sanlitun Taikoo Li – as part of the renewal of the famous “bar district” Sanlitun area near Beijing’s embassy district, this project shows an open interface in response to the existing pedestrian environment. While connected by UG levels as a whole, the street-level layout is composed of small volumes organized by a network of open alleys which allow seamless connection to the surrounding urban fabric. The primary organizing space is featured by a central plaza placed in adjacent to a multi-functional hall. Equipped by techniques e.g. a large LED screen and interactive landscape design, the central plaza is usually the place for large-scale events and various activities. To guarantee the desired diversity of appearance, different architects have been invited to design different parts.

Type III Urban Space - SOHO Galaxy – located adjacent to a residential district with traditional urban patterns, SOHO Galaxy provides a spectacular central space that is permeable and well accessible from the surrounding pedestrian network. The central space facilitates the circulation between different components of the SOHO Galaxy, while also offering a connection to metro transportation. The coherent design of the central space within the MXD project led to its unique identity and attraction. In the evenings, it usually becomes well used as a space for leisure activities of local residents.
5.3. Peri-urban area

5.3.1. Framework development condition

<table>
<thead>
<tr>
<th>Development entity</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Developent entity state-backed: 33% International: 7%</td>
<td>site condition • site is usually large and irregular, allowing lower development density</td>
</tr>
<tr>
<td>• Architect: International: 50% local: 50%</td>
<td>surrounding context • site’s connection with mass public transporta- tion may be weak • adjacent to fragmented morphology, compli- cated surrounding environment; fragmented and insufficient open space • possible (planned) green belt or public green spaces in the surrounding area</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Site attached regulations</th>
<th>market potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>• possible “daizheng” or delegated green spaces</td>
<td>• middle/high-end market; international and local customers</td>
</tr>
<tr>
<td>• possible delegated public facilities</td>
<td>• profitable uses: retail, office, hotel</td>
</tr>
</tbody>
</table>

Table 5.3 Overview of framework development conditions of large-scale MXDs - Peri-urban area
Source: illustration by author

5.3.2. MXD characteristics

5.3.2.1. Functional characteristics

Target users
high/middle-end market, international and local consumers

Type of uses
Profit-oriented uses: retail, office, hotel
Retail: large mall
Office: class-A office tower
Hotel: high-end hotel

Other uses: park, small-scale public facilities

The regional planning of peri-urban areas frequently involves the provision of green spaces and public infrastructure. Public green space or parks may thus be involved in large-scale MXD projects through delegation or “Daizheng” mechanism.

5.3.2.2. Spatial characteristics

• Horizontal and internal-oriented/enclosed composition

Because of the generally large site parcels, most large-scale MXDs in peri-urban areas have been created with a horizontal spatial layout. Although in a few cases podium or mixed composition have been adopted due to limited site area, in most cases, use components have been arranged horizontally next to each other. In addition, strongly influenced by the fragmented and complex surrounding context, suboptimal pedestrian environment and the dominance of retail use, peri-urban MXDs also tend to adopt a more enclosed layout, which is reflected by the courtyard in early projects and big-box retail component in the later developments. The internal oriented design leads to low permeability – MXDs in such situation have been conceived much as independent islands standing on their own, rather than an extension of urban patterns surrounding them.

• Possible dispersed/permeable layout

The city green belt is located in peri-urban areas. As such, some MXD sites in the peri-urban area may be adjacent to the city green belt. Besides, delegated green spaces (“Da-
izheng” Green Spaces) within MXD sites may also be involved through which defined public green areas should be designed and constructed by the developer. These elements have demonstrated strong influences on the spatial layout. Such influences include positioning and orientation of project components towards the (planned) park or green space, they may even lead to a permeable street-level layout of MXDs through which linkage and pedestrian connections form MXD components to the planned parks or green belt can be established (see cases of Wangjing SOHO, Beiyaun Northstar, LDHY Plaza).

5.3.3. Urban spaces

Type I Urban space - Common space within use component
High support for type I urban space: The relative large site parcel, the dominance of retail use and the fragmented surrounding urban context often lead to internal-oriented layout peri-urban MXD projects and big-box massing of its retail component. This provides support for sizable type I urban spaces within peri-urban large-scale MXDs. Type I urban spaces have been usually introduced and designed as a spatial highlight, which enhances the quality and identity of the retail component and even the entire MXD development (cases: Indigo, Chaoyang Joy City, Wangjing ICC etc.).

Type II Urban Space – public/civic use component
Middle support for type II urban space: due to the insufficient provision of infrastructure in peri-urban areas, private developers may spontaneously promote the creation of public use component or facilities within large-scale MXD projects to promote functionality, attraction, and marketability of these developments. These use components may include bus transfer station (cases: Dreamport), and park (Indigo) etc.

Type IV Urban Spaces – Law-defined public open space
High support for type IV urban space: the development in peri-urban areas usually necessitated land requisition from collective entities for planned urban infrastructure and spaces (parks, roads etc.). „Daizheng“ mechanism was therefore usually involved in the development process if peri-urban MXDs. Public green spaces or parks are the most typical “daizheng” spaces, which have been created within large-scale MXDs in peri-urban areas (cases: Wangjing SOHO, Chaoyang Joy City, LDHY Plaza).
Image 5.25
Spatial structure of peri-urban large-scale MXDs - 3D diagram
Source: Illustration by author
Image 5.26
Spatial structure of peri-urban large-scale MXDs - urban pattern (500x500m)
Source: Illustration by author
Type I Urban Space - Wangjing ICC – Wangjing ICC is one of the earliest large-scale MXDs which have been created in the peri-urban areas of Beijing. Totaling 120,000 sqm, the project comprises a retail and office component. An internally-oriented layout has been adopted in response to the unpleasant peri-urban environment. A large central courtyard has been introduced to the retail component to create an attractive central place and bring natural light to the buildings. The central courtyard is planned with F&B services around it and programmed with changing activities.

Type I Urban Space - Indigo - The peri-urban MXD of Indigo is featured by a spacious "Winter Garden" - a sizable multi-functional atrium and event space within its retail component. The unconventional size of the Winter Garden has been enabled by the generous size of the peri-urban site of the project. Besides introducing natural light and view of a green landscape of the neighboring park, the Winter Garden functions as the key attraction for both the retail component and the MXD project. Created and operated for an inviting atmosphere, it is favored by the nearby residence for leisure activities. Spectacular scenes and experiences are provided in occasions of various events.

Type I Urban Space - Chaoyang Joy City – The peri-urban MXD project consists of a retail mall and two apartment towers positioned next to it. The retail component is featured by a series of connected atria, which have been created as major spatial attraction and event venues. The grand atrium has been designed with a “sky escalator”, which brings people directly to the top floors where cinemas and F&B services are located. The “sky escalator” also acts as a spectacular focal point within the mall component.
Type II Urban Space - Indigo - The site of Indigo is located adjacent to a regional park, which has been determined in the development plan of this peri-urban area. As the construction of the regional park has not started as the project was finished. The developer spontaneously offered to create a public park as a component of the MXD project. Planned for activities of different age groups, the park greatly contributes to the MXD project in terms of providing visual qualities and support for recreational activities of visitors of mall and hotel, and office workers.

Type IV Urban Space - LDHY Plaza – Located in the peri-urban area near the regional green belt, the site of LDHY Plaza required a vast public green space within the project. The development eventually transformed the public green space into a theme park with an exhibition pavilion.

Type IV Urban Space - Wangjing SOHO – the site of Wangjing SOHO has been originally planned for governmental use and with large “daizheng” public green spaces within it. Taking advantage of the site condition and “daizheng” mechanism, the development of Wangjing SOHO management to transform the public green space into four parks with different themes and attractions for both internal and external users. The coherent design of the building volumes, facade and landscape have brought many contributions to both the quality of the green spaces and the identity of the large-scale MXD project.
5.4. New Town

5.4.1. Framework development condition

<table>
<thead>
<tr>
<th>Development entity</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Developent entity state-backed: 45% International: 11%</td>
<td>site condition</td>
</tr>
<tr>
<td>• Architect: International: 20% local: 80%</td>
<td>• site is usually large, regular, allowing high development density</td>
</tr>
<tr>
<td>• involvement of government and public sectors through TOD and provision of public spaces or facilities</td>
<td>surrounding context</td>
</tr>
<tr>
<td></td>
<td>• site is usually directly connected to urban metro station (thanks to TOD)</td>
</tr>
<tr>
<td></td>
<td>• coherently planned open and green space system, dense built environment</td>
</tr>
<tr>
<td></td>
<td>• surrounding context may include rural patterns and/or new industrial zones</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Site attached regulations</th>
<th>market potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>• TOD related regulations</td>
<td>• middle end market, local customers</td>
</tr>
<tr>
<td>• possible “daizheng” or delegated green spaces</td>
<td>• profitable uses: retail, residential, office</td>
</tr>
<tr>
<td>• possible delegated public facilities</td>
<td></td>
</tr>
<tr>
<td>• mixed-use zoning code (F)</td>
<td></td>
</tr>
<tr>
<td>• possible incentives for open spaces</td>
<td></td>
</tr>
</tbody>
</table>

5.4.2. MXD characteristics

5.4.2.1. Functional characteristics

Target users
middle end market, local customers

Type of uses
Profit-oriented uses: residential, retail, office
Retail: large-scale malls (family, lifestyle malls)
Residential: market housing communities (usually gated communities)
Office: class-A office tower
Other uses: public transportation and parking facilities, other public facilities

As a result of the TOD planning concept,

5.4.2.2. Spatial characteristics

• Horizontal or mixed composition
The less expensive land price and therefore large site area of MXDs in new towns support horizontal spatial layout of MXDs, in which most use components are positioned next to each other. Targeting middle-end market, residential use has been usually planned on separated parcel(s) as a gated community to emphasize privacy and security;

• Permeable layout
Even though big-box mall with massive volumes are widely developed in new town MXDs, the horizontal layout, emphasis on pedestrian environment (around TOD zones - much influenced by TOD planning concept) on a planning level and possible public green spaces contribute to a permeable layout in New-Town MXDs; In addition, spaces in form of pedestrian street has been enabled as main-street retail components has also been introduced by many developers into new town MXDs.

• Influence of public transport facilities
Besides the planned open and green space infrastructure, the public transportation facilities (metro stations) have also played a critical role in influencing the spatial layout of a project’s components, including positioning of components/open space and establishing connections.

Table 5.4
Overview of framework development conditions of large-scale MXDs - New Town
Source: illustration by author
5.4.3. Urban spaces

Type I Urban space - Common space within use component
High support for type I urban space: Type I urban spaces are common within the sizable and massive retail component of new town large-scale MXDs. The TOD planning concept enables a dense and populated environment around possible sites of MXD projects. Besides, a considerable population growth in new town areas has also been pronounced by the city’s master plan. For these reasons, the retail components of new town MXDs have been usually created with vast sizes and also contain sizable common spaces within them. (Example: Paradise Walk Daxing, Funmix, Lippo Plaza, Wanda Plaza Tongzhou)

Type II Urban Space - Public/civic use component
High support for type II urban space: As the TOD planning concept of new town areas emphasized dense and mixed-use development around stations of public transportation, new town large-scale MXD projects usually involve public transportation - especially metro station and related facilities as one of its use components. The public transportation facility also significantly influenced the spatial configuration of MXD projects.

Type III Urban Space – Primary organizing Space
High support for type III space: 1) entrance plaza, 2) pedestrian streets
The horizontal layout of new town large-scale MXDs, as well as the systematically planned pedestrian network and open space system, have contributed to the creation of primary organizing spaces in forms of pedestrian street and entrance plaza, which allow the MXD projects to take advantage of the favorable surrounding environment for its accessibility and visibility. (Example: Paradise Walk Daxing, Wanda Plaza Tongzhou)

Type IV Urban Space - Law-defined public open space
High support for type IV urban space: „daizheng” green spaces and parking lots have been involved in all large-scale MXDs of new towns. (Example: Paradise Walk Daxing)

5.5. Summary
This chapter investigates the characteristics of large-scale MXDs and urban spaces within the four typical development conditions of Beijing. The result of this investigation shows that different development contexts provide different degrees of support for potential urban space typologies. The relationship between different development contexts and urban space types is summarized in the table below, with an overview provided by the illustrations at the end of this chapter.

<table>
<thead>
<tr>
<th>Type of Urban Space</th>
<th>Master planned Business District</th>
<th>Central City Area</th>
<th>Peri-urban Area</th>
<th>New Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type I urban space - Common space within use component</td>
<td>• low support</td>
<td>*** high support</td>
<td>*** high support</td>
<td>*** high support</td>
</tr>
<tr>
<td>Type II urban space - Public/civic use component</td>
<td>*** high support</td>
<td>*** high support</td>
<td>** middle support</td>
<td>*** high support</td>
</tr>
<tr>
<td>Type III urban space - Primary organizing space</td>
<td>*** high support</td>
<td>*** high support</td>
<td>* low support</td>
<td>*** high support</td>
</tr>
<tr>
<td>Type IV urban space - Law-defined public open space</td>
<td>* low support</td>
<td>* low support</td>
<td>*** high support</td>
<td>*** high support</td>
</tr>
</tbody>
</table>

Table 5.5: Support of different contextual conditions on urban spaces within MXD
Source: the author
Tongzhou Wanda Plaza
Tongzhou
Open Year: 2014
67

FUNMIX
Yizhuang
Open Year: 2015
70

Paradise Walk Daxing
Daxing
Open Year: 2016
79

Paradise Walk
Yizhuang
Open Year: 2014
55

Lippo Plaza
Yizhuang
Open Year: 2014
68

Greenland Central Plaza
Daxing
Open Year: 2013
57

Urban Rural Century Plaza
Yizhuang
Open Year: 2015
69

Image 5.33
Spatial structure of new town large-scale MXDs - 3D diagram
Source: illustration by author
Image 5.34
Spatial structure of new town large-scale MXDs - urban pattern (500x500m)
Source: illustration by author
Type I Urban Space - Paradise Walk Daxing — large-scale MXD projects in new town areas are characterized by sizable commercial components. The Paradise Walking in Daxing comprises a 150,000 sqm mall, which embeds the largest atrium of the projects in this region. As a result of TOD planning, the mall component is directly adjacent to the metro station. The atrium has been planned as space which links the metro station and the mall.

Type I Urban Space - Funmix Plaza — the sizable mall of the Funmix Plaza is featured by a vast L-shaped common space within it. The common space is accompanied with three atria, which provides natural light and rich visual connections. The common space provides major venues for the organized activities and events within the mall, which include promotional events, and public events in cooperation with local government.

Type III Urban Space - Paradise Walk Daxing — A vast plaza has been arranged as intermediary space connecting the main entrances of the retail component and major pedestrian network surrounding the project site, which leads to high visibility and accessibility of the MXD project. Besides, the entrance plaza has been created to generate attraction of the development through an inviting image and activities. A public recreation zone has been defined, which supports daily leisure activities of external users. Created as a major event venue, various events have been held.
Type III Urban Space - Paradise Walk Daxing – to take full use of the site, outdoor shopping streets has been planned as an extra form of retail besides the mall in Paradise Walk Daxing. Space units in the shopping streets were sold out to separate owners to generate financial gain in short term. The suboptimal positioning of them and lack of central operation restrain both the marketability and urban quality of such spaces.

Type I Urban Space - Tongzhou Wanda Plaza – The vast development of Wanda Plaza in Tongzhou provides two forms of retail spaces: the mall, and shopping streets. The units of outdoor shopping streets have been directly sold to separate owners to generate financial gain in short term.

Type IV Urban Space - Paradise Walk Daxing – the transit-oriented planning involved in new town areas emphasized the provision of public facilities and open and green spaces in the development on the site of Paradise Walk as transit-oriented development zone. “Daizheng” green space and public parking lots were required in the development of the large-scale MXD. Extending through the entire site, the public green space is well-integrated in the development and used by both users of the large-scale MXD and the general public users from adjacency.
Makers

- Development entity
  - state-backed: 58%
  - International: 30%
- Architect:
  - International: 92%
  - local: 8%

Site

site condition
- small block size, multiple parcels, very high density

surrounding context
- strategically positioned; public transportation in the district; multi-level connections
- dense street network, small block size
- structured and continuous open/green space system
- high density environment with homogeneous high-end user groups

market potential
- very high-end market, international consumers
- profitable uses:
  - office, hotel, retail, residential

site attached regulations
- various regulations through specific plan (including modern and international style)
- district management

Functional characteristics

For-profit uses
- office (class A office tower) as dominant use
- residential (serviced apartment) for international consumers
- hotel (luxury / business hotel with international brand)
- retail (high-end malls and boutique shops)

Other uses
- convention, club, art exhibition, public viewing etc.

Market positioning
- very high-end market, international consumers

Spatial characteristics

spatial composition (urban design concept)
- Vertical composition / multiple towers
- Permeability and tendency of pedestrianization

cultural influence
- Emphasis on international/modern style

MXD CHARACTERISTICS

• Type I
  - public / civic use component promoted by government

• Type II

• Type III
  - spectacular primary organizing space as part of surrounding pedestrian / open space system to promote the identity and visibility of project

• Type IV

TYPES OF URBAN SPACES

Master planned Business Districts

FRAMEWORK DEVELOPMENT CONDITION

SUMMARY - characteristics of large-scale MXDs and urban spaces in - master planned business district

Source: illustration by author
Central City Area

FRAMEWORK DEVELOPMENT CONDITION

MXD CHARACTERISTICS

TYPES OF URBAN SPACES

Makers
- Development entity: state-backed: 37%, International: 29%
- Architect: International: 60%, local: 40%

Site
- site condition
  - site is usually small; allowing high development density
- surrounding context
  - sites are usually located within short distance to metro stations
  - usually large blocks defined by wide streets; fragmented and insufficient open space
  - usually adjacent to major streets (a), or located within commercial districts with fine pedestrian network (b)
- site attached regulations
  - building setback in case of position near wide street
  - possible influence of historical core and/or spiritual axis etc.

Spatial characteristics
- spatial composition
  - (urban design concept)
    - compact podium composition
    - Permeable layout in case of fine pedestrian environment
- cultural influence
  - historical core, spiritual axis

Functional characteristics
- For-profit uses
  - office: class-A office
  - residential: serviced apartment
  - hotel: luxury business hotel with international brand
  - retail: middle-scale mall or shopping district
- Other uses
  - convention, club, art exhibition, museum, opera, transport facility
- Market positioning
  - very high-end market: international and local consumers

Market potential
- very high-end market: international and local consumers
- profitable uses: office, hotel, retail, residential

Other uses
- convention, club, art exhibition, museum, opera, transport facility

Summary: characteristics of large-scale MXDs and urban spaces in central city area
Source: illustration by author

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## Makers

- Development entity: state-backed: 33%, International: 7%
- Architect: International: 50%, local: 50%

## Site

**site condition**
- site is usually large and irregular, allowing lower development density

**surrounding context**
- site's connection with mass public transportation may be weak
- adjacent to fragmented morphology, complicated surrounding environment; fragmented and insufficient open space
- possible (planned) green belt or public green spaces in the surrounding area

**site attached regulations**
- possible "Daizheng" or delegated green spaces
- possible delegated public facilities

**market potential**
- middle/high-end market; international and local customers
- profitable uses: retail, office, hotel

## Functional characteristics

<table>
<thead>
<tr>
<th>For-profit uses</th>
<th>Other uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>office</td>
<td>park, small scale public facilities</td>
</tr>
<tr>
<td>class-A office</td>
<td></td>
</tr>
<tr>
<td>residential</td>
<td></td>
</tr>
<tr>
<td>hotel</td>
<td></td>
</tr>
<tr>
<td>luxury hotel with international brand</td>
<td></td>
</tr>
<tr>
<td>retail</td>
<td></td>
</tr>
<tr>
<td>family mall</td>
<td></td>
</tr>
</tbody>
</table>

## Spatial characteristics

### spatial composition (urban design concept)
- Horizontal and internal-orient-ed/enclosed composition
- Possible dispersed/permeable layout (in case of green belt)

### cultural influence
- no specific contextual influence
- influence of international makers

## MXD CHARACTERISTICS

### TYPES OF URBAN SPACES

- **Type I**
  - common space - sizeable atrium within retail/office podium

- **Type II**
  - spontaneous: park as integrated public use
  - spontaneous: bus station

- **Type III**
  - delegated ("Daizheng") public open space

- **Type IV**

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**Image 5.43**
Summary - characteristics of large-scale MXDs and urban spaces in peri-urban area
Source: illustration by author
## New Town Makers
- Development entity: state-backed: 45% International: 11%
- Architect: International: 20% local: 80%

## Site
- **site condition**: site is usually large, regular, allowing high development density
- **surrounding context**: site is usually directly connected to urban metro station (thanks to TOD)
- **site attached regulations**: TOD related regulations, possible "daizheng" or delegated green spaces, possible delegated public facilities, mixed-use zoning code (F), possible incentives for open spaces

## Functional characteristics
<table>
<thead>
<tr>
<th>For-profit uses</th>
<th>Other uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>office</td>
<td>public transportation, other public facilities</td>
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<tr>
<td>class-A office tower</td>
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<tr>
<td>residential</td>
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<td>market housing communities</td>
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<td>hotel</td>
<td></td>
</tr>
<tr>
<td>retail</td>
<td></td>
</tr>
<tr>
<td>large-scale mall</td>
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</tr>
</tbody>
</table>

## Spatial characteristics
- **spatial composition (urban design concept)**
  - Horizontal/mixed composition
  - Permeable layout
  - Influence of public transport facilities, delegated green open spaces
- **cultural influence**: no specific contextual influence

## MXD Characteristics
- Type I
  - sizeable atrium within retail/office podium
- Type II
  - public transport facilities / parking lots etc.
- Type III
  - entrance plaza, pedestrian street
- Type IV
  - delegated ("Daizheng") public open space

## Market positioning
- high/middle end market, local consumers

## Summary - characteristics of large-scale MXDs and urban spaces in new town
Source: illustration by author
Chapter 6. Making and Shaping Urban Spaces through Large-scale MXD: Case Studies
Chapter 5 provides an extensive investigation of functional and spatial characteristics of large-scale MXD and typologies of potential urban spaces in the four typical development conditions. It has been found that different conditions resulted from Beijing’s specific context of post-reform have led to different characteristic of large-scale MXDs and types of potential urban spaces.

In this chapter, five representative cases of large-scale MXD projects of Beijing are selected for an in-depth investigation on how different typologies of urban spaces and qualities have been created and shaped through the process of these MXD cases. The case study investigates the process of each MXD project, which includes the context and the stages of initiation, implementation, and operation and use. The investigations of this chapter aim to identify the activities and mechanisms, which have contributed to the emergence and qualities of urban spaces within large-scale MXD projects. Besides, the qualities of each urban space are assessed using the assessment tool developed in Chapter 2 to reveal the different characteristics of different type of urban spaces.

The findings of this chapter demonstrate the potential of large-scale MXD in achieving urban spaces and qualities, or the potential of achieving a situation in which both large-scale MXDs and urban space benefit from each other, which is hypothesized at the beginning of this research. Findings of this chapter also contribute to the development of possible strategies in releasing such potential.

Selection of cases
First, the selected cases covers MXD projects within all four typical development conditions of master planned business district (1 case, The Place), central city area (1 case, Parkview Green), peri-urban area (2 cases, Indigo and Wangjing SOHO) and New Town area (1 case, Paradise Walk Daxing). The selected MXD projects also provide typical types of potential urban spaces identified in the previous chapters. The selected cases cover all four urban space typologies - which include type I (common space within use component - 2 cases, atria within malls), type II (public/civic use component - 2 cases, museum and park), type III (primary organizing space - 2 cases, pedestrian zone and entrance plaza) and type IV (law-defined public open spaces - 1 case, public green space). Besides, all these projects are in a good operational condition, and the urban spaces demonstrate some special qualities or involve some interventions or mechanisms, which make them stand out from their kinds. The following table shows an overview of the information of cases selected.
<table>
<thead>
<tr>
<th>MXD Typology</th>
<th>Project Name</th>
<th>Year of Open</th>
<th>Urban Space Investigated</th>
<th>Type I</th>
<th>Type II</th>
<th>Type III</th>
<th>Type IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Planned Business District</td>
<td>The Place</td>
<td>Year of open: 2006</td>
<td>Central City Area</td>
<td>“central atrium&quot;</td>
<td>“winter garden&quot;</td>
<td>canopied pedestrian zone</td>
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</tr>
<tr>
<td>Central City Area</td>
<td>Parkview Green</td>
<td>Year of open: 2011</td>
<td>Peri-urban Area</td>
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<tr>
<td>Peri-urban Area</td>
<td>Indigo</td>
<td>Year of open: 2012</td>
<td>Peri-urban Area</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peri-urban Area</td>
<td>Wangjing SOHO</td>
<td>Year of open: 2013</td>
<td>New Town</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6.1
Overview of selected cases of large-scale MXDs and urban spaces
Source: illustration by author
6.1. Case study 1: The Place
6.1.1. Introduction

Basic information
The Place (世贸天阶) is located on the west edge of Beijing’s Central Business District (CBD). Opened shortly before the 2008 Olympic Games, the high-end development totals more ca. 220,000 sqm of GFA, with 130,000 sqm of office and 80,000 sqm of retail space[1]. The whole structure of The Place is composed of two retail/entertainment wings positioned on the north and south side of the site. On the east side of each wing stands a 23- storied office tower. The basement floor offers an indoor connection between the two wings, while an outdoor, yet canopied plaza - a pedestrian zone - connects the components and the projects with its surrounding on the street level. The world’s largest LED screen – the “Sky Screen” - looms 30m above the plaza, offering a unique attraction and fascination within the project.

Urban space of investigation
Canopied pedestrian zone (type III urban space - Primary organizing space): The spacious canopied pedestrian zone provides the most spectacular feature of the development, as well as a famous place and scenic spot of city tourism of Beijing. With the spectacular Skyscreen and light show, the frequently organized events, as well as leisure activities, the space is characterized by a fancy and lively atmosphere. The canopied plaza connects the components of the MXD of both the north and souths wings, while functions also as space facilitating people’s circulation into the large-scale MXD project, it is therefore categorized as type III urban space (primary organizing space).

[1] “designed to provide customers with a one-stop shopping experience that includes expensive boutiques, posh eateries, several movie theaters, and an upscale health club.” (Thornton, 2010)
6.1.2. Making and shaping: The Place

6.1.2.1. Context of development and initiation

Context of development

• Historical development
The CBD of Beijing is situated to the east of the city center, between the 3rd and 4th Ring Roads. The area has historically been the east-suburb industrial zone. In 1993, this area was planned to become a new central business district serving the increasing demand for international business and trade activities. The area was considered suitable for such a plan as 1) it is well located between the international airport and city center; 2) the relocation of factories on site for the industrial transformation of the city enables empty lands for such a large planning project. The master plan of CBD was determined at the beginning of 2000 after an international competition, which is followed by intensive development activities.

• Regional urban planning
Characteristic of the CBD’s master plan include:
1) continuous open and green space system;
2) mixed-use district;
2) small land parcel and dense pedestrian network;
3) coverage of public transportation (metro stations);
4) planning for a high-end district (homogeneous user groups);
5) district management: a district management organization - Beijing Central Business District Administration Committee takes charge in the management of the area.

• Property market
Much influenced by the government’s objective and urban planning, the CBD area is characterized by extremely high land prices and upscale property market, targeting primarily international users and consumers.

Framework development conditions

• Site
1) Surrounding context: The developer acquired the land former pharmacy factory. The site is located on the west edge of CBD. It is near two metro stations (within 500 and 600m radius). The CBD cultural park, as one of the planned junctions of the continuous green and open space system of CBD, is located directly to the east of the site. As the master plan adopted small parcels, the site is surrounded by a dense pedestrian network. As intended by planning goal, in the CBD area dominate the buildings primarily conceived for homogeneous high-end international users. On its south side stands the Global Trade Mansion, an up-scale apartment previously developed by the same developer.
2) Site condition: The rectangular site of The Place is 150m x 250m. The CBD master plan required a west-east central street across the site, and a north-south street within the site. The site is thus eventually divided into four smaller parcels.
3) **Site attached regulations:** Landuse: the site is planned for commercial land uses (landuse category C) i.e. retail, office or hotel use. Spatial regulations: As part of the areal open space system, the planned west-east street is 30m wide with a 15m-building setback on both its north and south sides, resulting in an at least 60m-wide void between possible building areas on the north and south side. The master plan also requires a building height of 80-100m on the site.

4) **Market potential:** Profitable types of uses: according to JLL (Jones Lang LaSalle) Consultant’s suggestion, the profitable use combination include high-end shopping malls, luxury hotel/club, and class-A office space.

- **Development entity:**
  The Place has been developed by a private developer. However, as it is situated within the CBD, the public sector is much involved in the process of development and operation.
The relative densely planned metro network in the CBD results in good connectivity with urban mass transportation of urban spaces within it; The planned high-density area contributes to a dense pattern surrounding urban spaces; The planned mixed-use area contributes to the diversity of land use types surrounding urban space; The adoption of district management enables public policing in urban spaces within the space. However, the CBD plan presents high-end homogeneous user groups, which reduces the urban space’s land use attraction.

6.1.2.2. Conceptualization

Spatial concept

<continuous pedestrian circulation> An uninterrupted pedestrian circulation was considered critical for the market success of the project. First, a continuous circulation guarantees the connectivity between individual parts of the development, and their functionality and marketability. Second, it helps to achieve the economy of scale. At the beginning of the development, the divided parcels were considered disadvantageous from a developer’s perspective. First, the central street makes it difficult to offer an uninterrupted pedestrian circulation between components within the project – which may significantly affect the overall profitability of the development. Second, while the office and hotel space can take form of towers, the division of parcels limit the developable floor area and diversity of shops/services inside the retail component, and is therefore disadvantageous in achieving economy of scale, especially for the smaller north parcel; Therefore, the process of urban design demonstrated a strong intention in linking up the parcels together through the establishment of continuous pedestrian circulations.

A series of variations have been developed and proposed to the authority. The first attempt proposed the cancellation of the central street and a building concept of one undivided and connected building mass, which allows “a more powerful and dramatic atmosphere”. This proposal was denied by the city planning authority (Beijing Municipal Commission of City Planning), who insisted that the streets shall not be removed. Based on this situation, another attempt was made with connections on upper levels through skywalks or other structures, while keeping the streets unchanged. The intensive discussions and negotiations with the municipal planning authority have led to constructive outcomes: First, the planning authority eventually gained a better understanding about the necessity of making the two parts connected for the project’s success in the developer’s perspective; Second, while granting the possibilities of connection through skywalks, the planning authority also offered an exceptional approval – the underground connection.

Image 6.6
Two of initial plans of The Place: the north and south parts are connected using wide-spanning skywalks to form a closed circulation on upper levels. The middle of the skywalk is covered by an iconic dome, enabling more leasable commercial space (which can also be used for press conference) and lifted indoor junction between the two shopping wings.
Source: Jame Wong Architects
The municipal planning commission offered the possibility that the space (land) under the planned street be rented to the developer as part of the development, so that the whole project can be connected on underground levels – which means actually the extension of the building control line on the underground level. This approval is unconventional in the local planning practice as streets and its underground are municipal facilities that are normally not available for private real-estate development. The exceptional approval enabled the introduction of an additional B1 level. It was developed with retail shops, food and drink services as well as entertainment functions e.g. cinemas\(^2\). The extensive underground level connects both two wings and allows an indoor circulation of the users between use components of *the Place*. Eventually, after many times of negotiations between the project developer and planning authority, a continuous pedestrian circulation of the street has been achieved.

**pedestrianizing the street**
Although an underground linkage has already been made available, the intention of connecting the parts had driven the developer further. By the time the final plan was determined, the street was still supposed to facilitate motorized traffic. However, the developer team made a further request to the planning commission: regarding the fact that the surrounding street network of the master-planned CBD was still under construction and as the project was planned, the developer asked for permission of a temporary pedestrianized space - that the street of *The Place* be temporarily closed and used as pedestrian zone before the surrounding streets are completed and traffic condition is ready, arguing that this will also be helpful in making *the Place* an iconic event space especially in response to the upcoming Olympic Games in 2008. This request was permitted, a pedestrianized plaza is enabled as a result of negotiation and flexibility in the approval. After the Olympic Games, the through-site motorized traffic was considered not necessary, the pedestrian plaza was preserved.

- **on urban space quality:**
  - protection from motorized traffic
  - comfort - amenities e.g. F&B services, toilets etc.

- **supporting mechanism:**
  1) size (power of developer) - The developer of large-scale MXD has acted as a powerful agent in negotiation with authority for conditions for urban qualities

### arranging major entrances in accordance with the areal open space

The coherently planned open space system in the CBD area and the setback control lines indicated a sizable void - an open space which is centrally positioned on the development site, and with strong visual and physical connection to the surrounding open space system and pedestrian network. Because of its size, position, and strong linkage to the surrounding context as a result of the urban planning activities, the central void was conceptualized into the primary organizing space of the project - the space that facilitates the main circulation between the components of the project and the visual and spatial connection to the surrounding environment, and potentially the most spectacular and representative entrance space and central spatial element of the development.

- **on urban space quality:**
  - capacity - size of space
  - physical barrier - visibility
  - physical barrier - connectivity to surrounding pedestrian network

---

\(^2\) To guarantee enough strength for the street surface and space for the municipal pipelines underneath the street, the spatial height of this level was reduced.
On the ground level, F&B services such as cafes and restaurant have been arranged around the plaza. Through such arrangement, cafes, restaurants or other tenants can benefit from the pedestrian flow on the plaza to gain more visitors and consumers. Besides, the view to the scenes of activities on the plaza from the cafes and restaurant - as a resulted of spatial proximity and visual connection - also add attraction and market value to the cafes and restaurant. Eventually, arranging entrances opening to the plaza caused much higher rent prices of the ground floor areas as shops and F&B tenants can take advantage of the vision and pedestrian flow to make more profit.

For the plaza as an urban space, having cafes and restaurant around it increases its quality in terms of comfort, as food and drink services or amenities such as toilets are available. On the other hand, cafes and restaurants, through setting up their outdoor seating areas or furniture, can enhance staying possibilities for the comfort of the urban space.

- on urban space quality:
  - comfort - amenities e.g. F&B services, toilets
  - comfort - staying possibilities

- supporting mechanism: spatial and functional synergy
urban space and (parts of) MXD can benefit from each other. Such mutual benefit can be achieved when physical and/or visual connection is provided through their proximity or adjacent positioning of them.

The initial mix of uses was changed to enable the financing for holding and operating the retail component. The initial use concept involved three primary uses: retail, office and hotel, the retail components have been planned to be sold separately. However, as the project developed, the developer gradually realized the importance of holding the retail uses - first, the distinctive spatial quality e.g. size and exposure of the plaza implied potentials for long-term profitability of the retail component. Second, the desired marketing activities of retail (through e.g. joint promotion or events) can be better achieved with a centralized operation where retail spaces are held and managed by the developer. However, holding the retail component means higher short-term costs and slower cash flows, which eventually increases the financial pressure and risk for the private developer. To solve this problem, an adjustment was made to the original concept: the developer decided to replace the initially planned hotel use space with office use, so that the resulted financial gain can counterbalance the cost of holding and leasing the retail component. As a result of this adjustment, the realized project is composed of the retail component and two office towers, while a centralized operation of the retail component was enabled.

Holding and central operation of the retail component enabled the organization of large-scale events and joint promotion activities, and their impacts on the urban qualities of the plaza, which are hardly achievable under a structure of separated ownership.

- supporting mechanism: coherent and adjustable system
This adjustment reflects possibility of varying certain components or aspects of a large-scale MXD project to support the desired features and possibly urban qualities of other components, while keeping the (financing) feasibility and objective of the whole project.
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Spatial concept of The Place - Source: illustration by author
Development concept
- use concept: retail/entertainment, office; high-end users of CBD;
- spatial concept: vertical composition on each parcel - office tower stands on retail/entertainment podium (B1-L4). The primary organizing space is arranged in accordance with the planned open space on site;
- management: resulted by the district management of CBD area, the public sector is involved in the management of the plaza;
- financing: all components (retail and office) are held by the developer;
- Marketing: the plaza as a unique selling point and venue of marketing activities.

Influence on urban space qualities:
Role/core function of the plaza:
The plaza has been conceived with the following role or core functions in the MXD project: **Role in marketing**: 1) the plaza enhances the visibility and exposure of MXD, especially the retail/entertainment component through provision of physical and visual connections; 2) It provides selling point for being a spatial element particularly available in an MXD project; 3) it has been created with unique features to differentiate the project with competitors; 4) it was conceived as a critical venue for marketing events of the whole project and/or its components (particularly the retail component); **Intended users and use activities**: as primary organizing space, unspecialized activities including circulation, resting, other activities in case of event (supporting marketing activities); both internal users and external visitors; **Role in spatial configuration**: 1) facilitating major internal and external circulation: The plaza is a necessary space that enables the internal and external pedestrian circulation of the project; 2) providing (external) visual connection - the plaza enhances the exposure and visibility of the project desired for marketability, especially through its positioning; 3) embedding unique features desired to differentiate the project with competitors and establish the project’s identity. As the “gateway” space, it should define the identity of the project, and provide an attractive atmosphere and place of events which draws people into the development; **Management**: the plaza and surrounding retail component is centrally managed by the private developer, public sector management (local government, Administration Committee of Beijing CBD) is involved through a district management structure.

6.1.2.3. Implementation, operation and use
**<the Skyscreen>** The most significant action on the plaza in the implementation stage was the creation of the Skyscreen. It was conceived as a major element which brings identity and attraction to the plaza and further to the whole development. Although a pedestrianized plaza has been permitted, the developer and project architect found during the design process that merely these connections were “still insufficient to make the central space strong enough to bring spatially the two sides together and define the project’s identity... something is still missing”[3]. The gap made it difficult for the two sides to form an intensive atmosphere, which leads to an even more dangerous result for a commercial project – the lack of identity and attraction. In the next round of planning and design activities, finding solutions for this issue became a critical task. The inspiration came as James Wang, the America based project architect at the time, came across the case of Fremont Street Experience in Las Vegas, where a 460m long light canopy is adopted to facilitate a light show concept for the revitalization of the city’s downtown. After the architect showed the photos and videos of Fremont Street Experience, the client got immediately interested as there have not yet been projects of similar spectacularity in China. An investigation team, including both developers and architects, was immediately organized and headed for the investigation in Las Vegas in the U.S., where they met the team/company who created and operate the Fremont Street Experience. After a week’s stay to learn about details, the developer team determined the creation of a similar element above the street of the Place – the Skyscreen. Importantly, the Skyscreen provides

3 James Wong, from Interview
an answer to the issues confronted by the developer team: It functions as a major visual attraction and support for events on the plaza, which helps to build up the identity of the whole project through unusual spatial appearance, activities and events, and eventually contributes to the marketability of the development.

**<Skyscreen - scale and shape>** Realized with a cost of 250 Million RMB, the Skyscreen was created with an iconic scale of 30m width and 260m length, hanging 30m above the plaza, stretching from the west to the east end of the site. In order to maximize its uniqueness, various designs of Skyscreen were proposed, which range from arch-shaped (similar to Fremont Street Experience), to curved and ribbon-like designs. Eventually, a simple flat design was selected for it provides the best visual effect of the light show while being cost-efficient.

**<Skyscreen - techniques>** The Skyscreen is integrated with visual, sound and communication technologies. It adopts a more advanced visual technology than that of the original Fremont Street Experience – while the latter applied four colored light bulbs, the former is equipped entirely with LED modules, making it the world’s largest LED display of the time. Sound equipment is integrated with the Skyscreen to enhance the overall effect of output. Besides, communication technologies are also adopted to allow programs of interaction between audience and Skyscreen. These technologies also allow the Skyscreen to flexibly offer different contents and support different events and activities on the plaza.

**<Skyscreen - light show>** Display programs have been especially developed for maximizing the visual effect of the Skyscreen. Video materials and animations were developed to generate strong visual stimulation. The light show runs in a 30-minutes interval.

**<Skyscreen - events backdrop>** The Skyscreen is frequently utilized to provide a supporting backdrop for the various events held on the plaza below it. Its scale and visual and sound effects help events to achieve greater impact on the audience and the wider public through media communication.

**<Skyscreen - interactive programs>** In December 2014, the BMN (Beijing Media Network) - a state-owned media developer and operator - joined the operation of the Skyscreen. A series of programs have been developed, including one interactive program which allows the Skyscreen to displays short messages and images sent by its audience. Between the
light shows, one can send photos and short text messages using their smartphones to the operation platform with a fee of 1 RMB, the message will then be shown on the Skyscreen soon after it gets approved. This program makes the plaza since then a famous place where people express their feeling to friends, families, and dating couples. While the light shows provide visual attraction and discovery, the interactive program of Skyscreen promotes the attraction of the plaza through engagement.

**Skyscreen - CityTV** The BMN also managed to transform the Skyscreen into a point of CityTV network - a broadcasting network consisting of some 10 large-scale outdoor LED screens distributed in populated areas of the city. The program of CityTV focuses on news, public service announcements, publicity films, weather forecast, early warning for emergencies, and live-transmission of critical events e.g. meetings, sports games, press conferences etc. As CityTV programs are conceived to provide services for the general users of the city rather than specific groups of consumers, they greatly expanded the range of audience of the Skyscreen or the users of the plaza.

The Skyscreen, as a “compact” solution, allows the provision of a wide range of urban qualities. While providing the desired qualities for achieving the role of the plaza in the development, it also enabled the provision of other qualities, which are not necessarily needed and initially intended. First, the Skyscreen’s contribution to attraction and identity of the plaza is achieved through provision of unusual spatial appearance and activities - the quality of discovery. Second, the Skyscreen, as an unusual spatial element, also provides a spectacular focal point, which promotes active engagement of its audience. Third, while providing the desired qualities for achieving the role of the plaza in the development, the Skyscreen have enabled the provision of other qualities, which are not necessarily needed and initially intended. Fourth, the CityTV programs enhanced the urban qualities of the plaza through enabling alternative use activities and services for public users. Fifth, the structure of the Skyscreen itself also functions as a huge shelter against bad weather, which contributes to the comfort of the plaza.

- on urban space quality:
  - discovery - unusual space
  - discovery - spatial flexibility
  - discovery - unusual activities through supporting events
  - active engagement
  - land use - diversity of uses and users, magnet land uses
  - comfort - protection against bad weather

**landscape design interventions**
A series of landscape design interventions have been conducted in the making of the canopied plaza. These actions include arrangement of big stairs, seating elements, and landscape. **big stairs** Sculptural big stairs was introduced by architects on the north side of the plaza. Referring the Spanish steps in Rome, the stairs have been conceived to create a “focal point of sightseeing”, provide simultaneously seating possibilities where peo-
people may look down on the activities on the plaza or look up to the show on the Skyscreen (James Wang). **landscape seating elements with green**: The seating elements provide beside the big stairs and seating areas of cafes/restaurants alternative resting possibilities. These elements are combined with natural elements e.g. vegetation that provides shades and views of green.

**<multi-functional basketball stadium>** A multi-functional structure - named as “Hoo-Place” and recognized as “Beijing Urban Basketball center” was established on the east side of the Plaza under the support of governmental organizations (Beijing Basketball Association, Beijing Olympic City Development Association, Sports Bureau of Chaoyang District). With a size of 24x48x12m, the stadium adopts a light and flexible structure. It is also equipped with stage techniques, which makes it adaptable for multiple activities. The transparent ceiling enables the view of the Skyscreen from inside the space. Conceived beyond being merely a basketball stadium, the space is intended as a venue for various matches, training, performances, exhibitions, education, and press conferences aiming for the communication of sports culture to the public. Especially, the introduction of the basketball stadium brings about activities and programs for the general public users on the plaza.

**Management/maintenance activities**
The management activities of the plaza are conducted within the management structure and to support the core function of the plaza determined in the conceptualization stage. Management and maintenance activities of the plaza include:

1) **<no access control>**: Determined by the plaza’s role (as primary organizing space) of facilitating the circulation of various internal and external users, strict access control is not possible and not adopted.

2) **<setting up rules on plaza>**: Several rules have been set up and posted on the plaza to prohibit activities e.g. firework, skating, lying down, pets, riding bicycles and motorized traffic.

3) **<involvement of public policing - district management>**: Because of the district management attached with the CBD, the plaza is secured by public policing personals.

4) **<adopting maintenance personals>**: Personals have been employed for maintaining a clean environment and functionality of facilities.

- on urban space quality:
  - <managerial barrier - access control>
  - <managerial barrier - policing>
  - <comfort - clean and maintained environment>
Marketing activities

As primary organizing space which is particularly found in MXD projects, the plaza was conceptualized as a special selling point, as well as a venue supporting marketing events of the Place. It is therefore much involved and communicated in the marketing activities by the project operator. The marketing activities include:

1) **<advertising through mass media>** - the plaza and the Skyscreen are advertised as the most representative features of the Place;

2) **<holding events>** - including promotional and public-relation events organized by the project owner and tenants, and events organized in cooperation with the government or other public organizations; Large-scale events are supported by the central management structure;

3) **<establishing a service platform>** on social media.

<organizing promotional events in association with public festivals or holidays> One of the major marketing activities is frequently holding various promotional events on the plaza, which is well supported by the spatial and functional properties and available technologies of the plaza. To enhance the influences of promotional events, big-scale promotional events are usually organized in accordance with national/international events/festivals. Events associated with occasions of e.g. festivals and holidays create an attraction for wider population and potential customers and simultaneously transform the space into a place of collective celebration for a wider range of users.

- on urban space quality:
  - <land use - diversity of users>

<organizing events in cooperation with public sector> Particularly, the canopied plaza of the Place has drawn much attention of mass media through holding events in cooperation with the public sector e.g. the local government, especially events that were related to the Olympic Games. The construction of the Place began in 2005 and finished in 2007. Preparing for the opening of 2008 Olympic Games, the Place has been listed by the mu-
nicipal government among the five city places[^4] representing a modern Beijing, while the canopied plaza was determined by the Beijing Olympic Committee and city government as one of the 26 “Plazas of Olympic Culture[^5]”, which would facilitate public viewing, exhibitions, live performances, press conferences, and numerous other services and events during the XXIX Olympic Games.

• on urban space quality:
  <land use - diversity of users>
  <land use - diversity of uses>
  <communication - advertising through mass media>
  <communication - broadcasting through social media>

• supporting mechanism - mutual benefit in cooperation with public sectors
  For the city government, the canopied plaza of the Place provides a suitable venue for holding such events for two main reasons: 1) its location within CBD - a representative area for a modern and international Beijing - enhances the influence of events; 2) its spatial, functional features and facilities/technologies provide strong support. On the other hand, for the project owner, holding public events can greatly contribute to the popularity and marketability of the Place as well: 1) Public events help to create a good image and public relationship of the development; 2) In public events, public or state-media are usually involved and can contribute to the communication and promotion of the development. Besides being reported by public and state media, the Place also appeared in several officially filmed advertisement for Beijing’s Olympic Games, which has been widely broadcasted in state media networks. As such, organizing events in cooperation with the public sector enables a possible mutual benefit for the private and public sector. Such a mechanism of mutual benefit promotes the emergence of public events in private spaces and eventually (can be taken advantage to) enhance the urban qualities of the space.

• supporting mechanism - active role of public sector
  The public sector has played an active role in supporting events on the plaza. The active involvement is on one hand motivated by the mechanism of mutual benefit; On the other hand, the CBD as a master planned representative urban district also contributed to a more active role and involvement of public sector in projects within the district.

<establishing service platform through social network>
  The operation team also established a service channel on the Wechat platform to provide services e.g. parking and visiting guides to the Place, the platform is also a critical channel for broadcasting information of e.g. sale and public events.

[^4]: which include also the national stadium “Bird Nest”, the Water Cube, and new CCTV Headquater
[^5]: 奥运文化广场
6.1.3. Summary - Urban space making and shaping: three essential factors

Three essential aspects of factors can be identified through the case study, which have contribute in achieving the urban spaces and qualities through the process of the Place as a large-scale MXD project:

1) “Shared qualities”:
First, as has been reflected in the case of the Place, large-scale MXDs need and can benefit from certain urban spaces and qualities to achieve its development objectives (including market success). Some urban qualities are generally needed and desired for a large-scale MXD project as a whole, while some urban qualities are necessary for achieving the conceived role or core function of the specific type of space within the large-scale MXD project. Such qualities are therefore needed or desired by the makers of large-scale MXD. They motivate and drive the making and shaping activities and thus are likely to be offered in a large-scale MXD project. As these qualities contribute to both aspects of the success of large-scale MXD and urban space, they are termed in this research as the “shared qualities”. As has been mentioned above, “shared qualities” include urban qualities that are contributive for a large-scale MXD project as a whole - generally needed or desired for all its spaces and qualities that are desired for specific types of spaces within the development.

2) “Supporting mechanisms”
Second, the making of large-scale MXD project has involved mechanisms (logic and rules), that can be utilized in realizing the desired urban spaces and urban qualities while also contributing to the success of the MXD project. Based on these mechanisms, making and shaping activities and strategies have been developed and conducted, which introduced urban spaces and urban qualities to the large-scale MXD project. Such mechanisms have been on one hand provided by the nature of large-scale MXDs, and on the other hand by the broader context of Beijing in which the large-scale MXD project is situated. Such mechanisms are termed in this research as the “supporting mechanism”.

3) “Techniques”
Third, besides the “shared qualities” and supportive mechanisms, the “techniques”, or innovative making and shaping strategies have also contributed to the creation of urban spaces and urban space qualities. As has been demonstrated in the case study, many basic strategies have been developed, which contributed to the “shared qualities”. Importantly, while satisfying the shared qualities, innovative strategies (termed as “techniques” in this research) can be developed, which also bring about, or promote other aspects of urban space qualities, bringing extra qualities than initially intended and conceptualized to a large-scale MXD project and space within it\(^6\). The “techniques” are an important factor contributing to urban space and qualities within large-scale MXD projects, as it provides potentials for achieving urban space and qualities beyond the urban qualities necessary for large-scale MXD. “Techniques” contribute to introducing urban space(s) into the MXD and/or promoting the qualities of urban space within an MXD. They can be developed in different levels and aspects in the making of large-scale MXD projects, including activities of both the intervenor and (direct) makers.

These three essential aspects of factors consist the potential of achieving urban space and qualities through the process of a large-scale MXD. They also build up a framework for further investigations in this chapter, regarding how urban spaces and qualities have been created in different cases of large-scale MXD projects.

\(^6\) As is well demonstrated in the case of the Place, the Skyscreen, as a compact solution, has shown great potential in bringing extra qualities than initially conceptualized to the plaza, significantly contributing to its urban qualities. Besides, events can also be viewed as compact solution, which showed the possibility of enhancing a wide range of urban qualities of the plaza.
Plaza of The Place in the evening

Promotion and PR events on the plaza

Image 6.21a
Source: photo by author

Image 6.21b
Source: photo by author
Image 6.21c
Light show of the Skyscreen
Source: photo by author
6.1.4. Summary - The Place
6.1.4.1. Potentials in achieving urban space and qualities
1) “Shared qualities”
MXD - Urban qualities generally needed for MXD project
• secured, maintained and pedestrianized environment
As is demonstrated by the case of the Place, MXD needs and thrives on a continuous pe-
destrian circulation, which leads to the creation of secured, maintained urban spaces that
are protected from motorized traffic. The need for a pedestrianized space has actually
been one key factor that Security measures are usually adopted to prevent crime, while
personals are employed to keep a clean and maintained environment.
• dense and multi-use environment
While dense development creates potentially more profitable spaces and helps to achieve
the economy of scale, and multiple uses enable market synergy for the developer, the
dense and multi-use environment provided by a large-scale MXD project contribute to
the attraction of urban space within it in terms of density and diversity of land use.

Type III Urban Space - Urban qualities contributing to the role of primary organizing
space (type III space):
Certain urban qualities contribute to achieving the conceptualized role and core functions
of the plaza as primary organizing space of the development. Such qualities are therefore
needed or desired and more likely to be offered in the making process of large-scale MXD.
These aspects of qualities include:

Physical barrier - minimization of physical barrier
Minimization of physical barriers is needed for the primary organizing space to facilitate
the pedestrian circulation between the development and surrounding context, and to
enhance the desired exposure and visibility of the project.

Discovery - discovery through unusual space, activities, and people
Unique spatial design or spatial elements and events are utilized to bring attractions to
the plaza for potential customers, and help the space to establish the identity for the
entire project.

Engagement - passive and active engagement
Unique spatial elements or activity scene provide spectacular focal points for active en-
gagement. The involvement of major pedestrian circulation in and around the primary
organizing space promotes the possibility of passive engagement.

Management - minimization of access control
Considering the circulation of various internal and external users in the primary organiz-
ing space, strict access control is usually not possible and not adopted.
Communication
As a particular selling point and venue for event marketing, the primary organizing space is much involved in the marketing of the MXD project and well communicated in the marketing process.

<communicational barrier - advertising>
<communicational barrier – broadcasting through social media>

Possible qualities via events:
The plaza as the primary organizing space of the large-scale MXD is also conceptualized as an event venue. As has been demonstrated in the case of the place, events can bring about qualities in other aspects. While above are the needed and desired urban qualities for primary organizing space, in the case of the Place, events also result in attraction through land use - events (especially public-oriented events) can enrich the diversity of uses and users, and introduce magnet uses to the urban space.

<diversity of land uses: type of uses> via event
<diversity of land use: users> <magnet use> (via public-oriented events)

2) “Supporting mechanism” :
Supporting mechanisms related to the nature of MXD:
• synergy through proximity of spaces and activities
When physical and/or visual connections are available, the activities or spatial features of one space may contribute to the desired functionality and/or visual quality of the other, and vice versa. The MXD, with its dense form of spatial composition, provides possibilities of proximity and realization of such synergy. In terms of urban space quality, the mechanism can contribute in two aspects: 1) urban space (spaces with urban qualities) may be introduced in an MXD as it can benefit other parts of the development; 2) On the other hand, an urban space can also gain urban qualities from other parts of a MXD when proper connections and relationships are provided. In the case of the Place, such mechanism of synergy is demonstrated through arranging cafes and restaurant around the primary organizing space, as a result of which the quality of both sides was enhanced.

• coherent and adjustable system
Development of a large-scale MXD project means the coherent conceptualization of multiple components and spaces, and multiple interrelated aspects including use (programming), spatial configuration, management, marketing and financing. It is the development objective of the entire project rather than its parts is the overarching goal. The large-scale MXD as a coherent and adjustable system provides possibility of varying certain components or aspects of a MXD project to support the desired features and possibly urban qualities of other components or spaces, while keeping the feasibility and overarching objective of the whole project unchanged. In the cases of the Place, adjustment haven been made in type of uses and ways of revenue production of the retail component, which enabled an operation structure advantageous for providing urban qualities.

• size (in space and capital scale)
The unusual size of large-scale MXD, which include size in space, capital involved and organization (power), can be taken advantage of for the provision of urban spaces and qualities. First, the spatial size of the development possibly contributes to the unique spatial feature and performances of spaces within it. Second, the large capital involved in large-scale MXD allows the introduction and adoption of costly technologies (e.g. technologies of the Skyscreen in the case of the Place), which opens up new possibilities for the provision of urban space qualities. Third, the large organization and power of development entity of large-scale MXD allows the negotiation with public authority for changes of planning conditions, which may be favoring the provision of urban spaces or qualities.
• possible active role of the public sector
Large-scale MXD projects inevitably involve more attention and participation of the public sector, especially when they are situated in critical locations or integrated with public facilities. In the case of the Place, the involvement of the public sector is much related to its location in CBD. The public sector has contributed to the provision of urban space qualities in many aspects including setting up planning regulations, district management, introducing the multi-functional basketball stadium, integrating the CityTV, organization of public events on the plaza and communication.

• mutual benefit through events in cooperation with the public sector - “public events private space”
As is demonstrated in the case of the Place, holding public events within MXD through cooperation with public sectors or organizations can benefit both the project owner and public sector. Public events can extend the range of uses and users of a space and enhance its urban qualities. Therefore, the mechanism of mutual benefit can be utilized to promote the occurrence of public events in MXD projects, and eventually contribute to urban space qualities.

Supporting mechanism by context:
• The CBD, as a representative master planned key business area, caused much attention and involvement of public sector (in planning, management, programming, events, and communication); This case also demonstrates a close relationship of government and developer in their cooperation.

• Flexibility in planning - the planning authority showed some flexibility towards the established planning conditions. In the case of the Place, this flexibility has actually contributed to the emergence of urban space and its qualities.

3) “Techniques”
Techniques of intervention
The case of the Place has shown a great influence of urban planning activities in shaping the MXD and its urban spaces. Following are possible planning interventions learned from the case study:

• defining a representative city area (CBD) may promote the involvement of the public sector in the making process of MXD and possible urban spaces within it.
• densely planned metro network in a given area contributes to connectivity with public transportation and less (macro) physical barrier of urban spaces within the area.
• creating a continuous pedestrian environment and open space system in an area promotes the emergence of type III urban spaces within MXD projects in this area, and their urban qualities in terms of physical access (connectivity to surrounding pedestrian network and visibility), especially when a through-site open space is planned. Site attached regulations e.g. building control lines can be implemented to guarantee the capacity (size) of the urban space.
• high-density development area with multiple uses positively contributes to the land use attraction of urban spaces within the area in terms of density and diversity of uses around urban space.
• flexibility in zoning regulations. Generalized zoning categories enable flexibility for adjustment of uses, which enabled possible changes favoring urban space and qualities.
• setting up district management contributed to the involvement of public policing and security of urban spaces within the district.

“Techniques” of making
• “Skyscreen” as a “compact solution”
The case of the Place demonstrates possible activities satisfying the core function of primary organizing space while shaping urban qualities. It also demonstrates strategies that
simultaneously contribute to multiple urban qualities - the “compact solutions” - among which the Skyscreen built up the most representative example. The Skyscreen simultaneously contribute to the shared qualities: providing shelter for a protected pedestrian environment; providing a huge visual guidance for visibility and displaying changing programs/light shows and supporting promotional events - which contribute to the attraction of discovery and engagement. Notably, besides these shared qualities, the Skyscreen can also associate strategies that lead to other urban qualities: It promotes the land use attraction through introducing activities for the public e.g. providing news programs (public viewing) and (interactive) programs allowing participation and interaction of external users.

- public event through cooperation with the public sector

Holding event is another important possible intervention which has extended the quality of urban space. Especially, the involvement and support of public sector in holding public events can introduce activities and programs that attract a wider range of user groups, and therefore contribute to urban space qualities in terms of land use attraction.

6.1.4.2. Quality of urban space - result of assessment

Canopied Plaza

As a result of the process of the large-scale MXD of The Place, the canopied plaza (type III urban space) demonstrates the following characteristics regarding its urban quality (see the following table):

**Capacity:** the nature of the Plaza as type III urban space guarantees a 24-hour access, while the building control line enables the size of the plaza;

**Accessibility:**
- high attraction in the aspect of land use: the space’s positioning within a dense and multi-use environment, as well as the introduction of public activities the multi-functional stadium, CityTV programs, and various events, has led to a high attraction in terms of land use.
- high attraction in the aspect of engagement: embedding the major circulation and staying possibilities within it, the plaza provides a high attraction for passive engagement e.g. people watching, while the spectacular Skyscreen and organized events provide focal points for active engagement;
- high attraction of in aspect of discovery thanks to the distinctive spatial appearance and changing scenes and activities supported by the Skyscreen;
- comfort: Besides, although being an outdoor space, a certain degree of comfort has been achieved through landscape design and the Skyscreen as a shelter against bad weather.
- low physical barrier: it is well positioned in proximity of the metro station (thanks to the CBD master plan) and well connected and visible in the local pedestrian network;
- low communicational barrier: as a major selling point and place of public events, the plaza is communicated through various ways ranging from mass media to social network, involving both public/governmental and private media;

**Catalyst:** high quality of catalyst as a result of comfort and active engagement.
<table>
<thead>
<tr>
<th>The Place</th>
<th>Canopined Plaza</th>
<th>Type III</th>
</tr>
</thead>
<tbody>
<tr>
<td>aspect</td>
<td>sub-aspect assessment / indicator</td>
<td>value</td>
</tr>
<tr>
<td>CAPACITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>open time</td>
<td>number of daily open hours</td>
<td>24 hours / day</td>
</tr>
<tr>
<td>size of space</td>
<td>area of space</td>
<td>15000 sqm</td>
</tr>
<tr>
<td>ACCESSIBILITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU land use</td>
<td>diversity of land use: types of uses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>types of land use within 5-min walking distance from urban space (residential,</td>
<td></td>
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<tr>
<td></td>
<td>office, commercial)</td>
<td>0            mono functional land use</td>
</tr>
<tr>
<td></td>
<td>1 types of land uses</td>
<td>1            2 types of land uses</td>
</tr>
<tr>
<td></td>
<td>x 2 3 or more types of land uses</td>
<td>2            1 - 2 types of land uses</td>
</tr>
<tr>
<td></td>
<td>diversity of land use: users</td>
<td></td>
</tr>
<tr>
<td></td>
<td>types of user groups within 5-min walking distance from urban space</td>
<td>0            adjacent uses for homogeneous high-income social group</td>
</tr>
<tr>
<td></td>
<td>1 adjacent uses generally for high-income groups</td>
<td>1            2 adjacent uses support multiple social groups</td>
</tr>
<tr>
<td>density of surrounding uses</td>
<td>dominant building pattern of surrounding urban environment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 low-rise pattern (1-6 storey)</td>
<td>2            high-rise pattern (&gt;100m or more than 10-storey)</td>
</tr>
<tr>
<td></td>
<td>1 middle-rise pattern (7-10 storey)</td>
<td></td>
</tr>
<tr>
<td>magnet land uses</td>
<td>number of magnet land uses e.g. public use or services around or within urban</td>
<td></td>
</tr>
<tr>
<td></td>
<td>space</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 at least one or temporary public amenity/use available within/near space</td>
<td>2            2 or more types of public use/amenities provided within/near space</td>
</tr>
<tr>
<td></td>
<td>x 2 two or more types of land use</td>
<td></td>
</tr>
<tr>
<td>AC comfort</td>
<td>protection against motorized traffic</td>
<td></td>
</tr>
<tr>
<td>comfort (protection &amp;</td>
<td>degree of pedestrianization</td>
<td></td>
</tr>
<tr>
<td>relaxation)</td>
<td>0 space is overlaid by motorized traffic / not suitable for pedestrian traffic</td>
<td>2            1 space is occasionally motorized</td>
</tr>
<tr>
<td></td>
<td>1 space is completely pedestrianized</td>
<td>2            1 space is completely pedestrianized</td>
</tr>
<tr>
<td></td>
<td>protection against crime - security</td>
<td></td>
</tr>
<tr>
<td></td>
<td>availability of security measures e.g. security personals, CCTV, self-policing</td>
<td>0            not exist</td>
</tr>
<tr>
<td></td>
<td>layout etc.</td>
<td>1            2 space employs security measures</td>
</tr>
<tr>
<td></td>
<td>protection - night-time lighting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>availability of night-time lighting</td>
<td>0            no night-time lighting available</td>
</tr>
<tr>
<td></td>
<td>1 single type of lighting at night</td>
<td>2            1 single type of lighting at night</td>
</tr>
<tr>
<td></td>
<td>x 2 multiple types and sufficient lighting at night</td>
<td></td>
</tr>
<tr>
<td></td>
<td>protection against bad weather</td>
<td></td>
</tr>
<tr>
<td></td>
<td>degree of shelter within the space</td>
<td>0            non or very limited shelter (providing shading)</td>
</tr>
<tr>
<td></td>
<td>1 some sun/shade, overhangs/shielding (canopied) from wind and rain</td>
<td>1            2 space is indoor and not influenced by weather</td>
</tr>
<tr>
<td></td>
<td>x 2 safe weather</td>
<td></td>
</tr>
<tr>
<td>relaxation - natural element</td>
<td>availability / amount of natural elements in or around space (natural light, green, water etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 non - very limited natural elements</td>
<td>2            1 natural light and some natural elements available</td>
</tr>
<tr>
<td></td>
<td>1 large amount of natural elements</td>
<td></td>
</tr>
<tr>
<td>relaxation - clean and</td>
<td>degree of maintenance of urban space</td>
<td></td>
</tr>
<tr>
<td>maintained environment</td>
<td>0 not maintained</td>
<td>2            1 partly maintained</td>
</tr>
<tr>
<td></td>
<td>1 partly maintained</td>
<td></td>
</tr>
<tr>
<td></td>
<td>x 2 well maintained</td>
<td></td>
</tr>
<tr>
<td>relaxation - human-scale</td>
<td>availability /amount of human-scale interface within urban space</td>
<td></td>
</tr>
<tr>
<td>interface</td>
<td>0 non-human-scale/overscaled</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 partly human-scale interface</td>
<td></td>
</tr>
<tr>
<td></td>
<td>x 2 human scale interface</td>
<td></td>
</tr>
<tr>
<td>relaxation - staying</td>
<td>available / amount of elements for seating, leaning or lying down</td>
<td></td>
</tr>
<tr>
<td>possibilities</td>
<td>0 no seating</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 only one type of stationary seating</td>
<td>2            1 only one type of stationary seating</td>
</tr>
<tr>
<td></td>
<td>x 2 two or more types of seating or substantial moveable seating</td>
<td></td>
</tr>
<tr>
<td>relaxation - air-control and</td>
<td>availability of air-control (micro-climate) and optimization facilities/mechanism</td>
<td></td>
</tr>
<tr>
<td>optimization</td>
<td>0 not available in the space</td>
<td>1            2 full space employs techniques to improve or enrich the air quality</td>
</tr>
<tr>
<td></td>
<td>x 1 space partly employs techniques to improve or enrich the air quality</td>
<td></td>
</tr>
<tr>
<td>amenities/services e.g. food,</td>
<td>availability / amount of amenities/services e.g. food, drink, toilets provided</td>
<td></td>
</tr>
<tr>
<td>drink, toilets</td>
<td>within or around urban</td>
<td>0            1 food and drink available, customers-only or paid restrooms</td>
</tr>
<tr>
<td></td>
<td>x 2 food and drink available, free restrooms available in vicinity (400m)</td>
<td></td>
</tr>
<tr>
<td>(AE) engagement</td>
<td>passive engagement</td>
<td></td>
</tr>
<tr>
<td>(passive &amp; active)</td>
<td>availability of supportive spatial layout between staying space / view / focal</td>
<td>0            spatial layout does not support passive engagement</td>
</tr>
<tr>
<td></td>
<td>points</td>
<td>2            1 (spatial layout of) minor part supports passive engagement</td>
</tr>
<tr>
<td></td>
<td>x 2 (spatial layout of) major part supports passive engagement</td>
<td></td>
</tr>
<tr>
<td>active engagement</td>
<td>existence of special element/ visual focus / special activities within space</td>
<td>0            none present</td>
</tr>
<tr>
<td></td>
<td>x 2 major interactive activities; free performances/activities</td>
<td></td>
</tr>
<tr>
<td>(AD) discovery and display</td>
<td>discovery unusual space</td>
<td></td>
</tr>
<tr>
<td></td>
<td>degree of contrast of apperance with surrounding context or distinctive from</td>
<td>0            non or unobvious contrast</td>
</tr>
<tr>
<td></td>
<td>similar categories</td>
<td>1            2 obvious contrast and distinctive</td>
</tr>
<tr>
<td></td>
<td>x 2 available</td>
<td>2            1 obvious contrast and distinctive</td>
</tr>
<tr>
<td></td>
<td>discovery unusual space - flexibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>availability of change mechanism e.g. flexible, adjustable design within space</td>
<td>0            not available</td>
</tr>
<tr>
<td></td>
<td>1 monthly or several times a year</td>
<td>2            1 monthly or several times a year</td>
</tr>
<tr>
<td></td>
<td>x 2 available</td>
<td></td>
</tr>
<tr>
<td></td>
<td>discovery unusual activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>availability / amount of animation programs within space</td>
<td>0            non present or seldom</td>
</tr>
<tr>
<td></td>
<td>1 monthly or several times a year</td>
<td>2            1 monthly or several times a year</td>
</tr>
<tr>
<td></td>
<td>x 2 weekly or several times a month</td>
<td></td>
</tr>
<tr>
<td></td>
<td>discovery different people</td>
<td></td>
</tr>
<tr>
<td></td>
<td>existence of amenities for different social groups to display themselves</td>
<td>0            none present</td>
</tr>
<tr>
<td></td>
<td>x 2 temporary: available through culture-oriented programs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(part of) space permanently caters to alternative uses or user groups (subcultures)</td>
<td>1            2 temporary: available through culture-oriented programs</td>
</tr>
<tr>
<td>connectivity to mass</td>
<td>transportation network</td>
<td></td>
</tr>
<tr>
<td>transportation network</td>
<td>distance between urban space and nearest metro station</td>
<td>0 mass transportation is directly connected to the space, or near transit station</td>
</tr>
<tr>
<td></td>
<td>x 1 mass transportation station less than 450m away, yet not directly connected</td>
<td>-1           1 mass transportation station less than 450m away, yet not directly connected</td>
</tr>
</tbody>
</table>
### Table 6.2

<table>
<thead>
<tr>
<th>Source: author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban qualities of the Plaza of The Place - assessment result</td>
</tr>
</tbody>
</table>

#### The Place - canopied plaza

**Type III**

<table>
<thead>
<tr>
<th>CATALYST</th>
<th>duration: comfort</th>
<th>total score comfort</th>
<th>1.7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>possibilities: active engagement</td>
<td>total score active engagement</td>
<td>2</td>
</tr>
</tbody>
</table>

| open time: | 12 hours/day |
| size: 7500 sqm |  |

![Diagram showing various urban qualities](image)

1. **Connectivity to local pedestrian network around site**
   - Number of access points / directions of pedestrian network:
     - [x] More than 450m (5min walk)
   - Number of major connections:
     - [x] 3 or more cardinal directions
     - [x] 1 cardinal direction
   - Degree of height difference:
     - [x] At least 2 stories

2. **Restrictions on spatial boundary**
   - Degree of height-level difference on the boundary:
     - [x] At least 1 storey
   - Degree of presence of escalators:
     - [x] Not directly connected

3. **Visual restrictions**
   - Degree of visibility / existence of visual signs and guidance:
     - [x] Space is directly visible from major adjacent pedestrian flow
   - Degree of presence of access control:
     - [x] Not directly visible yet well guided by signs

4. **Behavioral control**
   - Degree of presence of security personal:
     - [x] Policing layout
   - Degree of presence of access control:
     - [x] Policing through other personal or public police

5. **Access control**
   - Degree of visibility / existence of visual signs and guidance:
     - [x] Space is not directly visible, no signs and guidance present

6. **Policing personals**
   - Degree of presence of security personal:
     - [x] Policing through private guards

7. **Symbols and image**
   - Degree of visibility / existence of visual signs and guidance:
     - [x] Signs and symbols announcing / indication public use
     - [x] Signs and symbols indicate neither public use nor specific user groups

8. **Advertising through mass media**
   - Availability of reports and advertising through mass media:
     - [x] Spaces got reported through major mass media

9. **Broadcasting through social media**
   - Spectacular design and animation programs encourage sharing activities:
     - [x] Only small part of the space or occasionally does the space encourage sharing activities
   - Spatial design or management do not encourage sharing activities:
     - [x] Spectacular design and animation programs encourage sharing activities

10. **Broadcasting through third-party platforms**
    - Availability of third-party service-platforms e.g. e-maps, smart phone app, Wechat etc.:
      - [x] Space is visible in major service platforms
    - Space not visible in any service platform:
      - [x] Space not visible in any service platform

<table>
<thead>
<tr>
<th>Source: author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban qualities of the Plaza of The Place - assessment result</td>
</tr>
</tbody>
</table>

![Diagram showing various urban qualities](image)
6.2. Case study 2: Parkview Green

6.2.1. Introduction

Basic information

Parkview Green is a mixed-use complex totaling ca. 200,000 m² GFA, comprising office (82000 m²), retail and entertainment (ca. 50000 m²), and a 110-suite boutique hotel (ca. 10000 m²). The project is located in central city area, near 2nd ring road of east Beijing’s Chaoyang district, with the CBD on its east side over the street. Surrounded by low-rise residential apartments, schools and embassies, the development differentiates itself from the environment with its scale and unique geometrical appearance – four connected towers hidden inside a single transparent envelope, covered by a pair of triangular sloping roofs of composed of steel frames and ETFE modules. From the southeast, with its highest point at 89m, the entire building volume goes gradually lower in other directions with a 26-degree sloping angle as a response of shading-prevention for neighboring residential areas. Standing on a 9m-below-ground sunken garden, the development has its five lower floors (from LG2 to L3) as retail and entertainment, L3-L12 as office space, and the top L13-L16 as a hotel – essentially a podium composition, similar with many projects in central city areas of Beijing. Besides, the development also comprises an art museum – the Parkview Museum on its 10th floor.

Urban space of investigation

Atrium of the mall - common space within use component (Type I urban space)

The enveloped grand atrium forms a striking space within the development. Stretching 68m from the third lower ground floor directly to the sloping roof, the centrally located L-shaped shared space enables multiple types of activities and visual interactions between users of different components. Beside the main entrance on the east side, a grandiose walking-bridge – world’s largest indoor bridge - spans on the diagonal and provides two alternative entrances for visitors at the northwest and southeast corner.

Art museum - public/civic use component (Type II urban space)

The Parkview Museum - an art exhibition center established within Parkview Green - builds another highlight for the project. Located on the 9th (10th) floor, the museum opens free of charge to the public. The Parkview Museum holds long-term exhibitions as well as periodic events e.g. forums and exhibitions. It also contains amenities e.g. a shop, cafe, and toilets. Its position on the 9th floor enables a dramatic view of the atrium and surrounding urban landscape.
6.2.2. Making and shaping: Parkview Green

6.2.2.1. Context of development and initiation

Context of development

• Historical development
  Fangcaodi is one of Beijing’s oldest district between the 2nd and 3rd ring roads in the eastern central city area. Located in the central city area, the Fangcaodi district is characterized by low-rise residential apartments, schools and embassy quarters.

• Regional urban planning
  the region of Fangcaodi does not have a structured open space system. Land parcels of commercial uses are arranged along the major Dongdaqiao Road.

• Property market
  the central city area, especially thanks to the location near the embassy district and CBD, implies a high-end market primarily for office properties.

Framework development condition

• Development entity:
  Parkview Green is developed totally by a private developer. Chyau Fwu Properties - the development entity of Parkview Green, is a family enterprise and capable private real-estate developer based in Taiwan and Hong Kong. George Wong (黄建华), a family member of Chyau Fwu Properties, as the founder of Parkview Green in Fangcaodi. The developer cooperated with the Hong Kong based Architecture office IDA (Integrated Design Associates). The site of Parkview Green was acquired in 1995 by the family Wong with their Taiwan -based enterprise Chyau Fwu Properties.

• Site:
  1) Surrounding context:
    The site is neighboring the first embassy quarter in central city area in its south while lying directly to the east of the Forbidden Palace and close to the CBD on its east side. Dongdaqiao road - a busy 40m tree-lined main road which was frequently used by visiting foreigners from the international airport before urban speedways were built - lies on the east side the site. Although the CBD of high rise clusters is just across the road, The context is characterized by walled structures and unconnected pedestrian system. Located 350 meters away from the nearest Dongdaqiao metro station, the site is well connected to the mass public transportation.
  2) Site condition: The quasi-square-shaped site totals about 34000sqm.
  3) Site attached planning regulations: The site allows a high development density with a developable area of 200,000 sqm. However, as the site is surrounded by low-rise residential structures, the zoning ordinance required a building height limitation of only 90 meters. The initially planned land use of the site changed from residential to commercial use (B) - allowing commercial functions including office, retail, hotel etc.,.
  4) Market potential: the central city area site, especially thanks to its location near the embassy district and CBD, implies a high-end market primarily for office use.
6.2.2.2. Conceptualization

*<holding the development for long-term profit>* Holding the development for long-term profit was a private decision of the developer, for whom the Parkview Green was much created as a family asset. The project was initially planned as a residential project, situated harmoniously with its residential context. This plan was actually already approved by the planning authority. However, the developer changed the idea later when considering the precious location of the central city site. “It will be really a pity if we just build some residential units and sell them off”, especially as the developer’s family has been always hoping to own a property in Beijing or Singapore as “a family asset to keep for generations”[7]. The decision for a for-holding development is one first decision which significantly influenced the project and its quality. First, the uses were changed - the function

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7 Interview in AC(ArchiCreation) Magazin
of the developed has therefore changed from for-sale residential to for-rent commercial property; Second – the developer’s team can focus on qualities and long-term profits\(^8\) of the project. Leading to a particularly long development time (nearly 10 years) and more construction cost, and qualities that characterizing Parkview Green e.g. unique and delicate design, carefully selected artworks, technologies such as a microclimatic envelope, and a centralized operation which contributes to management and marketing (large-scale events) within the development etc.

- **supporting mechanism - size (financial capacity)**

The financial capacity of the private developer has fundamentally enabled holding the project. The family was capable enough and didn’t have any financial pressures at the time to cover the high financial demands resulted by holding the development.

**<different market roles for different use components>** One important act in conceptualizing the uses of Parkview Green was assigning different roles to different uses to maximize the synergy and the long-term profitability of the entire project.

As a great potential for office use has been identified by market analysis, office was therefore planned as the cornerstone use of Parkview Green, which ought to produce stable and major revenue for the development. While office use is planned as the cornerstone use, the role of the retail and hotel component was defined towards the synergic effect between uses rather than focusing on direct profits of their own.

The hotel has been positioned as a component that could quickly establish the reputation of the development. It was planned as a small-size and luxury boutique hotel that only contains 110 suites. As the developer explains: “I am not expecting to make much profits out of the hotel rooms, rather, it helps the project to growth its popularity in short time. As an already established brand, the Eclat hotel can quickly build up the image of Parkview Green with its own established reputation.”\(^9\)

The retail component - the mall of Parkview Green, was positioned to primarily serve the users of the office and hotel components and to create a people-attracting atmosphere for the whole development. Although being not far from the CBD, the site itself is situated within a residential area rather than a commercial district, which was considered disadvantageous for retail commercial uses. Besides, regarding the existing shopping centers in the near-by area and CBD, Shopping, especially retail use was considered not of good profitability. However, a retail component’s potential in supporting other components and contributing to the whole development was recognized by the developer. Rather than an independent profit-oriented component, the retail component (mall) was positioned as an amenity for the whole mixed-use project to take advantage of the synergy provided within the mixed-use environment. Following this idea, the retail component of Parkview Green was conceived with two major roles in the development: First, providing functional support for use activities of other components; Second, the developer also took advantage of the mall to create a lively and attractive atmosphere for the whole project.

The role of the retail components was achieved through two major strategies in terms of use: First, the mall was programmed to primarily serve the workers of the office components and hotel users, which lead to a considerable proportion of recreational programs of dining (F&B Services) and socializing (cinema, bookstore etc.) planned in the retail/entertainment component. Second, the developer also created unique experiences by combining art programs (will be discussed later).

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\(^8\) “We build to own it, not to sell it, so we want it to have the best quality of all” (Wong, interview in AC(ArchiCreation) Magazin)

\(^9\) Interview in AC(ArchiCreation) Magazin
F&B services were conceived as the key attraction of the mall. Especially, a middle-end food court was planned within the mall to attract a larger population for a lively atmosphere. While all the profit-oriented use components of Parkview Green target high-end consumers, the middle-end food court brings attraction not only for the white-collar office workers or hotel guests of Parkview Green, but also a wider range of external users, which helps to create a lively atmosphere within the MXD. Although having lots of restaurants actually considerably lowers down the average rent of the space, it matters little as the mall has greatly promoted the marketability of other components and the whole project. Eventually, although not generating considerable revenue by itself, the mall has greatly contributed to higher rent prices and revenue of the office space\textsuperscript{[10]} and even that of the hotel, and the overall image of the development. Meanwhile, the operator uses the revenues from office and hotel uses to nurture the retail/entertainment component, making it financially feasible and becoming even more attractive.

The less profit-oriented retail component in MXD potentially extends the range of users and the diversity of activities and uses within a space or project, and enhances the urban quality of urban spaces within the MXD.

- on urban space quality:
  - land use - diversity of users>

- supporting mechanism: 1) coherent system, 2) spatial and functional synergy

The large-scale MXD as a coherent system allows different roles of its components to achieve the overall development objective. Thanks to the synergy between different components within the MXD, different profitability (different role in revenue production) of different components within an MXD is allowed. These mechanisms create potentials for the existence of less profit-oriented and more inclusive components or spaces in a large MXD project (such as the food court for middle-end market), which eventually enhances the urban qualities of the MXD or its component.

Introducing the art museum

As the family has been experienced in art collection, the developer considered combining the project with art collection and exhibition a great advantage in making the project standing out among other projects of competitors; Besides the numerous artworks arranged all over Parkview Green, and a small gallery, an art museum - the Parkview Museum - was planned within Parkview Green. The art museum is a non-profit facility with free opening to the public, and primary functions e.g. contemporary art exhibition, education, and communication. The art museum is totally financed and operated by the project developer.

First, the art museum belongs to the strategies contributing to the integration of art within commercial spaces, which is primarily introduced to create the identity and marketability of the entire project. Second, it is also a result of maximizing the use of the developable area. The museum on the ninth floor (architectural) was not planned at the beginning, instead, there was only a platform under the sloping roof as the conceptual design was finished. Considering it as a waste of space, the developer suggested to make it an extra functional space. As the office of the developer is located on the 8th floor, no tenant spaces are wished on the floor above it. As a result, the additional space was determined to become an exhibition center – the Parkview Museum as the project was realized.

\textsuperscript{10} as is proved by statistic in the operation phase, the original rent of 220rmb/mon has been raised to 450rmb/month
• supporting mechanisms

1) uniqueness for marketability - the art museum contribute to the marketability of the project in terms of creating unique experiences through the combination of programs;
2) "man-made artifact" - the personal preference of the developer played a critical role in introducing the museum;
3) size (financial capability of the developer) - the financial capacity of the developer guaranteed the feasibility of the art museum.

Development of spatial concept
Before IDA – the project architect of Parkview Green - took over the case in 2000, several spatial concepts for the site have already been proposed by other architects. However, none of these concepts was satisfying enough for the Wong family. The major challenge was resulted by the conflict between the large developable floor area allowed on site and restriction on building height and shading required by urban planning of the district. The site allowed a great amount of developable floor area. However, when the full site is built up to its height limit, shading problems will emerge both between the buildings on site as well as between the project and adjacent residential areas. To prevent shading, the building mass must become gradually lower towards its north and west side, following an angle of 26 degrees (from north to south) to allow sunlight into ground-level apartments neighboring the project. This would lead to a 40% loss of the total development volume.

The eventual concept managed to achieve the maximal site potential (floor area) while accounting the site-attached planning restrictions. It is a direct response to prevent shading on the residential units to the north and west side, gaining sufficient natural light for internal masses, while pursuing maximal buildable floor area. First, the building volume was planned to cover almost the entire buildable site and to extend to the height limit on its south-east corner. The top of the volume follows the 26-degree angle required by the zoning ordinance to prevent shading, which shaped the volume into a pyramid form and enabled the maximal over ground floor areas. Second, three underground levels were planned as compensation for the floor area "cut off" by the statutory building height and daylight angle to reach the targeted GFA of 200000 sqm. To turn the conventionally low-value underground levels into a valuable estate, several actions were conducted: 1) Planning a spacious moat – a sunken garden (9m deep, 24m wide)- around the volume to enable sunlight and fresh air into the underground spaces while providing views of the landscape from inside. Following the client’s will to take full use of the buildable space, underground spaces between site and building control lines are also utilized for building techniques.

<retail/entertainment underground levels> The spacious underground levels were considered not suitable for office spaces. Therefore, retail/entertainment uses were arranged on these levels as more suitable uses – this was indeed the origin of the mall of Parkview Green. "... What we call a mere serendipity" (Wong). In the planning process, the ground and first floor have also been added to the retail/entertainment component, the space of Parkview Green Mall increased to 5 stories as the project was realized.

The site condition, together with the developer’s intention and planning activities of MXD in response to the site, eventually led to an enclosed and vertical composition of use components of Parkview Green. The five lower floors (from LG2 to L3) became a mall, standing on this are office space from L3-L12. Hotel spaces, including a club and convention room, were planned on the very top L13-L16 to take advantage of privacy, the city view and terraces under the sloping roof.

As the office was positioned as the corner-stone use of the development, creating successful office spaces was considered fundamental in the making of the Parkview Green. "We know quite well that the project needs a unique selling point upon its completion
to compete against other commercial developments for corporate tenants” (Xu, pp-85). Believing that the future trends of workplace will no longer be bound by rooms and glass curtain walls regarding the popular use of mobile information technology, the architects intended to create “a new type of office with enhanced value beyond the traditional workplace by introducing what they called “informal spaces” such as outdoor terraces and sky gardens that are supposed to be integrated into most of the upper office levels.” Such a unique working environment can be created through the interplay between indoor and exterior green spaces, gardens, and offices. Two critical actions were conducted in the spatial conceptualization to achieve the desired qualities and selling point of the office: 1) Planning an L-shaped central atrium and 2) Adoption of a micro-climatic envelope.

<shared atrium>
An L-shaped central atrium was planned to primarily introduce natural light into the office space for its functionality and marketability. First, natural light was necessary for quality office spaces. Second, natural light was also considered critical in establishing special qualities or “selling points” for the office component. The L-shaped void of 24m width guarantees a suitable depth of office units (12-15m distance from the window to core) while supporting the “informal green spaces” between the building volumes. Notably, the atrium was designed not only for the office levels but also extended till the B2 level - the lowest level of the retail component. As such, a shared atrium was created, which makes Parkview Green different from typical MXDs with a vertical composition, in which the mall atrium usually has little relationship with other use components e.g. office tower standing above. In the case of Parkview Green, the shared atrium allows visual connections between all components of office, hotel, and retail, while also bringing natural light to these components.

• supporting mechanism: spatial synergy creating shared atrium allows synergy between uses and urban quality resulted by visual connections e.g. natural light and view of green elements on the office terraces. The spatial proximity of spaces or components within an MXD environment allows a space to benefit the qualities of other spaces when visual connections is provided, and vice versa.

• supporting mechanism: size (in space)
The size of the MXD enables a desired spectacular spatial appearance of the atrium, which also contributes to the urban quality of the atrium in the aspect of discovery.

<microclimatic envelope> The transparent microclimatic envelope is another critical strategy to ensure the value and qualities of the office component featured by “informal spaces” (roofs, terraces, sky gardens...) especially in response to Beijing’s climate and environmental conditions. As a desired “selling point” for potential tenants, the informal spaces are desired to be “accessible and enjoyable by the users all year round”. A transparent microclimatic envelope was developed, which covers all the components of Parkview Green as well as the atrium to offer a comfortable microclimate within it. Rather than create an expensive, huge, totally enclosed and air-conditioned indoor space, the architects and engineers managed to develop a solution, which takes advantage of Beijing’s climatic characteristics and natural ventilation. The air inside the envelope is filtered to
remove the pollution, while natural ventilation based on solar-chimney effect keeps the
temperature in range and ensures a comfortable microclimate inside the project. The
microclimatic envelope functions as a technical solution that eventually enabled the idea
of “everything under one roof”. The atrium, together with the microclimatic envelope,
brings about 30000 sqm leasable “indoor” open spaces for the project, and profits from
cost-saving thanks to its energy-efficient design.
• contextual influence: climate and environment condition - the extreme climate and
suboptimal air condition have been a key reason leading to the (semi)enclosed spatial
structure of the MXD.
• supporting mechanism: spatial synergy - Although the atrium and microclimatic enve-
lope were created to primarily serve the qualities of office component, the spatial prox-
imity of components and spaces within an MXD environment allows such qualities to
influence and benefit other components and space within the MXD. Taking advantage of
this mechanism, strategies can be developed which allow urban spaces within an MXD to
take advantage of qualities of other components and spaces, and vice versa, which even-
tually contribute to both the MXD and urban spaces within it.
• supporting mechanism: size (financial capacity of the developer) - The financial capacity
of the developer enabled the development and implementation of new technologies e.g.
the microclimatic envelope within the development.

<diagonal axis and sky bridge> Besides the entrances on the sides of the building and a
major circulation around the central atrium, a through-site walking axis was introduced
by the architect along the northwest-southeast diagonal together with two additional
entrances on the northwest and southeast corner of the building volume. According to
the architect, this extra through-site walking axis is a response to the (future) develop-
ment plan of central city area. Accordingly, the CBD on the southeast side of the site
would be developed into a new business center, while an existing commercial center in
Chaoyangmen lies on its northwest. “We believe if we offer a walking axis in this direction
within our site, chances will be great that an urban space can be created, linking both the
existing and newly planned (emerged) commercial centers – for us an exciting prospect”
(Xu[11]). This walking axis was formed into a spectacular “indoor” sky bridge, which also
became a major focal point and venue of art exhibition within the project.

The effect of the axis in making the MXD/atrium more physically accessible proved to be
limited as the surrounding context does not offer a continuous pedestrian network. Rath-
er, the sky-bridge functions as a focal point and exhibition space.
• on urban space quality:
<discovery - unusual space>
<active engagement> as focal point

Image 6.32
Atrium of Parkview Green
Source: photo by author
1. atrium of mall B2
2. art museum L9
3. hotel L12 - L16
4. office L2 - L11
5. retail mall U2 - L2
6. retail B1 - B2
7. parking B2 - B3

Spatial concept of Parkview Green - Source: illustration by author
6.2.2.3. Implementation, operation, and use - the mall atrium
Role / core function of atrium
The atrium has been conceived with the following core functions in the MXD project:

**Role in marketing:** 1) enhancing the desired qualities of use component - introducing natural elements, people watching, or providing resting and other functions; 2) providing a selling point through unique feature e.g. unusual spatial appearance, functions, or activities/people; 3) supporting marketing activities as an event venue. **Intended users and use activities:** Unspecialized activities of the users of the retail component; other activities and a possibly broader range of users in case of events; **Role in the spatial configuration:** 1) positioned within use component; 2) as a unique spatial feature for the component or entire MXD project; **Management:** managed by the operator of use component to support the mall users and use activities, and marketing events.

**Introducing middle-end food court** As has been previously mentioned, the commercial planning in mall was oriented primarily towards the office worker within the project - functions providing possibilities of dining (F&B Services) and socializing (cinema, bookstore...) were introduced as major services and key attractions, which also attract external visitors and vitalizes the space. It was very difficult in the positioning of the mall at the beginning. “There need to be some key forces attracting people to our mall” (Wong). Introduction of middle-end food and dining: “Therefore, the essential question of our project’s positioning and strategic planning is how to attract customers... Our strategy is to make food and dining as the key attraction of our mall... which turns out to work quite well. Having lots of restaurants actually considerably lowers down the average rent of the space, but this is less important than the fact that they draw people here and make the space lively.” (Wong, in ArchiCreation). The economic food court and cinemas attract the residence from the nearby neighborhood while being welcomed also by the customers, tenants and workers of the project, extending liveliness into the late evening.

**Arranging art works within the space**
The developer team believed that the new experiences brought by the hybridization of commercial and art/cultural functions within one space could be key factor for the mall to attract visitors and build up the identity of the whole development. “... in commercial spaces people barely see artworks which are supposed to be exhibited only in professional art galleries... conventional art galleries, with their white walls and wooden floors, would not be able to bring about rich experienced which people want... by mixing stores and artworks together, we created a key factor for Parkview Green’s success” (Wong).

The Parkview Group has a long history in artwork business and intended, therefore, to develop the whole project into an artistic work. The developer planned a one-hundred-mil-
lion RMB (about 14 million Euro) budget for purchasing artworks inside the estate. This budget was however not counted as the construction cost of the project, but rather, in the artwork business of the group.

This strategy turned out to be very successful – the daily visitors of the art museum is more than 200, while this number reaches more than 400 on weekends and holidays. Besides attracting people, the artworks arranged all around and the art museum on the 10th floor is also an effective way of marketing by increasing the chance of sharing activities and communication - “Many people come here to take photos with these pretty artworks, which widely spreads our name” (Wong).

![Artworks distributed within Parkview Green, which promote the sharing activities of people](image)

Source: photo by author

### Distinctive Spatial Design Taking Advantage of Size
Creating a unique spatial atmosphere through functional hybridization and careful design as an attraction of the shopping center. Especially, the grandiose atrium defined by the pyramid-shaped sloping roof was considered as one distinctive spatial feature of the mall. The 69m high space is “rare in today’s shopping malls” and “one key competitiveness”, which makes the mall extremely suitable to bring about dramatic spatial experiences and activities.

* On urban space quality:
  - Discovery - unusual space
  - Engagement - active engagement

### Management/Maintenance Activities

#### Central Management and Maintenance
The early decision by the developer for creating a for-hold project enabled a central management structure - the developer takes full responsibility on the management the atrium and sunken garden surrounding the project, together with the maintenance of the entire project and its environmental system, which guarantees consistent high performance of these spaces. The central management of MXD guarantees a secured and maintained environment the whole development, as well as supporting joint promotions and events. As a part of the mall, the management of the atrium is largely influenced (limited) by the mall component in which it is situated to keep the order within the component. Management and maintenance activities involve access control, subjective rules, private policing and maintenance measures for a clean and maintained environment:

1. **Access Control**: the access of the atrium is restrained by the open time of the mall: form 10:00 - 22:00. The entrance gates are used as a major means of access control during non-operational hours. Although movies may be run in the cinema on the B2 level after the opening hours of the mall, entrance to other areas from the atrium is prohibited.

2. **Subjective Rules**: subjective rules have been set up by the operation team and posted at the main entrances of the mall, which regulates use activities of the atrium to keep a desired order within the mall. The forbidden activities include skating, pet walking, smoking, balloons, ball games, and vending activities without permission.

---

12 while the entrance for office components opens form 7:00 - 22:00
3) **<private policing>** private security personals are employed by the operation team to ensure a desired order in the atrium.

4) **<maintenance>** staffs have been employed to keep a clean and a maintained environment in the whole development including the atrium of the mall.

The management and maintenance activities guarantee a secure and clean environment, while also creating barriers for accessibility and restraining the capacity of the urban space through limited open time.

- on urban space quality:
  - <comfort - clean and maintained environment>
  - <comfort - protection from crime>
- negative influences:
  - <managerial barrier - access control>
  - <managerial barrier - behavioral control>
  - <managerial barrier - policing>
  - <capacity - open time>

**Marketing activities**

As atrium of the mall is created as a unique feature of Parkview Green as well as a major venue for event marketing activities, it is much involved in the marketing process of Parkview Green. Marketing activities include:

1) **<advertising through mass media>** the atrium is much communicated and advertised through mass media e.g. major websites, newspapers, and magazines;

2) **<organizing various events in the atrium>:** Events organized in Parkview Green are characterized by high diversity and frequency. They take place at a pace of about 2-3 times per month, with yearly organized large-scale events. Activities organized in the atrium are diverse, including promotional events by developer or tenants, public relationship events and public events organized in cooperation with public sectors or organizations. All these activities are perfectly supported by the atrium thanks to the central management of the mall, the grand size, amenities and visibility of the atrium for all the components. Promotional and public relation events e.g. flashmob, festival celebration etc. are frequently organized.

**<city-scale public events>:** introducing public activities and users

The atrium is also utilized to hold public events through cooperation between the mall’s operator and public sectors. An example is the exhibition of Beijing design week. Beijing Design Week is an annual international cultural event co-organized by Beijing City government, Ministry of Science and Technology and Ministry of Culture and Tourism of PRC. The purpose of Beijing Design Week is to raise public design awareness as well as to help
develop stronger design infrastructure and discourse in Beijing. The large-scale event consists of multiple sections e.g. opening and award ceremonies, forums, design fairs, and exhibitions in more than 150 places all over the city. In 2015, the atrium of Parkview Green Mall acted as one of the venues of Beijing Design Week, which held a series of events and exhibitions.

Events generally contribute to the quality of discovery inside the atrium through introducing unusual spatial appearance, activities and people to the space. Spectacular spatial elements or activities also increase the chance for active engagement. Especially, public relationship events and public events can bring about use activities for general public and increase the diversity of use activities and users within the space.

- on urban space quality:
  <discovery - unusual space>
  <discovery - unusual activities>
  <discovery - different people>
  <active engagement>
  <land use - diversity of uses> in case of public event, public relationship events
  <land use - diversity of users> in case of public event
  <land use - magnet land use> in case of public event

- supporting mechanism: possible mutual benefit in cooperation with public sectors in organizing events - For the public sector as the initiator of Beijing Design Week, the atrium of Parkview Green provides an ideal venue for exhibitions, ceremonies, and people gatherings. Besides, the event organizer can take advantage of the development’s location and popularity of the MXD and the mall to gain more exposure and visitors. At the same time, Parkview Green and its mall can also gain popularity and attracts more people and potential customer through association with the large-scale public event. First, the MXD and the atrium are communicated by the event organizer and related media as the venue of the event; second, the event is able to bring new spatial appearances, spectacular visual elements, different people or interesting activities to the mall, which enhances the attraction of the development. Especially, events oriented for public audience have the potential for attracting a wider range of population, which also helps to create a good public image for the development.

3) **Smartphone application** A smartphone application was developed, which embeds functions e.g. providing informational services for brands, dining places, sales, movies, car-parking, children, events, booking and even navigation for artworks inside the devel-
While promoting the customers’ experiences of the development, the smartphone application also provides an alternative platform through which the atrium is communicated to a wider range of people.

- on urban space quality:

6.2.2.4. Implementation, operation, and use - the museum

Role of the museum (type II urban space) in the MXD:
The museum has been conceived with the following role or core functions in the MXD project: Role in marketing: It provides a selling point as a unique feature for the large-scale MXD project. The uniqueness is achieved through unusual use combination e.g. combining shopping with art exhibitions. It is the unconventional combination of functions, the space, activities and experiences, rather than the profitability of the introduced use itself, that contributes to the marketability of the project. Intended users and use activities: It has been conceived to primarily support activities of art exhibition and used by the general public. Role in spatial configuration: The museum is positioned within the retail component, which also attracting people to go into the component on the way visiting the museum. Management: the management should support public users of the space. However, the positioning of it within the mall component as led to access control by the mall. Financing: The museum does not produce substantial revenue and can bring therefore extra financing burden to the development - the developer’s financing support from the public sector or other sources can be necessary.

The detailed programming, design, management and marketing activities serve the museum’s role and core function. Key activities in the stages of implementation, operation, and use include 1)a multi-purpose common space as a compact solution; 2) management activities; and 3) marketing activities.

Multi-purpose common space:
programming - <multi-purpose space> Besides the necessary reception space and galleries, a multi-purpose area was introduced to the Parkview Museum. The multi-use space links the two galleries and is conceived with a flexible use program. Use programs supported by the multi-use space include exhibition, cafe (the Roof Cafe), and events such as speeches and forums (the Speaker’s Corner) etc. The various programs enabled by the multi-purpose space enhanced the attraction of the museum and that of the whole development.

Design - <arranging the common space for spectacular scene and natural element>
Taking advantage of its position within a large-scale MXD, the multi-purpose space was positioned to enable a spectacular view to enhance the uniqueness of the museum and the whole MXD project. Besides, taking advantage of the natural light, vegetation and green elements have been arranged within the space.
The multi-purpose space contributes to a series of urban qualities of the museum. First, it enhances the attraction of the museum in terms of land use by expanding the types of activities supported within it. Second, it provides the attraction of discovery by providing spectacular views and supporting changing activities and spatial scenes, while the view and exhibits also promote the chances of passive and active engagement. Third, the multi-purpose space also contributes to the comfort within the museum through embedding green elements and natural light, and seating possibilities and F&B services when the cafe is open. It is therefore also a compact solution.

• on urban space quality:
  <land use - type of uses>
  <discovery - unusual activities>
  <discovery - unusual people>
  <engagement - passive engagement>
  <engagement - active engagement> exhibits as focal points
  <comfort - amenities e.g. F&B services, toilets>
  <comfort - natural elements e.g. green elements, water, natural light etc.

• supporting mechanism - spatial synergy
  The mechanism of spatial synergy has contributed to achieving some urban qualities in this process. First, the design activities provide proper visual connection, which allows the museum to gain attraction and urban qualities from the other part of the MXD project. Second, the provision of green and natural light also takes advantage of the positioning of the museum within the MXD. The spatial and synergy allows a space to gain urban qualities through its positioning within a large-scale MXD project.

Management activities
1) <presence of access control> the open time of the museum is from 11:00 to 19:00 daily - that is after the mall is opened and before the mall is closed.
2) <minimized behavioral control> to support public use of the museum, no subjective rules are present in the museum, only necessary rules for viewing the exhibition.
3) <soft policing> Supporting public use of the museum, the security measures are conducted by museum staffs, which reduces the managerial barrier (presence of policing) of the museum as urban space.
Supporting the intended use of the museum for public users, the behavioral control and policing have been minimized: However, the museum’s positioning within the mall limits its access.

- on urban space quality:
  <managerial barrier - access control> - negative influence
  <managerial barrier - behavioral control>

Marketing and public relation activities

1) <advertising through mass media> As a unique feature of the development, the museum is much communicated for establishing the identity of Parkview Green.

2) <art exhibition> Art exhibitions - including permanent and temporary exhibitions - are held at a frequency of several times per year.

3) <organizing events> Well supported by the multi-functional common space, various other events including lectures, concerts, forums have been held. Educational events in cooperation with schools and education organizations; live artist studio etc.. Especially, educational programs are included in the operation of the museum, which further extends the type of uses and range of users of the museum.

4) <creating smartphone application for information services> The Parkview Green smartphone application also broadcasts information about the art museum, including exhibition and special events.

- on urban space quality:
  <communication - advertising through mass media>
  <communication - broadcasting through third party service platform>
  <communication - broadcasting through social media>
  <land use - diversity of users>
  <discovery - unusual space>
  <discovery - unusual activities>
  <discovery - unusual people>
Atrium and food court of Parkview Green
Source: photo by author

Atrium of mall of Parkview Green
Source: photo by author
Image 6.45c
Atrium of Parkview Green
Source: photo by author
6.2.3. Summary - Parkview Green

6.2.3.1. Potentials in achieving urban space and qualities

1) “Shared qualities”

**MXD - Urban qualities generally needed for MXD project**
- secured and maintained pedestrian environment
- dense, multi-use environment

**Type I urban space - atrium of the mall:**

Urban qualities attached to Type I. Urban Space:

The case of Parkview Green reflects following aspects of urban qualities, which are needed for, or attached to the atrium as common space within use component (type I urban space) to achieve its role and core function in the entire MXD project:

**Comfort:**

the atrium as common space within the mall was conceived with the primary functions of bringing natural light to the mall and offering a comfortable space for non-specific activities such as resting or events. Qualities of comfort in terms of natural light and protection from bad weather are therefore necessary.

<comfort – protection from bad weather>
<comfort – natural elements> e.g. natural light, green etc.

**Discovery:**

The atrium of the mall plays a critical role in achieving the uniqueness of the mall to attract people to the development and create a lively atmosphere. Uniqueness is desired as a key quality for achieving such attractions. The unusual spatial appearance, function program (combination of shopping and art exhibition), or activities/people (through various events) lead to the quality of discovery of the atrium as urban space. The space also necessitates quality of flexibility for holding different marketing events.

<discovery – unusual space>
<discovery – unusual activities>
<discovery - flexibility>

**Engagement:**

The spectacular spatial elements or activities, which are introduced to achieve uniqueness of the mall, also provide focal points which promote active engagement within the atrium.

<active engagement>

**Management:**

The positioning of the atrium within the mall restricts its urban qualities in terms of management. Access and behavioral control and policing are largely influenced by that of the component where the space is situated.

<management- access control> presence of access control
<management- behavior control> presence of behavior control
<management - policing> presence of policing

**Communication:**

As a unique selling point of the mall as well as a venue for marketing activities, the space is much involved in the marketing activities and communicated in various ways.

<communicational barrier – advertising through mass media>
<communicational barrier – broadcasting through service platform>

**Possible qualities via event:**

As common space within the mall component, atrium’s role as an event venue of the project also indicates potential urban qualities in many other aspects beyond the above-listed...
qualities desired and attached to common space within use components. Events can temporarily create different settings of the spatial, functional, managerial, operational and communicational conditions of the space, and possibly result in changes of urban qualities in almost all aspects. As has been particularly demonstrated in the case of Parkview Green, events in cooperation with public sector such as Beijing Design Week have enhanced the urban quality of the atrium in terms of land use through expanding the range of users and activities; events have also extended the open hours of the space, which contributes to urban qualities of capacity and (reducing) managerial barrier.

**Type II urban space - museum:**
The case of Parkview Green reflects following aspects of urban qualities, which are needed for, or attached to the museum as public / civic use component (type II urban space) to achieve its role and core function in the entire MXD project:

**Discovery:**
The art museum is introduced as a unique feature of the MXD which helps to make the project different from others and enhances it marketability. The combination generates quality of discovery through unusual activities, while unusual spaces tend to be created taking advantage of the special situation within an MXD project.

\[
<\text{discovery} \text{— unusual space}>
\]
\[
<\text{discovery} \text{— unusual activities}>
\]
\[
<\text{discovery} \text{— different people}>
\]

**Engagement:**
Unusual activities and spatial situations or elements (e.g. artworks) provide focal points for active engagement.

\[
<\text{active engagement}>
\]

**Communication:**
As the museum has been introduced as a unique feature of the development, it is well communicated in the marketing process of the development.

\[
<\text{communicational barrier} \text{— advertising through mass media}>
\]
\[
<\text{communicational barrier} \text{— broadcasting through social media}>
\]
\[
<\text{communicational barrier} \text{— broadcasting through service platforms}>
\]

**Land use:**
The intended use for the public promotes the attraction of the museum as urban space in the aspect of land use through increasing the diversity of use activities and users.

\[
<\text{land use} \text{— diversity of land use - types of uses}>
\]
\[
<\text{land use} \text{— diversity of land use - users}>
\]

**Symbolic barrier:**
The intended public use of the museum minimizes the symbolic barrier for people to enter it.

\[
<\text{symbolic barrier} \text{— degree of symbolic implication}>
\]

**Management:**
To support the intended public use activities, behavioral control and policing are minimized. However, access control is present due to its situation within the mall.

\[
<\text{management} \text{— behavior control}>
\]
\[
<\text{management} \text{— policing}>
\]
\[
<\text{negative influence} \text{— management} \text{— access control}>
\]

- when the public/civic use component is situated within other component(s)
2) “Supporting mechanism”

Supporting mechanisms related to the nature of MXD:

• spatial and functional synergy (synergy through proximity of spaces and activities)
When physical and/or visual connections are available, the activities or spatial features of one space may contribute to the desired functionality and/or visual quality of the other, and vice versa. For instance, as is demonstrated in this case, arranging F&B services adjacent to the atrium (urban space) enhances both the qualities of the urban space and the functionality and marketability of the F&B tenants. Also, the creation of a shared atrium allows the users of office floors to gain a lively view of the atrium while promoting the urban quality of the atrium through bringing natural light and view of green (sky garden) to it.

• coherent and adjustable system
The large-scale MXD as a coherent system, together with the existence of the mechanism of functional and spatial synergy, have enabled different roles of different use components in a large-scale MXD development, and the potential of introducing less profitable uses, such as the less profit-oriented retail mall and middle-end food court in Parkview Green, or public / civic use components. This contributes to the urban quality by increasing the range of users and use activities inside the project.

• size (in space and capital scale)
The unconventional size of the large-scale MXD supports the provision of qualities of discovery (unusual space, spatial flexibility) and capacity of potential urban spaces within it.

• possible active role of the public sector, possible mutual benefit through organizing public events
The case of Parkview Green also demonstrates a mutual beneficial relationship between public sectors - especially city government and operator of MXD - in organizing events (e.g. Beijing Design Week). As has been shown in the case study, the cooperation benefits both the owners of the MXD and the public sector, while promoting urban qualities inside the space through introducing public/civic use activities and more inclusive and attractive spatial characteristics.

• man-made artifact
Particularly, the case of Parkview Green reflects a possible strong influence of the developer’s personal preference in introducing urban space and qualities. Developer’s personal intentions and financial capacity have been the key reason in introducing the urban spaces and urban qualities to Parkview Green, which include the art museum and art-exhibition functions within the development. This mechanism suggests the possibility of promoting urban space making within large-scale MXDs by changing the idea of their makers.

3) “Techniques”

conceptualization:
• introducing non-profit oriented components into MXD
• introducing public/civic use component into MXD

implementation:
• atrium - holding public event in cooperation with public sectors
Public events can bring new experience through combination with public-oriented activities, while contributing to diverse user groups within the space.

• art museum - introducing multi-functional space
For a type II urban space, introducing a multi-functional space can be a compact solution to bring alternative activities and urban qualities to the type II urban space.
6.2.3.2. Quality of urban space - result of assessment

1) The mall atrium
As a result of the process of the large-scale MXD of Parkview Green, the mall atrium (type I urban space) demonstrates the following characteristics regarding its urban quality (see the following table):

**Capacity:** while the size of the MXD allows a large size of the atrium, the open hour of the atrium is restrained by that of the mall component;

**Accessibility:**
- high attraction in the aspect of comfort: the indoor space provides high comfort degree;
- high attraction in the aspect of engagement: embedding rich visual connection and staying possibilities within it, the atrium provides a high attraction for passive engagement e.g. people watching, while the spectacular spatial elements (e.g. the sky bridge), artworks and organized events provide focal points for active engagement;
- high attraction in the aspect of discovery thanks to the distinctive spatial appearance (contributed by artworks) and changing scenes and activities;
- the involvement of the public art museum has contributed to the attraction of the space in terms of land use;
- certain physical and managerial barrier: as the space is located within the mall component, its physical connection and management is constrained by the conditions of the mall component;
- low communicational barrier: as a major selling point and place of various events, the plaza is communicated through various ways ranging from mass media to social network, involving both public/governmental and private media;

**Catalyst:** high quality of catalyst as a result of comfort and active engagement.

2) The art museum
As a result of the process of the large-scale MXD of Parkview Green, the art museum (type II urban space) demonstrates the following characteristics regarding its urban quality (see the following table):

**Capacity:** the size and open time of the museum is restrained by its positioning within the mall;

**Accessibility:**
- high attraction in the aspect of land use contributed by its intended public use and the various exhibitions and activities supported by its multi-functional space;
- high attraction in aspects of comfort as an indoor space;
- high attraction in aspects of engagement: the positioning of the museum in the large-scale MXD provides an attraction for people watching, while artworks promote the active engagement within the space;
- low communicational barrier: as a major selling point and events venue, the plaza is communicated through various ways;
- low symbolic barrier as the museum claims its intention for public use through obvious visual signs;
- low managerial barrier to support intended public use;
- certain physical barrier due to its positioning within the mall, which prevents the direct connection from the pedestrian network around the site.

**Capacity:** high quality of catalyst as a result of comfort and active engagement.
<table>
<thead>
<tr>
<th>aspect</th>
<th>sub-aspect</th>
<th>assessment / indicator</th>
<th>Type I</th>
<th>criteria</th>
<th>value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPACITY</td>
<td>open time</td>
<td>number of daily open hours</td>
<td>12 hours / day</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>size of space</td>
<td>area of space</td>
<td>7500 sqm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCESSIBILITY</td>
<td>diversity of land use: types of uses</td>
<td>types of land use within 5-min walking distance from urban space (residential, office, commercial)</td>
<td>0</td>
<td>mono functional land use</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2 types of land uses</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2</td>
<td>3 or more types of land uses</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>diversity of land use: users</td>
<td>types of user groups within 5-min walking distance from urban space</td>
<td>0</td>
<td>adjacent uses for homogeneous high-income social group</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>adjacent uses generally for high-income groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>adjacent uses support multiple social groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>density of surrounding uses</td>
<td>dominant building pattern of surrounding urban environment</td>
<td>0</td>
<td>low-rise pattern (1-6 storey)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>middle-rise pattern (7-10 storey)</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>2</td>
<td>high-rise pattern (&gt;100m or more than 10-storey)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>magnet land uses</td>
<td>number of magnet land uses e.g. public use or services around or within urban space</td>
<td>0</td>
<td>non-public service/amenities available</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>at least one or temporary public amenity/use available within/near space</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>two or more types of public use/amenities provided within/near space</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>protection against motorized traffic</td>
<td>degree of pedestrianization</td>
<td>0</td>
<td>space is overlaid by motorized traffic / not suitable for pedestrian traffic</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>space is occasionally motorized</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>space is completely pedestrianized</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>protection against crime - security</td>
<td>availability of security measures e.g. security personals, CCTV, self-policing layout etc.</td>
<td>0</td>
<td>not exist</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>single type of lighting at night</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2</td>
<td>multiple types and sufficient lighting at night</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>protection - night-time lighting</td>
<td>availability of night-time lighting</td>
<td>0</td>
<td>no night-time lighting available</td>
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<tr>
<td></td>
<td></td>
<td>1</td>
<td>natural light and some natural elements available</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2</td>
<td>large amount of natural elements</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>protection against bad weather</td>
<td>degree of shelter within the space</td>
<td>0</td>
<td>non or very limited shelter (providing shading)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>some sun/shade, overhangs/shielding (canopied) from wind and rain</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2</td>
<td>space is indoor and not influenced by weather</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>relaxation - natural element</td>
<td>availability / amount of natural elements in or around space (natural light, green, water etc.)</td>
<td>0</td>
<td>non - very limited natural elements</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>natural light and some natural elements available</td>
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<tr>
<td></td>
<td></td>
<td>2</td>
<td>large amount of natural elements</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>relaxation - clean and maintained environment</td>
<td>degree of maintenance of urban space</td>
<td>0</td>
<td>not maintained</td>
<td>2</td>
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<tr>
<td></td>
<td></td>
<td>1</td>
<td>partly maintained</td>
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<td></td>
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<td></td>
<td></td>
<td>2</td>
<td>well maintained</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>relaxation - human-scale interface</td>
<td>availability /amount of human-scale interface within urban space</td>
<td>0</td>
<td>non-human-scale/overscaled</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>partly human-scale interface</td>
<td></td>
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<td></td>
<td></td>
<td>2</td>
<td>human scale interface</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>relaxation - staying possibilities</td>
<td>available / amount of elements for seating, leaning or lying down</td>
<td>0</td>
<td>no seating</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>only one type of stationary seating</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2</td>
<td>two or more types of seating or substantial moveable seating</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>relaxation - air-control and optimization</td>
<td>availability of air-control (micro-climate) and optimization facilities/mechanism</td>
<td>0</td>
<td>not available in the space</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>space partly employs techniques to improve or enrich the air quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>full space employs techniques to improve or enrich the air quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>amenities/services e.g. food, drink, toilets</td>
<td>availability / amount of amenities/services e.g. food, drink, toilets provided within or around urban space</td>
<td>0</td>
<td>non available</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>food and drink available, customers-only or paid restrooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>food and drink available, free restrooms available in vicinity (400m)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>passive engagement</td>
<td>availability of supportive spatial layout between staying space and view / focal points</td>
<td>0</td>
<td>spatial layout does not support passive engagement</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>(spatial layout of) minor part supports passive engagement</td>
<td></td>
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<td>(spatial layout of) major part supports passive engagement</td>
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<td></td>
<td>active engagement</td>
<td>existence of special element/ visual focus / special activities within space</td>
<td>0</td>
<td>none present</td>
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<td>1</td>
<td>one or two minor installations, statues or fountains</td>
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<td>2</td>
<td>major interactive installations; free performances/activities</td>
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<td></td>
<td>discovery unusual space</td>
<td>degree of contrast of apperance with surrounding context or distinctive from similar categories</td>
<td>0</td>
<td>non or unobvious contrast</td>
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<td>obvious contrast and distinctive</td>
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<td></td>
<td>discovery unusual space - flexibility</td>
<td>availability of change mechanism e.g. flexible, adjustable design within space</td>
<td>0</td>
<td>not available</td>
<td>2</td>
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<td>available</td>
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<td></td>
<td>discovery unusual activities</td>
<td>availability / amount of animation programs within space</td>
<td>0</td>
<td>non present or selten</td>
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<td>1</td>
<td>monthly or several times a year</td>
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<td></td>
<td>discovery different people</td>
<td>existence of amenities for different social groups to display themselves</td>
<td>0</td>
<td>none present</td>
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<td>temporary: available through culture-oriented programs</td>
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<td>2</td>
<td>(part of) space permanently caters to alternative uses or user groups (subcultures)</td>
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<td>connectivity to mass transportation network</td>
<td>distance between urban space and nearest metro station</td>
<td>0</td>
<td>mass transportation is directly connected to the space, or near transit station</td>
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<td></td>
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<td>1</td>
<td>mass transportation station less than 450m away, yet not directly connected</td>
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<table>
<thead>
<tr>
<th>Parkview Green</th>
<th>2 - art museum</th>
<th>Type II</th>
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<tbody>
<tr>
<td>aspect</td>
<td>sub-aspect</td>
<td>assessment / indicator</td>
</tr>
<tr>
<td>CAPACITY</td>
<td></td>
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<tr>
<td>open time</td>
<td>number of daily open hours</td>
<td>10 hours / day</td>
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<tr>
<td>size of space</td>
<td>area of space</td>
<td>4000 sqm</td>
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<tr>
<td>ACCESSIBILITY</td>
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<tr>
<td>AU land use</td>
<td>diversity of land use: types of uses</td>
<td>types of land use within 5-min walking distance from urban space (residential, office, commercial)</td>
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<td>diversity of land use: users</td>
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<td></td>
<td>density of surrounding uses</td>
<td>dominant building pattern of surrounding urban environment</td>
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<td></td>
<td>magnet land uses</td>
<td>number of magnet land uses e.g. public use or services around or within urban space</td>
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<tr>
<td>AC comfort</td>
<td>protection against motorized traffic</td>
<td>degree of pedestrianization</td>
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<tr>
<td>(protection &amp;</td>
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<td>1</td>
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<tr>
<td>relaxation)</td>
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<td></td>
<td>protection against crime - security</td>
<td>availability of security measures e.g. security personals, CCTV, self-policing layout etc.</td>
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<td>protection - night-time lighting</td>
<td>availability of night-time lighting</td>
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<td>protection against bad weather</td>
<td>degree of shelter within the space</td>
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<td></td>
<td>relaxation - natural element</td>
<td>availability / amount of natural elements in or around space (natural light, green, water etc.)</td>
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<td></td>
<td>relaxation - clean and maintained environment</td>
<td>degree of maintenance of urban space</td>
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<td>relaxation - human-scale interface</td>
<td>availability / amount of human-scale interface within urban space</td>
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<td>relaxation - staying possibilities</td>
<td>available / amount of elements for seating, leaning or lying down</td>
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<td>relaxation - air-control and optimization</td>
<td>availability of air-control (micro-climate) and optimization facilities/ mechanism</td>
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<td></td>
<td>amenities/services e.g. food, drink, toilets</td>
<td>availability / amount of amenities/services e.g. food, drink, toilets provided within or around urban</td>
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<td>(AE) engagement- (passive &amp; active)</td>
<td>passive engagement</td>
<td>availability of supportive spatial layout between staying space and view / focal points</td>
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<td>(AD) discovery</td>
<td>discovery unusual space</td>
<td>degree of contrast of appearance with surrounding context or distinctive from similar categories</td>
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<td>and display</td>
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<td>discovery unusual space - flexibility</td>
<td>availability of change mechanism e.g. flexible, adjustable design within space</td>
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<td>discovery unusual activities</td>
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<td>existence of amenities for different social groups to display themselves</td>
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<td>connectivity to mass transportation network</td>
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</table>
| BP physical barrier | connectivity to local pedestrian network around site | number of access point / directions of urban space with surrounding pedestrian network | -2 mass transportation station is more than 450m (5min walk away) *
| BM managerial barrier | restrictions on spatial boundary | degree of height-level difference on the boundary of urban space | -1 major connection in one cardinal direction (one major access point) *
| BS symbolic barrier | visual restrictions | degree of visibility / existence of visual signs and guidance | -2 height level difference at least 2 stories
| BC communicational barrier | behavioral control | presence / amount of subjective rule and laws regulating users’ behavior inside the space | 0 non present
| | access control | degree / presence of access control | -1 one rule visibly posted
| | policing personals | degree of presence of security personals | -2 two or more rules visibly posted
| | symbols and image | types of indicated user groups by symbols / signs of urban space | -1 one rule visibly posted
| | advertising through mass media | availability of reports and advertising through mass media | -2 two or more rules visibly posted
| | broadcasting through social media | availability internet infrastructure, spatial design, activities (recording and sharing activities through self-media) | -1 present in certain time period
| | broadcasting through third-party platforms | availability of third-party service-platforms e.g. e-maps, smart phone app, Wechat etc. | -2 existence of entrance fee, permanent access control system
| CATALYST | duration of stay: comfort | total score comfort | 1,9
| possibilities for interaction: active engagement | total score active engagement | 2

| Parkview Green - art museum | Type II | comfort | 1,9 |
| physical barrier | 0 |
| managerial barrier | 0,7 |
| symbolic barrier | 1,3 |
| communicational barrier | 0 |
| open time: 10 hours/ day |
| size: 4000 sqm |

Table 6.4 Urban qualities of the Museum of Parkview Green - assessment result
Source: author
6.3. Case study 3: Indigo 

6.3.1. Introduction

Basic information
Indigo is a retail-led mixed-use project with a total gross floor area (GFA) of 176000 m² and site area of ca. 59000 m². It is located in Jiuxianqiao area, one of the ten peri-urban districts of Beijing to the north-east of the central city area between the 4th and 5th ring road in the northwest of Beijing city, with ca. 10 km linear distance from the city center. The project was developed by a joint venture of two leading property developers- Swire Properties from Hongkong and Sino-Ocean land from Beijing, master-planned and designed by the international design company Benoy. Developed between 2007 and 2012, the whole project is composed of a retail / entertainment podium (with 87000m² GFA), an attached 369-room-hotel tower (25 storied - EAST Beijing), and ONE INDIGO, a 58,000m² international Grade-A Office Tower a free-standing office tower, together with a small park lying in the east of the site, next to a 17-ha planned regional park.

Urban space of investigation
1. “Winter Garden” (Type I urban space - Common space within use component)
Indigo is highlighted by a “winter garden”- a large-scale multi-functional space located on the east side of the shopping center. This space - a 2400 sqm indoor plaza with 33m height, covered by a sweeping-glass rooftop, becomes the spatial highlight and activity center inside the entire development.

2. The Park (Type II urban space - Public/civic use component)
A small park is on the east side of the site with diverse facilities for children and adult recreation. Although exclusively established and maintained by the private property owner, the park is free for the public and full-time open. It is frequently used and enjoyed by the regional urban users.
6.3.2. Making and shaping: Indigo

6.3.2.1. Context of development and initation

Context of development

• Historical development

The peri-urban area of Jiuxianqiao is historically an industrial zone located to the northeast of the city center, the area is characterized by a mosaic urban pattern including old workers’ dwelling in the 1960s, informal rural settlement, and residential communities developed since the 1990s.

• Regional urban planning

According to the regional urban planning, the site parcel was planned as the south end of a stripe of commercial use parcels along the major Jiuxianqiao Road. The site would be surrounded by majorly residential areas on its west and south side, and electric industrial zone on the northeast. Notably, a 17-ha regional park (“Jiuxianqiao Park”) was planned on the east side of the site, replacing the existing low rise settlements of rural and floating populations. The adjacency of the project to the park became one of the key factors shaping the development of Indigo.

• Property market

The area is characterized by a high-end market potential for commercial uses due to the imbalance functional development.

Framework development condition

• Development entity:

Indigo was jointly developed by a local and a global private developer. The development entity of indigo is a marriage of private local and global property development enterprise – Sino Ocean land and Swire Property. Back in the year 2005, Sino-ocean Land, a local Chinese private real-estate company that was expanding in Beijing, acquired a parcel of land from the peripheral Jiangtai county. Seeing the potential in the background of Beijing’s urban development, the company decided for developing multi-use commercial project. However, the local enterprise was lack of experience on the complicated processes of development and operation as well as the huge capital needed. At the same time, the global developer Swire Properties was looking for project resources in mainland Chinese cities and partners with local experiences and connections. The cooperation was quite natural as the executives occasionally met each other. In 2008, a joint venture was founded as the development entity for the new project, with each partner holding 50 percent of its stake. The whole investment totaled 4 Billion RMB. While Sino-ocean land was mainly in charge of the construction, Swire property was in charge of the operation. As private developers, the key objective is the commercial profit through the development.

• Site:

1) Surrounding context: At the beginning of the project, the site had a very weak connection with other parts of the city due to insufficient streets and absence of mass transportation. The development was finally determined with the city’s promise of further
transport infrastructures: 1) a planned No.14 metro line that directly goes and stops by the west of the site. 2) Second, a terminal for high-speed railway would be built 3 kilometers away from the site; and 3) third, a new street would be constructed which provides a connection between the site and the busy 4th ring road of Beijing. Pedestrian environment/open space: The site is surrounded by a mixed and fragmented urban pattern, where a continuous pedestrian system is absent. Notably, the site is adjacent to a planned regional park, which has become an important shaping factor for Indigo. Land use: the site is surrounded primarily by residential use and complex composition. The electric industrial zone is located to its north. It is surrounded by residential areas on the west and east site – former Xiaoqu (built in 1960-1970s) as workers’ housing of industrial zones, high-end gated residential communities on the southwest across the river, newly built in the late 1990’s market-housing trend. To its east and west stood dense low-rise informal settlements of rural and floating population.

2) Site condition: The generous quasi-rectangular site totals 5.9-ha,

3) Site attached regulations: the site is planned with commercial function, allowing 80m building height. No extra objectives have been claimed in the regulatory plan.

4) Market potential: the site indicated the potential for retail, office, and hotel uses.

Image 6.51
Indigo - framework development condition
Source: illustration by author
6.3.2.2. Conceptualization

Use concept
Following the market analysis, retail/entertainment, office and hotel were planned as primary uses of the development. Targeting middle-high end customers from both local middle-class residents and international travelers, the development of Indigo was positioned as “a business and leisure center of Beijing”.

Retail: Retail has been planned as the cornerstone use of Indigo. With a volume of 87,000 sqm, it takes up more than half of the total floor area of the development. Targeted for emergent middle-class young families, the use concept of the mall (170 shops) comprises fashion (fashion stores 28%), F&B services (26%, including various restaurants and a food court for office workers), children, and lifestyle/recreation (11% - supermarket, 7-hall cinema).

Office: With international Grade A and LEED certification, the office use of Indigo totals 58,000 sqm and aims for up-scale office tenants.

Hotel: With 369 rooms and 33,000 sqm floor area, the Hotel EAST Beijing is positioned as a boutique business hotel aiming for business travelers and tourists. The operator of the hotel has been determined at the early stage of the development.

Spatial concept
According to Benoy architects, the master plan concept was a response to the surrounding urban settings: the west side of the site is characterized by urban landscapes while the east side was to be transformed to a local green park according to the regional plan. “Benoy’s design concept for Indigo aimed to connect these two sides of the city, using simple geometries to manage a smooth transition and facilitate the interaction between the commercial areas and local green settings.”

Overall spatial composition
The large-scale of the site, the main street and complex and fragmented patterns to the west, and the planned park to the east of the site have been the main contextual factors which have influenced the overall spatial concept of Indigo. First, the generous peri-urban site allowed horizontal spatial layout, in which different components stand next to each other. Second, the fragmented urban patterns and pedestrian system on the west was considered an unattractive context, while the planned park was seen as an advantageous contextual factor that could add value to the development. Therefore, the massing and positioning of the use components of Indigo follow a horizontal spatial layout, enclosed structure and orientation towards the planned park:

Office component: The office component took the form of a free-standing 25-storied tower with ca. 100m height. It was positioned on the south-west of the site, closest to the main street (Jiuxianqiao Rd.), taking advantage of the tall volume to establish the development’s visual identity and visibility from the main street. This configuration also allows convenient entrances near the main street and future metro station for office workers.

Hotel component: The hotel use took the form of a 25 storied tower and was placed in the southeast of the site, adjacent to the future park in order to take advantage of the view of the landscape while allowing a private entrance separated from the main road. The hotel tower adopted a curved plan shape that maximized view over the park from its hotel rooms. However, the south part of the site is deliberately separated for vehicle roads so that “visitors to EAST Hotel enjoy their own private drop off entrance”.

Image 6.52 Spatial concept - massing
Source: Indigo
Retail/Entertainment: The cornerstone use, the retail/entertainment component was formed as an enclosed “big box” volume, shaped as flat as possible to minimize its floor number to make its shops most accessible. “An early decision, made with the client, was to utilize the generous site plot to minimize the numbers of floors to only four above ground, and one trading basement level. A below ground customer drop-off and B2/B3 parking plus a future metro connection will feed shoppers to the basement level. “ Regarding the market synergy between the retail component for both the office and hotel components, the retail component was also designed as the spatial anchor, with connections to both free-standing office tower (via a canopied path) and Hotel (via direct indoor connection on Ground floor and L1) providing easy access for both the hotel and office users.

Introducing the Park - a public use component
As the project was developed, the construction of the promised regional public park was still not in vision due to delayed relocation programs. The absence of the park landscape would lead to the failure in providing the desired qualities previously conceptualized. To avoid this, the eastern area outside the building control line was deliberately planned and made into a small public park under the will of the development team, which could enable a (temporary) park landscape to ensure the qualities and attraction desired for the project. When the 17-ha regional public park is finished, the existing park of Indigo can also provide a smooth connection to it.

Role of the park
The park was introduced for two key contributions to the success of the development: First, the park was created as a temporary solution to provide the pleasant view for all the hotel, office and retail components of Indigo, which was promised by the regional public park yet not available at the time. When visual connections are provided, the view of the park enhances the qualities of hotel, office and retail uses and therefore promotes the marketability of these components. Second, the park was conceived as an outdoor component which serves the experiences and marketability of the development through providing functional support for certain activities. Thanks to its proximity to other components within an MXD environment, it can be used by users of these components and add value to the office and hotel components through supporting recreational and leisure activities of office workers and hotel users. Especially, for the retail mall, which was positioned as a center of daily shopping activities and “one-stop destination of local families”, the park was programmed to enhance the attraction of the mall for children and family users through functional support and facilities for activities of children of different age groups, which include leisure areas, playgrounds and facilities, and an interactive ground fountain. Besides, the public use of the park also promotes the public image of the mall and development, which eventually contributes to the market performance of Indigo.

<establishing visual connections between the park and use components of MXD>
The park was therefore also positioned on the east side of the site to guarantee great visibility from all the other components of Indigo. Although conceived as a public park, the positioning of it was rather in favor of mall users, which restrained the physical access and visibility from the major pedestrian route on the west side.

- supporting mechanism: spatial and functional synergy through proximity
Through visual connection and proximity of spaces within an MXD environment, urban space and its qualities can benefit other spaces or components. First, through the provision of visual connection, the park brings desired view and visual quality (green elements, scene of children’s play) to the retail, hotel and office components. Second, the spatial connection and proximity between the park and other components allow it to support the activities of them and enhance the functionality and marketability of these components. The park as type II urban space has been thus introduced into the development.
At the east side of the retail component, facing the park, a vast space with 2400 sqm large, 33m height was created - named as the Winter Garden.

Role of Winter Garden
The Winter Garden of Indigo Mall was conceptualized with the following core functions to the development’s success: Role in marketing: 1) enhancing the desired qualities of use component - introducing natural elements, people watching, or providing resting and other functions, especially in response to Beijing’s extreme climate conditions; 2) providing a selling point through unique feature e.g. unusual spatial appearance, functions, or activities/people; 3) supporting marketing activities as an event venue. Intended users and use activities: Unspecialized activities of the users of the retail component; other activities and a possibly broader range of users in case of events; Role in spatial configuration: positioned within use component; 2) as a unique spatial feature for the component or entire MXD project; Management: Managed by the operator of use component to support the mall users and use activities, as well as marketing events.

To achieve its uniqueness, the Winter Garden was designated with unconventional scale comparing to the atria normally found in shopping centers: the floor area totals ca. 2400 sqm and the whole space expands all four commercial floors, reaching a height of 33m. Even though concerns existed about the considerable loss of leasable spaces, this design solution/scale was believed to be critical for achieving the desired dramatic role of the winter garden that brings ultimate profit to the entire project. To achieve this scale, a special structural solution was developed through cooperation with the architects Benoy and structural design consultant HAD, which “shelters the winter garden by a generous undulating canopy which creates a fluid gesture toward the park. The grid-shell mesh roof of the canopy is edged by a steel vertebrae which rests on a line of vertical columns and suspends a cable-wall facade” (HDA). The Winter Garden’s large-scale contributes to the capacity and spatial flexibility of the Winter Garden as urban space, and support an unusual spatial appearance.

• on urban space quality:
  <capacity - size of space>
  <discovery - unusual space>
  <discovery - spatial flexibility>

• supporting mechanism:
  1) size (developer’s capacity): The developer’s capacity enabled the development of a structural system to support the large-scale Winter Garden.
  2) the peri-urban site contributes to large building footprint and size of common space within use components.

The Winter Garden was positioned on the east side of the mall, as the intermediate space between the outdoor park and the shop areas of the retail mall to created good visual and physical connection between the Winter Garden and both the park and the shop areas of the retail mall. The visual and spatial connections of the Winter Garden to the park were stressed in the spatial concept. The visual connection to the park was supposed to be achieved through a transparent facade - a large-scale glass curtain wall on the east facade of the retail mall. Besides, the Winter Garden was positioned on the same level as the park (street level) to promote the physical connection between these two spaces. Visual and physical connections between Winter Garden and shop areas of the mall: Second, the spatial concept also emphasized the visual connection and spatial connections between the Winter Garden and the shop areas of the mall. The internal circulation on
the 4 levels of Indigo Mall was configured to enable rich visual contacts and access to the Winter Garden. Horizontally, an “o” shaped main circulation (two passages sandwiching several vertical voids) linking all the tenants was conceived, with the grandiose Winter Garden on the east side as one major junction along the circulation route. Vertically, the Winter Garden was placed on the most accessible ground floor of the mall. Stretching 4-stories high, it is visible on all the floors above ground. These configurations enabled an easy circulation for through all tenant shops while making the Winter Garden a place that the customers hardly miss when they are moving around in the mall.

<arranging F&B services around Winter Garden> Especially, catering services were planned around the Winter Garden to create a unique “F&B village”. All restaurants and cafes were arranged with their seating areas facing the Winter Garden to take advantage of the indoor sunlight, the view of park, and activities, and the special design and elements of the Winter Garden. Besides, the floor edges around the Winter Garden were gradually set back from lower to higher levels, resulting in a terrace-shaped interface towards the Winter Garden. The architects took inspiration from the Mediterranean seaside village with terrace dwellings to create an exotic imaginary and scene that renders the uniqueness of the F&B area. This configuration, at the same time, maximized the visual connection both between floors and between the ground-floor event space and the surrounding F&B and circulation spaces – maximizing the Winter Garden’s characteristic of “theatricality”. It also significantly enhanced the rent prices of space units around the winter garden, and the project’s market performance.

Such configuration contributes to the development in three key aspects: First, it can promote the spatial qualities within the Winter Garden itself through enabling the view of the natural landscape and uses activities in the park for mall users. Second, it also allows the Winter Garden to introduce the view of park landscape into the shop areas of the retail mall and enhance the spatial qualities of these areas. Third, the visual and physical connection between the Winter Garden and shop areas also allows the surrounding shops to take advantage of the view over the Winter Garden to enhance their identity, which leads to a better market performance to the shops and the mall.

On one hand, while contributing to the MXD, the visual and physical connection provided by such spatial configuration also promote the urban quality of the Winter Garden. The vision on natural landscape increases the comfort of the Winter Garden as urban space. The physical proximity and connection to the shop areas of the mall enable amenities e.g. food & drink, toilets etc. and seating possibilities in adjacency to the urban space. However, on the other hand, the positioning of the Winter Garden also makes it hardly visible and accessible for people on the main pedestrian flow on the west side of the site. Besides introducing qualities from the park, this positioning also takes advantage of the Winter Garden as a unique attraction to serve the market performance of the mall. It can function as an “anchor”, which draws people walking through as many shops as possible, and increases their chances of consumption. As such, the spatial configuration of the Winter Garden as a common space within the retail component was much oriented towards the market profit of the component.

• on urban space quality:
  <comfort - natural element>
  <comfort - amenities e.g. food and drink services, toilets>
  <comfort - seating possibilities>
  possible negative influences:
  <physical barrier - visibility>
  <physical barrier - connectivity with surrounding pedestrian network>
hotel G- F23

retail mall U1 - F4

office F0 - F23

retail F3

retail F2

ground level

1 winter garden

2 park

retail, parking B1

parking, metro B2 - B3

major pedestrian circulation around site
secondary pedestrian circulation around site
major pedestrian circulation within site
major entrance / gate
major elevator
major escalator / stairs
metro line
food and drink service

Image 6.54
Spatial concept of Indigo - Source: Illustration by author
• supporting mechanism: spatial and functional synergy
The provision of physical and visual connections between the Winter Garden and other parts of the MXD allows both sides to benefit from each other.

Management concept
The whole development, including the retail, office, hotel and park components, is centrally managed by the developer.

6.3.2.3. Implementation, operation, and use - Winter Garden
Role/core function of Winter Garden
As has been addressed previously, the Winter Garden of Indigo was conceived with three core functions within the development:
1) Enhancing the qualities needed within the mall e.g. comfort through introducing natural light and view of green landscape etc;
2) As a key event venue, supporting the various marketing activities and events necessary for the retail component or the MXD project;
3) As a unique feature of the mall and Indigo, providing attraction possibly through unusual spatial appearance and/or activities.
These core functions of the Winter Garden further drove the activities in the implementation and operation stages.

Design activities
Detailed design activities focus therefore on the provision of comfort within the Winter Garden, the spatial flexibility and uniqueness design of the space. These activities include:
1) <adopting a wide-spanning ceiling structure> The Winter Garden is sheltered by a generous undulating canopy which creates a fluid gesture toward the park. The grid-shell mesh roof of the canopy is edged by a steel vertebrae which rests on a line of vertical columns and suspends a cable-wall facade”(HDA). The roof mesh is subdivided into triangular modules, combining glazing panels with integral sun-shading treatment and louvers, which generate soft light and delicate shade patterns (HDA) for the comfort inside the Winter Garden. The transparency of the facade is highlighted by a minimalist cable structure to maximize the visual connection with the park. The wide-spanning structure allows a column-free space below it. It is also equipped with light and sound techniques, which enhances the flexibility of the Winter Garden for different activities.

2) <seating elements> two types of stationary seating elements are provided through design. The center if the Winter Garden was designated slightly lower than the surrounding floor ground to distinguish the event space from surrounding circulation space. Steps were arranged around the plaza to bridge the height difference, which has been at the same time designed into seating furniture. Besides, indoor green elements with integrated seats were also introduced through two vegetation beds, that are symmetrically...
positioned inside the Winter Garden.

- on urban space quality:
  <comfort - seating elements>
  <comfort - natural element>

3) **<distinctive style>** - The design enhanced the uniqueness through distinctive style of “indoor outdoor-ness”. The architects took inspiration from the Mediterranean seaside village with terrace dwellings to create an exotic imaginary and scene that renders the uniqueness of the F&B area surrounding the Winter Garden. In addition, the street-lamp-style lighting elements are used to enhance a characteristic of “indoor outdoor-ness” as the special identity of the space and the development.

- on urban space quality:
  <discovery - unusual space>

Management/maintenance activities

The winter garden is managed and maintained by the retail section of the project’s property management department. To support the Indigo mall to become a “family leisure center”, special attention were paid in management to establish a friendly image inside the Winter Garden. However, the access of the Winter Garden is restrained by the open time of the mall. Management activities include:

1) **<access control>** managed as an integrated part of the Indigo shopping center, the Winter Garden’s open time is bound up with and limited by the operation hours of the mall (from 10:00 am – 22:00 pm);

2) **<minimization of subjective rules>** the manager minimized the rules restricting types of behaviors. The only sign positioned in the winter garden shows “no skating” on it;

3) **<soft policing>** conducting “soft policing”: regarding the fact that the Winter Garden is mostly occupied by parents and children, a female mall staff has been deliberately chosen to look after the space to create a friendly impression. Actually, the whole management during the normal time creates a welcoming and inclusive atmosphere, little accessibility barriers are set through management. However, the types of activities in the space are mainly related to children activities. In case of large-scale events, the local public security department must be pre-informed, which support the security and maintenance of public order in the related area.

- On urban space quality: the minimization of subjective rules and adoption of soft policing reduce the managerial barrier, while the limited open hour and presence of access control due to the Winter Garden’s positioning within the mall restrain its quality in aspects of managerial barrier and capacity.

  <managerial barrier - behavioral control>
  <managerial barrier - policing>
  negative influence:
  <managerial barrier - access control>
  <capacity - open time>
Marketing activities
The Winter Garden, conceptualized as unique selling point of the development, and a major venue for event marketing activities of the retail mall as well as the whole development of Indigo, is much involved in the marketing process of the retail mall and the MXD. Marketing activities related to the Winter Garden include:
1) <advertising through mass media>;
2) <organizing various types of events>;
3) <setting up service platform through social media>.

The marketing team of Indigo mall takes central charge of the organization of events in the Winter Garden, while the cooperation with different organizations (including tenants, government, social organizations etc.) enable a diverse range of activities. Events are supported by special operation funds and the central management of the mall, which leads to the high frequency and large scale of organized activities and events within the Winter Garden.

<events by developer>
Celebrations with joint promotions on festivals: 1) Combining events of the mall with traditional festivals and public holidays has been considered an effective marketing strategy. Themed events in accordance with the festivals has enabled celebrating activities to happen beyond their conventional locations, turning the Winter Garden into an indoor venue of festivals, which is even more attractive because of its comfort primarily provided by air-conditioning and indoor sunlight. 2) Joint promotional activities of tenants are also held in accordance with festival events to take advantage of people attracted by the celebrations. The association of the space with public events on one hand contributes to the commercial success of the development, on the other hand provide possibilities of cultural representation of users. 3) Besides, the market team also invents numerous festivals by themselves to intensify the mall’s attraction.

<picture>
Image 6.58
Christmas celebration
Source: Indigo

Image 6.59
2017 Spring festival celebration event with “dragon and lion dance” performances in the Winter Garden of Indigo mall
Source: Indigo

Image 6.60
Joint promotion “Kid’s Wonderland” in 2017
Source: Indigo

</picture>

<picture>
Joint promotion “Kid’s Wonderland” in 2017
Source: Indigo

</picture>

<picture>
Joint promotion “Kid’s Wonderland” in 2017
Source: Indigo

</picture>

<promotional events by tenants and commercial entities> Besides events on major festivals, the winter garden is also frequently rented and utilized by tenants and other commercial entities as a venue for promotional events. These events usually involve the attractive exhibition of products and commodities, or carefully crafted scenes of fascination supporting “experience marketing” and interactions, or both of these forms. Especially, the central operation of the mall enables joint promotion of several tenants.

<picture>
Joint promotion “Kid’s Wonderland” in 2017
Source: Indigo

</picture>
<events in cooperation with government>
City-wide cultural event (such as Beijing Design Week) provides a framework and organizational platform, through which public cultural events may take place in both permanent and temporary venues distributed within the city. The Winter Garden’s spaciousness, comfort, and flexibility makes it one of the ideal temporary venues that support the events. The model of “public event, private venue” was also considered profitable for Indigo’s operator, as it can promote the project’s public image and reputation, and allow public exhibitions to bring new attractions to the development that draws more people as potential consumers.

<events in cooperation with social organizations>
Especially, the Winter Garden also shows possibilities of events in cooperation with social organizations. One typical example of such events is the “Country Fair”. “Country Fair” was initiated in 2009 by a bunch of artists and volunteers as an informal NGO that aimed to support independent farmers and family-agriculture through bridging directly countryside farmers and urban food consumers. With the growing concern of food safety and declining social trust in China, the Country Fair works as a platform for consumers to engage directly with the people who feed them, and for (local) farmers to practice direct marketing. It intends to open up an alternative market space in which trust between farmers and consumers, built through direct dialogue, acts as ‘certification.’ (PGS - Participatory Guarantee System as the central concept). In the beginning, “finding a place was always difficult”[13]. Places for holding the Country Fair were initially provided by the friends of organizers or volunteers, in art districts and then in residential areas, with no fixed locations. However, this situation changed as the market’s popularity rapidly grew. Since 2012, operators of some large-scale commercial projects began to Country Fair to these places. In 2013, shortly after its opening, Country Fair was of invited to Indigo. Within 4 years, the market has grown from a scale between several hundred to several thousand participants, while the number of daily visitors of Indigo mall increased from 1000-2000 to 8000.

Activities of Country Fair mainly include farmers selling food products, and sometimes also involves other activities including performances, DIY courses, and games. While new activities promote the quality of discovery within the Winter Garden, the Country Fair particularly contributes to the urban quality by extending the range of users within the space. It temporarily increases the diversity of users within the space and provides chances for people such as farmers to display themselves. Besides, the involvement of social organization can also contribute to the communication of Winter Garden and Indigo through the social organization and decentralized media.

<discovery - unusual space>
<discovery - different people to display>
<discovery - unusual activities>
<land use - diversity of users>
<communication - broadcasting through social media>

[13] from interview. 1) The space must be cheap. To achieve the organization’s goal of serving the farmers, the farmers must not be charged for their place in the market, space requiring high rent was therefore not affordable. 2) space must be possibly accessible for large population; 3) space must legally allow the occurrence of such activities.
supporting mechanism: mutual benefit between MXD and social organization

“Country Fairs” in the Winter Garden was enabled through a mutually beneficial contract between the operator and social organization. For the operator of the Indigo mall, introducing people attracting activities was adopted as a major marketing strategy. In the early stage shortly after the project was opened, the mall was not visited by many due to the weak traffic connection (the metro station of Indigo was established till 3 years later). The Country Fair, thanks to its form and advocated lifestyle, was considered to be able to bring new experiences and attraction to Indigo mall, and effectively promote the popularity and image of the mall within a short time, even though the market itself does not bring direct profit. For the organizer of Country Fair: the Winter Garden provided an ideal venue: First, the Winter Garden offers financial support for holding events such as the Country Fair from its marketing funds; Second, the development is located near densely populated residential area, which contributes to more visitors to the events; Third, the Winter Garden provides an indoor environment that minimizes the impact of weather conditions and guarantees its scheduled occurrence; Fourth, the MXD provides an advantageous managerial environment for such events to happen - through certain degrees of juristic /managerial autonomy.

supporting mechanism: juristic/managerial autonomy

Particularly reflected through the occurrence of the Country Fair, the MXD provides an environment with certain degree of juristic/managerial autonomy, which allows informal events to take place within it through private contracts: It was very difficult for the Country Fair to take place in official public spaces such as parks, for the reason that most of the farmers and vendors did not have a validated license for selling their products. Such
activities are administrated by municipal authorities such as Beijing Administration for Industry and Commerce (BAIC)[14], and may also involve Bureau of City Administration and Law Enforcement[15] and Municipal Commission of City Management[16] when they are to be held in public spaces. For an informal organization such as the Country Fair, it was hard to gain permissions at these administrative authorities. In comparison, it was much easier to hold the Country Fair in the Winter Garden of Indigo. In this case, it is the operator of Indigo mall that applies for permission at the administrative authority for a promotional event, while a contract was made between project operator and organization of Country Fair, which could greatly reduce difficulties in direct contact between Country Fair and city administration authorities. Such autonomy in management has therefore greatly promoted the occurrence of events by social organizations within spaces of large-scale MXD.

6.3.2.4. Implementation, operation, and use - the Park
Role/core function of the park
The park of Indigo was conceived with two core functions within the development: First, the park was designated to offer view of green landscapes to enhance the visual qualities inside the components; Second, it was conceived to enhance the experiences of the components of Indigo through supporting recreational activities of users, especially the visitors of the retail mall; Third, the public use of the park enhances the public image and public relationship of the development, which contributes to its marketability.

Programming
To support the park’s role, recreational activities for different age groups have been planned for the park.

Design activities
The park was designed to support walking and recreation. Besides various vegetation, seating possibilities and an interactive fountain were planned as amenities. A part of it has been specially designed as a play area for children, with carefully arranged playing facilities for different age groups of children (by BAM).

Management/maintenance activities
The small park is managed and maintained completely privately by the project’s property management company. The positioning of the small park as a public component has greatly influenced the management activities:

1) <no access control>: The park opens 24-hours to the public and free of charge.
2) <minimization of subjective rules>: A list of instructions on use behaviors are demonstrated by the sign at the park’s entrance. Two types of rules have been set including prohibiting behaviors in order to keep clean and safe[17], and claiming responsibilities of users[18]. In spite of that, no subjective rules were included.

14 北京市工商行政管理局
15 北京市城市管理综合行政执法局
16 北京市城市管理委员会
17 禁止吐痰、吸烟，禁止燃放易燃易爆礼花弹以及大型宠物
18 所有人员使用该公园的游乐设备均需根据规则进行操作，不得违反规则，否则自负其责

Image 6.64
Facilities for different age groups in the park of Indigo
Source: photo by author
3) <sign claiming public use>: the park’s intention for public use is clearly demonstrated on a sign placed at the entrances of both park and playground,

4) <no policing>: policing has been replaced by a service hot-line, no security personals are hired, which greatly contributes to a friendly and welcoming image and symbolism of the small park.

* on urban space quality:
  <managerial barrier - access control>
  <managerial barrier - behavioral control>
  <managerial barrier - policing>
  <symbolic barrier>

Marketing activities
The park is usually communicated in the advertising of the project as an appealing amenity - a part of the “17-ha regional park” - which serves better qualities of the components of Indigo. As the park was not conceptualized as an event venue, few events have been organized inside of it. Even though there have been some, these activities have all served as enhancement of the Children’s playground, such as setting up “water playground” in summer or ice-rink in winter.

1) <advertising through mass media>
2) <broadcasting through service platform>

* on urban space quality:
  <communicational barrier - advertising through mass media>
  <communicational barrier - broadcasting through service platform>

Users’ activities
<br>While events did little contribution to the communication and marketing, the public use and careful and interesting design managed to promote sharing activities through social media.

* on urban space quality:
  <communicational barrier - broadcasting through social media>
Winter Garden of indigo on a weekday afternoon

Source: photo by author
6.3.3. Summary - Indigo

6.3.3.1. Potentials in achieving urban space and qualities

1) “Shared qualities”

MXD - Urban qualities generally needed for MXD project

• connectivity to mass urban transportation

The project of Indigo didn’t begin until a metro station was promised, which reflects the fact that large-scale MXD project necessitates a good connection with mass urban transportation.

Type I urban space: Winter Garden

The case of Indigo reflects following aspects of urban qualities, which are needed for, or attached to the Winter Garden as common space within use component (type I urban space) to achieve its role in the entire MXD project:

Comfort:

The Winter Garden, as common space within the mall component, was conceived with the primary functions of bringing natural light and view of the natural landscape to the mall, and offering a comfortable space for non-specific activities of users such as resting and various marketing events. Therefore, qualities of comfort in terms of natural light and protection from bad weather are necessary and usually attached to such spaces.

Discovery:

The space plays a critical role in achieving the uniqueness of the mall and even the entire MXD project to attract people to the development and create a lively atmosphere. Uniqueness is desired as a key quality for achieving such an attraction. The unusual spatial appearance, activities/people (through various events) bring about urban quality of discovery to the Winter Garden as urban space. The space also necessitates quality of flexibility for holding different marketing and public relationship activities.

Active engagement:

The spectacular spatial elements or activities introduced to achieve uniqueness of the mall also provide focal points, which lead to active engagement within the atrium and urban quality of engagement within the space.

Physical barrier: (possible negative influence)

As urban space, the quality of common space within use component may be restrained by its positioning. The space serves primarily the component where it is situated. It may not be directly accessible from surrounding pedestrian network as physical boundary of use component usually exists.

Managerial barrier: (possible negative influence)

The positioning of the Winter Garden as common space within the mall component may restrict its urban qualities in terms of management. For the reason that access and behavioral control and policing are largely influenced by that of the component where the space is situated.
Communication:
As a unique selling point as well as a venue for marketing activities, the space is much involved in the marketing activities of the project, and therefore communicated in various ways. This has led to urban qualities of reduced communicational barriers.

<communicational barrier – advertising through mass media>
<communicational barrier – broadcasting through social media>
<communicational barrier – broadcasting through service platforms>

Potential qualities through events:
As common space within the mall component, the Winter Garden’s role as an event venue of the project also indicates potential urban qualities in many other aspects beyond the above-listed qualities desired and attached to common space within use components. Events can temporarily create different settings of a space’s spatial, functional, managerial, operational and communicational conditions and theoretically result in changes of urban qualities in almost all aspects. As has been particularly demonstrated in the case of Indigo, events in cooperation with public sectors and social organizations have enhanced the urban quality of the Winter Garden through extending the range of users and use activities within it.

almost all aspects of urban qualities, especially <land use> <managerial barrier>

Type II urban space: the Park
• role and intended urban qualities
The case of Indigo reflects following aspects of urban qualities, which are needed or attached to the park as common space within the use component (type II urban space):

Comfort:
Qualities of comfort are needed for the park to contain the intended public leisure activities

<comfort – natural element> related to the nature of park (recreational space)
<comfort – staying possibilities>

Land use:
The intended use for the public promotes the attraction of the park as urban space in the aspect of land use through increasing the diversity of use activities and users.

<land use - diversity of land use - types of uses>
<land use - diversity of land use - users>
<land use - magnet land use>

Management:
To support the intended public use activities of the park as public/civic use component, behavioral control and policing are minimized, which leads to urban qualities of reduced managerial barrier.

<management - access control>
<management - behavioral control>
<management - policing>

Symbolic barrier:
the intended public use of the park minimizes the symbolic barrier for people to enter it.

<symbolic barrier>

Communication:
The park as public/civic use component is also a feature contributing to the quality of the entire project. The space is therefore much involved in the marketing activities and communicated in various ways. Especially, public users may enhance the communication through decentralized social media.

231
<communication – advertising through mass media>
<communication – advertising through third-party platform>
possible <communication – social media>

2) “Supporting mechanisms”

Supporting mechanisms related to the nature of large-scale MXD:
• spatial and functional synergy (synergy through proximity of spaces and activities)
• size (in space and capital scale)
The physical size and capacity of the developer enabled the extraordinary spatial form and structural techniques of the Winter Garden;
• possible mutual benefit through organizing events with public sector / social organizations - the case of Indigo also demonstrates a possible mutual benefit between the operator of private space and public or social organizations. As has been shown in the events such as Beijing Design Week and Country Fair, such mutual benefit potentially contributes to the urban quality within the event space of large-scale MXD by introducing public or non-commercial activities.
• juristic/managerial autonomy
Importantly, the case of Indigo reflects a certain degree of juristic autonomy provided within large-scale MXD project. Such autonomy provides possibilities for informal events to take place within it through private contracts. Such autonomy in management promotes the occurrence of events by social organizations within spaces of large-scale MXD, which may contribute to its urban qualities.

Supporting mechanism by context:
• Peri-urban area - the specific condition of peri-urban are contributed to the occurrence of type I urban space.

3) “Techniques”
• arranging large-scale common space within use component
• organizing events in cooperation with social organizations

6.3.3.2. Quality of urban space - result of assessment

1) The Winter Garden - As a result of the process of the large-scale MXD of Indigo, the Winter Garden (type I urban space) demonstrates the following characteristics regarding its urban quality (see the following table):

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capacity</strong></td>
<td>while the size of the MXD allows a large size of the atrium, the open hour of the Winter Garden is limited by the mall;</td>
</tr>
<tr>
<td><strong>Accessibility</strong></td>
<td>• high attraction in aspects of comfort as an indoor space;</td>
</tr>
<tr>
<td></td>
<td>• high attraction in aspects of engagement: the positioning of the Winter Garden allows rich visual connections that promote passive engagement, while the space itself and the various organized events act as focal points for active engagement;</td>
</tr>
<tr>
<td></td>
<td>• discovery: the spectacular spatial appearance and changing scenes and activities in occasions of events contribute to a high attraction of the space in the aspect of discovery;</td>
</tr>
<tr>
<td></td>
<td>• land use: the positioning of the site in an area of multiple users groups, and the public transportation (metro station) within the site led to the attraction of the space in the aspect of land use;</td>
</tr>
<tr>
<td></td>
<td>• certain physical and managerial barrier due to its positioning within the mall, which prevents direct connections from the pedestrian network around the site, and possible controls.</td>
</tr>
<tr>
<td></td>
<td>• low communicational barrier: as a major selling point and events venue, the Winter Garden is communicated through various ways;</td>
</tr>
<tr>
<td><strong>Catalyst</strong></td>
<td>high quality of catalyst as a result of comfort and active engagement.</td>
</tr>
</tbody>
</table>
2) The Park - As a result of the process of the large-scale MXD of Indigo, the Winter Garden (type I urban space) demonstrates the following characteristics regarding its urban quality (see the following table):

**Capacity:** although privately owned, the park’s capacity for being open 24-hours a day to the public;

**Accessibility:**
- high attraction in land use as a result of intention for public users and use activities
- low managerial and symbolic barrier: the managerial and symbolic barriers have been minimized to support the intended public use;
- low communicational barrier: conceived as a selling-point (which features the quality of the development) the park is well communicated in the marketing process, and by the users as well;

**Catalyst:** the quality of catalyst is limited as the park does not provide spectacular focal points for active engagement.
<table>
<thead>
<tr>
<th>Indigo</th>
<th>1 - Winter Garden</th>
<th>Type I</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>aspect</strong></td>
<td><strong>sub-aspect</strong></td>
<td><strong>assessment / indicator</strong></td>
</tr>
<tr>
<td><strong>CAPACITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>open time</td>
<td>number of daily open hours</td>
<td>12 hours / day</td>
</tr>
<tr>
<td>size of space</td>
<td>area of space</td>
<td>2400 sqm</td>
</tr>
<tr>
<td><strong>ACCESSIBILITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU land use</td>
<td>diversity of land use: types of uses</td>
<td>types of land use within 5-min walking distance from urban space (residential, office, commercial)</td>
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<tr>
<td></td>
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<td>1</td>
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<td></td>
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<td>x</td>
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<tr>
<td></td>
<td>diversity of land use: users</td>
<td>types of user groups within 5-min walking distance from urban space</td>
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<td>x</td>
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<tr>
<td></td>
<td>density of surrounding uses</td>
<td>dominant building pattern of surrounding urban environment</td>
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<td></td>
<td>x</td>
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<tr>
<td></td>
<td>magnet land uses</td>
<td>number of magnet land uses e.g. public use or services around or within urban space</td>
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<td>1</td>
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<tr>
<td></td>
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<td>x</td>
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<tr>
<td>AC comfort (protection &amp; relaxation)</td>
<td>protection against motorized traffic</td>
<td>degree of pedestrianization</td>
</tr>
<tr>
<td></td>
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<tr>
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<td>x</td>
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<tr>
<td></td>
<td>protection against crime - security</td>
<td>availability of security measures e.g. security personnel, CCTV, self-policing layout etc.</td>
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<tr>
<td></td>
<td>protection - night-time lighting</td>
<td>availability of night-time lighting</td>
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<tr>
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<td>x</td>
</tr>
<tr>
<td></td>
<td>protection against bad weather</td>
<td>degree of shelter within the space</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>relaxation - natural element</td>
<td>availability / amount of natural elements in or around space (natural light, green, water etc.)</td>
</tr>
<tr>
<td></td>
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<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>relaxation - clean and maintained environment</td>
<td>degree of maintenance of urban space</td>
</tr>
<tr>
<td></td>
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<td>x</td>
</tr>
<tr>
<td></td>
<td>relaxation - human-scale interface</td>
<td>availability /amount of human-scale interface within urban space</td>
</tr>
<tr>
<td></td>
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<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>relaxation - staying possibilities</td>
<td>available / amount of elements for seating, leaning or lying down</td>
</tr>
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<td>1</td>
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<td>x</td>
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<tr>
<td></td>
<td>relaxation - air-control and optimization</td>
<td>availability of air-control (micro-climate) and optimization facilities/mechanism</td>
</tr>
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<td>1</td>
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<td>x</td>
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<tr>
<td></td>
<td>amenities/services e.g. food, drink, toilets</td>
<td>availability / amount of amenities/services e.g. food, drink, toilets provided within or around urban area</td>
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<td>1</td>
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<td></td>
<td></td>
<td>x</td>
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<tr>
<td>(AD) engagement - (passive &amp; active)</td>
<td>passive engagement</td>
<td>availability of supportive spatial layout between staying space and view / focal points</td>
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<td></td>
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<td>x</td>
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<tr>
<td></td>
<td>active engagement</td>
<td>existence of special element/ visual focus / special activities within space</td>
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<td>1</td>
</tr>
<tr>
<td></td>
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<td>x</td>
</tr>
<tr>
<td>(AD) discovery and display</td>
<td>discovery unusual space</td>
<td>degree of contrast of apperance with surrounding context or distinctive from similar categories</td>
</tr>
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<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>discovery unusual space - flexibility</td>
<td>availability of change mechanism e.g. flexible, adjustable design within space</td>
</tr>
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<td>1</td>
</tr>
<tr>
<td></td>
<td>discovery unusual activities</td>
<td>availability / amount of animation programs within space</td>
</tr>
<tr>
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<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>x</td>
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<tr>
<td></td>
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<td>existence of amenities for different social groups to display themselves</td>
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<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Connectivity to mass transportation network</td>
<td>distance between urban space and nearest metro station</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>x</td>
</tr>
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</table>
### Table 6.5
Urban qualities of Winter Garden of Indigo - assessment result

**Source:** Author

<table>
<thead>
<tr>
<th>CATALYST</th>
<th>duration of stay: comfort</th>
<th>total score comfort</th>
<th>2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>possibilities for interaction: active engagement</td>
<td>total score active engagement</td>
<td>2.0</td>
<td></td>
</tr>
</tbody>
</table>

**Indigo - the Winter Garden**

*Type I*

<table>
<thead>
<tr>
<th>BP</th>
<th>physical barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>connectivity to local pedestrian network around site</td>
<td>number of access point / directions of urban space with surrounding pedestrian network</td>
</tr>
<tr>
<td>restrictions on spatial boundary</td>
<td>degree of height-level difference on the boundary of urban space</td>
</tr>
<tr>
<td>visual restrictions</td>
<td>degree of visibility / existence of visual signs and guidance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BM</th>
<th>managerial barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>behavioral control</td>
<td>presence / amount of subjective rule and laws regulating users’ behavior inside the space</td>
</tr>
<tr>
<td>access control</td>
<td>degree / presence of access control</td>
</tr>
<tr>
<td>policing personals</td>
<td>degree of presence of security personals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BS</th>
<th>symbolic barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>symbols and image</td>
<td>types of indicated user groups by symbols / signs of urban space</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BC</th>
<th>communication barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>advertising through mass media</td>
<td>availability of reports and advertising through mass media</td>
</tr>
<tr>
<td>broadcasting through social media</td>
<td>availability internet infrastructure, spatial design, activities (recording and sharing activities through self-media)</td>
</tr>
<tr>
<td>broadcasting through third-party platforms</td>
<td>availability of third-party service-platforms e.g. e-maps, smart phone app, Wechat etc.</td>
</tr>
</tbody>
</table>

| open time : | 12 hours/day |
| size : | 2400 sqm |

**Number of service platforms e.g. e-maps, smart phone app, Wechat etc.**

- 2 mass transportation station is more than 450m (5min walk away)
- 0 major connections in three or more cardinal directions (several access points)
- 1 major connection in one cardinal direction (one major access point)
- 2 not directly connected

- 0 no physical restrictions on spatial boundary
- 1 height-level within 1 storey or bridged by escalators/elevators
- 2 height level difference at least 2 stories

- 0 space is directly visible from major adjacent pedestrian flow
- 1 space not directly visible yet well guided by signs
- 2 space not visible, no signs and guidance present (at major pedestrian flow)

- 0 non present
- 1 one rule visibly posted
- 2 two or more rules visibly posted
- 0 non present
- 1 present in certain time period

- 0 non present or policing through self-policing layout
- 1 policing through other personals or public police
- 2 policing through private guards with strong presence

- 0 signs and symbols announcing/indication public use
- 1 signs and symbols indicate neither public use nor specific user groups

- 0 spaces got reported through major mass media
- 1 no report or advertising on major mass media
- 0 spectacular spatial design and animation programs encourage sharing activities
- 1 only small part of the space or occasionally does the space encourage sharing acts

- 0 space is visible in major service platforms
- 1 space not visible in any service platform
<table>
<thead>
<tr>
<th>Indigo</th>
<th>2 - Park</th>
<th>Type II</th>
</tr>
</thead>
<tbody>
<tr>
<td>aspect</td>
<td>sub-aspect</td>
<td>assessment / indicator</td>
</tr>
<tr>
<td><strong>CAPACITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>open time</td>
<td>number of daily open hours</td>
<td>24 hours / day</td>
</tr>
<tr>
<td>size of space</td>
<td>area of space</td>
<td></td>
</tr>
<tr>
<td><strong>ACCESSIBILITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>diversity of land use: types of uses</td>
<td>types of land use within 5-min walking distance from urban space (residential, office, commercial)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2 types of land uses</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3 or more types of land uses</td>
</tr>
<tr>
<td>diversity of land use: users</td>
<td>types of user groups within 5-min walking distance from urban space</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>adjacent uses generally for high-income groups</td>
</tr>
<tr>
<td></td>
<td>x</td>
<td>2 adjacent uses support multiple social groups</td>
</tr>
<tr>
<td>density of surrounding uses</td>
<td>dominant building pattern of surrounding urban environment</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>x</td>
<td>1 middle-rise pattern (7-10 storey)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>high-rise pattern (&gt;100m or more than 10-storey)</td>
</tr>
<tr>
<td>magnet land uses</td>
<td>number of magnet land uses e.g. public use or services around or within urban space</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>at least one or temporary public amenity/use available within/near space</td>
</tr>
<tr>
<td></td>
<td>x</td>
<td>2 more or types of public use/amenities provided within/near space</td>
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<tr>
<td><strong>AC</strong></td>
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<tr>
<td>comfort</td>
<td>protection against motorized traffic</td>
<td>degree of pedestrianization</td>
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<tr>
<td>(protection &amp; relaxation)</td>
<td></td>
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<tr>
<td>protection against crime - security</td>
<td>availability of security measures e.g. security personal, CCTV, self-policing layout etc.</td>
<td>0</td>
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<tr>
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<tr>
<td>protection - night-time lighting</td>
<td>availability of right-time lighting</td>
<td>0</td>
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<tr>
<td>protection against bad weather</td>
<td>degree of shelter within the space</td>
<td>0</td>
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<tr>
<td>relaxation - natural element</td>
<td>availability / amount of natural elements in or around space (natural light, green, water etc.)</td>
<td>0</td>
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<tr>
<td>relaxation - clean and maintained environment</td>
<td>degree of maintenance of urban space</td>
<td>0</td>
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<tr>
<td>relaxation - human-scale interface</td>
<td>availability /amount of human-scale interface within urban space</td>
<td>0</td>
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<tr>
<td>relaxation - staying possibilities</td>
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<td><strong>(AD) engagement:</strong> (passive &amp; active)</td>
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<tr>
<td>passive engagement</td>
<td>availability of supportive spatial layout between staying space and view / focal points</td>
<td>0</td>
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<tr>
<td>active engagement</td>
<td>existence of special element/ visual focus / special activities within space</td>
<td>0</td>
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<td>discovery unusual space</td>
<td>degree of contrast of appearance with surrounding context or distinctive from similar categories</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>discovery unusual space - flexibility</td>
<td>availability of change mechanism e.g. flexible, adjustable design within space</td>
<td>0</td>
</tr>
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<td></td>
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<tr>
<td>discovery unusual activities</td>
<td>availability / amount of animation programs within space</td>
<td>0</td>
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<td>discovery different people</td>
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<tr>
<td>connectivity to mass transportation network</td>
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<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BP</td>
<td>Physical barrier</td>
<td>-1.0</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>connectivity to local pedestrian network around site</strong></td>
<td>number of access point / directions of urban space with surrounding pedestrian network</td>
<td>-2 mass transportation station is more than 450m (5min walk away)</td>
</tr>
<tr>
<td><strong>restrictions on spatial boundary</strong></td>
<td>degree of height-level difference on the boundary of urban space</td>
<td>x -1 major connection in one cardinal direction (one major access point)</td>
</tr>
<tr>
<td><strong>visual restrictions</strong></td>
<td>degree of visibility / existence of visual signs and guidance</td>
<td>x -2 space not visible, no signs and guidance present (at major pedestrian flow)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BM</th>
<th>Managerial barrier</th>
<th>-0.3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>behavioral control</strong></td>
<td>presence / amount of subjective rule and laws regulating users’ behavior inside the space</td>
<td>0 non present</td>
</tr>
<tr>
<td><strong>access control</strong></td>
<td>degree / presence of access control</td>
<td>x -1 one rule visibly posted</td>
</tr>
<tr>
<td><strong>policing personals</strong></td>
<td>degree of presence of security personals</td>
<td>x -2 two or more rules visibly posted</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BS</th>
<th>Symbolic barrier</th>
<th>0.0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>symbols and image</strong></td>
<td>types of indicated user groups by symbols / signs of urban space</td>
<td>x 0 signs and symbols announcing/indication public use</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BC</th>
<th>Communication barrier</th>
<th>-0.3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>advertising through mass media</strong></td>
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</tr>
<tr>
<td><strong>broadcasting through third-party platforms</strong></td>
<td>availability of third-party service-platforms e.g. e-maps, smart phone app, Wechat etc.</td>
<td>x -2 spatial design or management do not encourage sharing activities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATALYST</th>
<th>Duration: Comfort</th>
<th>1.6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>possibilities for interaction: active engagement</strong></td>
<td>total score active engagement</td>
<td>1</td>
</tr>
</tbody>
</table>

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Table 6.6
Urban qualities of the Park of Indigo - assessment result
Source: author
6.4. Case study 4: Wangjing SOHO
6.4.1. Introduction

Basic information
Wangjing SOHO is located in Wangjing District of Jiuxianqiao, one of the ten peripheral clusters of Beijing about 13km from the city’s center. Developed from 2009 to 2014 by Chinese real-estate developer SOHO China and designed by Zaha Hadid Architects, the development totals 522,000 sqm of GFA and ca. 115,000 sqm of site area, combining 360,000 sqm of office use and 53,000 sqm of retail shopping. The development features a strong image through its dynamic composition of three free-standing mountain-like towers peaking 200m and three commercial pavilions dispersed around them. The towers are linked on the underground retail level and sunken plaza between them.

Urban space of investigation
The Park
Wangjing SOHO is characterized by a large green and park space around it. The park surrounding the buildings on site takes up an area of 50000 sqm, nearly 50 percent of the total site, which is unconventional in a real-estate development where land is considered extremely valuable. The park of Wangjing SOHO represents another mechanism through which urban space can be initiated. According to the previous discussion, it can be categorized into type IV urban space – law-defined public open space.
6.4.2. Making and shaping: Wangjing SOHO

6.4.2.1. Context of development and initiation

Context of development

- Historical development

Wangjing was originally a rural area to the northeast of Beijing city, that was characterized by villages and pepper fields. The dramatic transformation of Wangjing began in 1988 as Beijing Municipal Construction and Development Company\(^{19}\) started the first large residential projects in Wangjing. The early residential projects were mostly initiated by the city or state-owned Danweis for the relocated population. In the 1993 Beijing Master Plan, Wangjing area was defined as a part of peri-urban area Jiuxianqiao, planned with 300,000 population and 14 million sqm of built-up area, including an industrial development zone on its north. Although the plan also involved the development of other functions e.g. working and shopping, residential developments have always been given priority as quick money was needed by both developers and local government\(^{20}\). As a result, Wangjing became one of the earliest “commuter city” of Beijing. The 1994 plan of Wangjing Area claimed Wangjing as a potential subcenter of Beijing. In response to that, a central parcel, which is located on the central axis of the district, was preserved for future governmental buildings. Large iconic green spaces were planned around the it. The central parcel became later the site of Wangjing SOHO.

- Regional urban planning

The 2002 Plan of Wangjing made by Beijing Municipal Institute of Urban Planning and Design (BMIUPD) emphasized on transformation towards a balanced land use and urban functions in this peri-urban district. Commercial/office functions have been planned on the parcels along the inner circle street. In addition, the sub-center was no longer intended. The central parcel was changed to commercial/office use and was put on the land market.

- Property market

Influences of “International Gateway” and “Headquarter Economy” - It is after 2002 that this imbalance began to get improved with new urban planning interventions in combination with Beijing’s promotion for its “headquarter economy”\(^{21}\). Although being peri-urban, Wangjing area was considered a “gateway” as it is positioned on the high-way corridor connecting international airport and city center. The concentration of International residence in Wangjing began since the middle of the 1990s, as the first groups overseas students and office workers from Korea settled here in their rented apartments, followed afterward by more foreign population who purchased their own housing and set up business in this area. In 2010, the master plan of establishing Dawangjing Business District was approved by the municipal government, which brought about potentials for a high-end real-estate market.

Framework development condition

- Development entity

In 2009, the Chinese real-estate developer SOHO China acquired the land through public bidding with a price of totally 4 billion RMB (ca. 10,000 RMB / sqm). SOHO China was the largest real-estate developer in Beijing which was founded in 1995 by tycoon PAN Shiyi and his wife ZHANG Xin. It has been developing high-profile commercial estates in first-tier Chinese cities Beijing and Shanghai. On one hand, the private developer is famous for its emphasis on the fashionable design and taste in their product. One specific strategy that has contributed to SOHO China’s brand image and market success is the frequent cooperation with famous international architects (“starchitects”) and developing

\(^{19}\) a state-owned company (北京市城市建设综合开发总公司)
\(^{20}\) through residential development, the local government can quickly gain money to built urban infrastructure to attract more investments
\(^{21}\) including giant manufacturers-Daimler Benz, Caterpillar; ABB; electronic communications companies Siemens, Microsoft, Lucent Technologies, Nortel Networks, Motorola; IT companies such as Alibaba; Foods biotechnology Nestle, among others.
its real-estate products into modern landmarks. Wangjing SOHO was the second project of SOHO China and Zaha Hadid Architects in Beijing. On the other hand, SOHO China is frequently criticized for its “quick money strategy” – selling all its properties for quick financial return.

• Site
  1) Surrounding context: The No. B29 parcel of Wangjing is located on the central axis of Wangjing district. Lying about 15 km from the city center, with ca. 300,000 residence population, Wangjing district belongs to the peri-urban cluster Jiuxianqiao. The site is surrounded by dominantly high-rise residential communities. No metro station is available within a 5-min walking distance.
  2) Site condition: consisting of two parcels, the fan-shaped vast peri-urban site totals 115,000 sqm.
  3) Site attached regulations: According to the planning, the site allows an above-ground development of 390,000 sqm of commercial and financial use (zoning code B) and 200m building height. Notably, even though the total site area is large, the planning allows only less than half of it (48000 sqm) for development, as most of the remaining sit area for delegated public green space (“Daizheng Green Space”). The site control lines provided by the planning authority define four pieces of “Daizheng Green Land” which are symmetrically positioned on all four directions surrounding the buildable area.
4) **market potential:** Market analysis has shown a good potential for office and commercial uses. The international population with higher consumption capacity contributed to the formation of a high-profile market. 1) The formation of a higher-end market was accelerated since 2000 with city’s promotion of its “Headquarter Economy” - thanks to its background of an international development zone, Wangjing has quickly become the site of regional headquarters of many international firms – many of which among the Global Fortune 500. 2) Meanwhile, the intensive (sub) urbanization since the beginning of 1990, with the development of colossal market housing projects intensified the concentration of urban middle class to this area. Eventually, this district has become middle-class residential areas, international communities and headquarter sites of global companies.

### 6.4.2.2. Conceptualization

A design competition was staged by SOHO China, in which four invited well-known international architecture offices provided their design solution to the development. Several goals were set to the applicants: 1) They were asked to “demonstrate their full creativity in making a new landmark of Beijing, particular effort had to address the massing strategy and the design of façades in order to express a strong sense of identity”; 2) As a large green area open to the public in the project is also required by planning, “the creation of an urban space where people can gather, relax and play was a key criteria during evaluation”; 3) the spatial layout and circulation has to be functional, efficient, and flexible for future changes to guarantee the project’s financial feasibility and market success; 4) the three near-ground levels (LG1, G, L1) were planned for retail use, therefore, innovative solutions for establishing a vibrant retail environment for people and retailers were also expected – retail spaces must be well connected with the surrounding public areas.[22]

![Competition entries Source: Wangjing SOHO](Image)

After reviewing the schemes presented by participant architect offices – MAKE (UK), FUKSAS (Italy), SANAA (Japan), and ZHA (Zaha Hadid Architects, UK). The concept of ZHA was selected as the winner concept for further modification and realization. The initial winning concept of ZHA consisted of two dynamic building volumes, “a major and minor volume, intertwined to form a unified design. Each volume houses office space, with connections between and to the surrounding landscape provided via a retail volume.” Beside “embracing and generation and extraordinary range of view”, this ‘duality’ of expression both loosens the building mass within defined site boundaries and supports a two-phase completion process”, while “the connecting retail atrium comprises retail spaces from LG to L2, forming a unifying pedestrian street”(Yin, 2012).

The jury claimed following winning features of this concept: 1) The concept is capable as the first landmark project of Wangjing, bringing strong identity for this area; 2) The parametric facade design enhanced the identity and uniqueness of the architecture; while the adaption of BIM in the design contributes to the quality, feasibility and as selling point; 3) The fluid space through buildings and site enhanced the dynamic building form as well as its connection with surroundings; 4) The concept avoids setting up large podiums, which enables one largest park in this district.

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[22] Source: Developing High Profile Branded Commercial Projects in China, Jerry Yin (2012), CTBUH Research Paper
Use concept

Following the market analysis, office use was conceived as cornerstone use totaling 360,000 sqm, while retail use of 53,000sqm, with a considerable amount of F&B programs, was planned as important use supporting the office component, while also benefiting from the adjacent public park defined by the “daizheng” control lines.

Intended users: the profit-oriented components target on middle and high-end office tenants. Determined by the urban planning, the delegated green space within the site should serve use activities of the general public.

Spatial concept

Soon after the ZHA concept has won the competition, requirements for modification were raised in communication with the planning authority. One major issue lies in the aspect of urban design: while showing a dynamic elevation on (bending to) its north side, the building mass turns its back to the landscape and central axis on the south, presenting a relatively dull and indifferent image. To improve the first concept’s insufficient response to the surrounding context, several months of work were conducted before the final concept came out. The office space was ultimately shaped into three mountain-like towers. The southern tower was shaped as the highest volume to emphasized the central axis of Wangjing district. Retail space is arranged on B1 floor and L1-L4 of each office tower. Each volume bends over towards the “daizheng” park on its side – forming a dialog between the green space and architecture mass in which the architecture elevation becomes a responsive background of the surrounding park landscape. The composition of the three building volumes formed a “landscape canyon” through which the surrounding green landscapes are entirely integrated with the architecture, the whole establishes the project’s identity with a unique flowing “urban scene”. Following the traditional Chinese “Shanshui” (mountain-and- water landscape) ideology, water landscapes were planned as an important element of the surrounding green space in the conceptual plan of ZHA.

Regarding the spatial layout within each volume, the architects proposed a very simple building typology – long stripe of central cores and service spaces surrounded by functional spaces, which allows a flexible division of leasable units for both retail and office use. The spatial layout (design) of both uses response greatly to the surrounding landscape:

1) arranging F&B units on the ground floor towards the park>, which provides direct entrances from the surrounding parks to maximize the visibility and accessibility of retail and F&B component;
2) positioning main entrance of office on the park/city site: The three main lobbies for office workers are also positioned on the park/city site of each tower to offer privileged entrances for office workers with pleasant landscapes;
3) vertical connections: Most retail units on G and F1 allow vertical connections through additional stairs; To ensure the visibility and accessibility of the LG retail, two sunken plaza/atrium were planned on both east and west ends of the LG retail street, with escalator connections to the grand ground-level lobbies and pedestrian plaza.

Image 6.74
Spatial concept of Wangjing SOHO
Source: Zaha Hadid Architects
Management structure: <delegated management> The park is managed by the developer for public purposes. The retail space adjacent to the park has been sold out individually, which disabled possibilities of large-scale events and promotional activities.

Marketing concept: The 500,000 sqm large themed urban garden has been considered as a unique feature and selling point which enhances the quality of the development of Wangjing SOHO.

Financial concept: The public green space will be designed, constructed and managed by the developer of Wangjing SOHO. As compensation, the government allowed a lower price of land use right transmission. Units in the retail component would be sold separately, which precluded a central operation.

6.4.2.3. Implementation, operation, and use
Role of the park
The park has been conceived with the following role or core functions in the MXD project: 
**Role in marketing:** 1) First, the public park was to be taken advantage of as an advantageous feature which enhances the qualities of the development through providing views of natural landscape and supporting recreational activities of users of the development; 2) Second, the developer’s team also managed to take advantage of the situation of the public park within the MXD development to shape it into a unique feature (“selling point”) of the development, which establishes the MXD’s identity and differentiates the project from other real estate products from competitors. **Intended users and use activities:** as is determined by the nature of delegated public green space, the park should support unspecific recreational activities of general public users. **Role in spatial configuration:** intended for public use, the delegated public green space has been planned with good connectivity and visibility from the local pedestrian network. **Management:** the park as delegated public space is managed by the private developer and must support the intended use activities within the park.

Design activities
1) <territorialization and „thematization” of the parks>: Much attention has also been paid to the design of the 50000 sqm park landscape – a feature which is rarely found in real-estate developments and therefore considered as one critical selling point of the project. Several leading international landscape architecture offices were invited to give suggestions on the park. The ultimate design development was conducted by the office Ecoland with the central aim of creating a unique urban garden office environment. Different from previous landscape projects of office environments, the large area available in SOHO Wangjing provided a large stage for landscape architects to release their creativity. Eventually, as a design concept, four major “themes”- waterscape garden, sports park, sculpture woods, and recreational theatre - were developed for the parks on the north, south, east and west side. **North:** the waterscape garden - The north park is the most representative among the four because of its central position on the urban axis and in the front of the longest elevation of the project. It was also the key point of the entire landscape. Taking advantage of the half-enclosing north building volume, the north park was conceived with a major **music fountain** surrounded by leisure green spaces and diverse topographies. The fountain was conceived as the definite focal point which brings attraction of comfort, engagement and discovery for both internal, and external users. The **waterscape** was therefore designed with some special features: 1) fountain of max. 30m height, with diverse ways of water spray; 2) the waterscape is equipped with music and special lighting effect at night 3) the shallow and approachable edge of the waterscape, making it an **interactive element**. **West:** the sculpture woods - The west park was conceived as a barrier to isolate the adjacent busy street, planned with dense vegetation, and grass fields with topographies that are enclosed by the surrounding woods, creating an atmosphere for people desiring quietness. **East:** the recreational theatre – The east park
Spatial concept of Wangjing SOHO - Source: illustration by author
was designed as another key-point of Wangjing SOHO’s park landscape, consisting of two waterscapes and one open-air amphitheater. The first waterscape was positioned on the northeast corner to form a sculptural entrance element, while the second waterscape was integrated into the design of a sunken theater, providing landscape features such as “spring mouths”, waterfalls and waterwalls as elements enabling a spiritual association with traditional Chinese gardens and cooling element in hot summer time. The design of the amphitheater took advantage of the sloping topography to create seating possibilities and a venue for events e.g. ceremonies and performances while enabling a more visible entrance to the underground retail area. **South:** the sport/cultural park – The south park, a rectangular area across the street, was conceived as a place for recreational and sports activities. The original plan included tennis courts and small football grounds, art galleries etc. In the final realization, the south park comprises a gallery-a mock-up used as the sales office, interactive fountains, park seats, and walking pathways. Notably, the street was closed by the project’s operator and became also a part of the sports plaza.
2) <coherent design of building and landscape>
All these themed green spaces were shaped by a unified design language, which is identical with their architecture backdrop, diminishing the boundaries between developable area and “daizheng” public green spaces. This wholeness enabled a coherent visual image and strong visual identity for both the building volumes and the “daizheng” spaces around them. The coherent design of building elevation and landscape led to a strong visual image and identity for both the project and the park around it.

• on urban space quality:
  <discovery - unusual spatial appearance>

Management/maintenance activities:
<management structure> delegated management: The private developer was delegated by the government for the management and maintenance of the public green park within Wangjing SOHO. A property management team takes charge of tasks including the management and maintenance of building assets and service facilities, security, cleaning and greening, and reception and concierge services. The law-defined nature of “daizheng” green space for public users has determined the inclusive management activities:
1) <no access control>: as the park is defined for public use, no access control is conducted;
2) <minimized behavior control>: no subjective rules are presented in any of these parks;
3) <maintained environment>: Personals are employed by the management team of Wangjing SOHO to look after the four parks, which also guarantees a maintained environment.
4) <policing through other personals>: Adoption of non-guard personals on the waterfront, with the single aim to prevent children from drowning.

• on urban space quality:
  <managerial barrier - access control>
  <managerial barrier - behavioral control>
  <managerial barrier - policing>
  <comfort - clean and maintained environment>

Marketing activities
As has been conceptualized, the public park plays the role of an advantageous and uniquely designed spatial feature, which represent qualities of Wangjing SOHO and contributes to the marketability of the project. It is therefore much involved in the advertising process and usually communicated as “the 500,000 sqm themed urban garden” featuring the MXD project. Meanwhile, event marketing is hardly involved within the park for two reasons: First, the park was not conceptualized as an event venue of the project. Second
the absence of central operation limited the possibility of jointly organized events and promotional activities. Marketing activities related to the park of Wangjing SOHO include:

1) **<advertising through mass media>**: The park is much advertised and communicated through mass media; through press conferences, maximizing celebrity effects (friends of Pan Shiyi) for marketing. Marketing through social media – Pan Shiyi frequently interacted with tenants of Wanjing SOHO, and share images, videos and texts on his personal Weibo (microblog), which is subscribed by 17 Million fans.

2) **<opening event>** The opening event of Wangjing SOHO has been the largest event within the development ever since, which demonstrated a great potential of its spatial design in supporting activities. However, due to the absence of a central operation, few large-scale events have been held after the grand opening ceremony.

Users’ activities

<**self-organized activities by local residents**> The distinctive design and informal use pattern (collective use) resulted by the specific cultural context have lead to spontaneously organized activities and events. Recreational activities e.g. street dances have been organized spontaneously by local residents. The in 2012 established dancing organization “Meiliyanse (beautiful color)” managed to find their place shortly before the completion of the project. The south street dividing the two parcels of Wangjing SOHO has been suspended for non-motorized traffic after the project’s completion, which enabled an uninterrupted pedestrian connection of the south park to the buildings, as well as an extra hard-ground plaza which was informally used as sport ground by residents afterward.

Self-organized events of residence contribute to the urban quality of discovery by introducing unusual activities and people, and communication of the space through social media.

- on urban space quality:
  - <communication - broadcasting through social media>
  - <discovery - unusual activities>
  - <discovery - different people to display themselves>

- supporting mechanisms:
  - culture-specific use pattern of urban space
Image 6.85a
East Park of Wangjing SOHO
Source: photo by author

Image 6.85c
North Park of Wangjing SOHO
Source: photo by author
6.4.3. Summary - Wangjing SOHO
6.4.3.1. Potentials in achieving urban space and qualities
1) “Shared qualities”:
Type IV urban space: The Park
The case of Wangjing SOHO reflects following aspects of urban qualities, which are needed for, or attached to the park as law-defined public space (type IV urban space) to achieve its role and core function in the entire MXD project:

Land use:
As is predetermined in the urban planning, law-defined public spaces are intended for public users and use activities. This promotes the attraction of it as urban space in the aspect of land use through by increasing the diversity of use activities and users.

Comfort:
Law-defined public spaces are intended to serve leisure and recreational activities of the general city users. The quality of comfort is therefore desired within it. Especially, comfort qualities are often desired through the provision of natural element e.g. vegetation and staying possibilities e.g. seating furniture etc.

Physical barrier:
Planned to primarily serving the public use, law-defined public spaces are (planned) well connected to the surrounding environment and accessible for general urban users. Physical accessibility to the local context is therefore attached to such type of spaces. This contributes to the urban quality of law-defined public spaces in terms of local physical access.

Symbolic barrier:
The intended public use of law-defined public space minimizes the symbolic barrier for people to enter it.

Management:
To support the intended public use activities within the law-defined public/open space, access control, behavioral control and policing are often minimized.

Communication:
As is demonstrated in the case of Wangjing SOHO, the integration of sizable public green space has been considered a unique feature and selling point of the MXD project. In such situations, law-defined public space is much involved in the marketing of the MXD project and well communicated in the marketing process, which contributes to its urban space qualities by reducing the communicational barrier.
2) “Supporting mechanism”

Supporting mechanisms related to the nature of large-scale MXD:
• spatial and functional synergy (synergy through proximity of spaces and activities)
Thanks to the synergy, arranging the retail and F&B services adjacent to the park allows possible mutual benefit between the park and F&B tenants. The urban quality of the park has been enhanced as the retail and F&B tenants may provide amenities (food and drinks, restrooms) and seating possibilities to the users of the park. Besides, The building volumes have been arranged to take advantage of the view of the park landscape to promote the quality of the indoor leasable space, while the building elevations, with proper design, enhanced the identity (urban quality of discovery) of the parks as urban space.

• size (physical)
The unconventional size of the large-scale MXD project provides support in achieving the urban quality of discovery of urban spaces within the project. As is demonstrated in the case of Wangjing SOHO, the park has gained its distinctiveness through being adjacent to the sizable and spectacular building volumes of Wangjing SOHO. The urban quality of discovery of the park has been further enhanced through a coherent design of the park landscape and the building elevations. Besides, the size also contributes to the capacity of the park as urban space.

• Possible active role of the public sector
The “daizheng” green space, as a result of the government’s planning intervention, has fundamentally shaped the provision of type IV urban space within the large-scale MXD project, and the urban quality of this space. This reflects possible active and strong influence and interventions of the public sector in creating and shaping urban spaces within private large-scale MXD projects. In the case of Wangjing SOHO, the “daizheng” regulations guarantee the urban qualities of e.g. capacity and land use of the park.

Supporting mechanism provided by context:
• culture-specific use pattern of urban space
The informal use pattern of urban space, as a special historical and cultural result, bring about possibilities that external users and their spontaneously organized activities be involved as factors contributing to urban qualities of spaces within privately developed large-scale MXD projects;

3) “Techniques”

Techniques of intervention:
• provision and control of urban space through delegation/“daizheng” mechanism
The case of Wangjing SOHO represents another mechanism through which urban space may be enabled and created – the mechanism of delegation or “Daizheng”, which is much attached with the Chinese context of urban planning and land politics. The large area of “daizheng” public green space defined by the planning control lines functioned as a framing condition for the entire making process of Wangjing SOHO, guaranteeing the physical existence of urban space and shaping its qualities.

• coherent design of large-scale MXD and type IV urban space
coherent design of large-scale MXD and delegated public open space (or “daizheng” space) contributes to additional urban qualities of type IV urban space. As has been demonstrated by the case of Wangjing SOHO, the integrative design, which resulted in a spectacular spatial scene of the park, have significantly contributed to the urban quality of discovery inside the park.

• territorialization and thematization
Defining zones within type IV urban space with different themes can also bring extra urban qualities to the space.
6.4.3.2. Quality of urban space - result of assessment
The Public Park
As a result of the process of the large-scale MXD of Wangjing SOHO, the Park (type IV urban space) demonstrates the following characteristics regarding its urban quality (see the following table):

**Capacity:**
The Park’s large-scale and 24 hour-open time is guaranteed by the planning regulations;

**Accessibility:**
- high attraction in the aspect of land use, which is much contributed by its intended public use;
- high attraction in the aspect of comfort as a result of careful landscape design;
- discovery: the coherent design of the building and surrounding open space contributed to a distinctive spatial appearance of the space;
- engagement: the adjacent positioning of the park near major pedestrian flow and the distinctive building and landscape design has led to qualities of passive and active engagement within the space;
- low physical, managerial and symbolic barrier: which is much resulted by the intended public use and arrangement of the “daizheng” space prioritizing external users in the urban planning process.

**Catalyst:** the quality of catalyst is limited as the park does not provide spectacular focal points for active engagement.
<table>
<thead>
<tr>
<th>Aspect</th>
<th>Sub-aspect</th>
<th>Wangjing SOHO</th>
<th>Park</th>
<th>Type IV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Open time</td>
<td>number of daily open hours</td>
<td>24 hours / day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Size of space</td>
<td>area of space</td>
<td>50000 sqm</td>
<td></td>
</tr>
<tr>
<td>Accessibility</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>AU land use</td>
<td>Diversity of land use: types of uses</td>
<td>types of land use within 5-min walking distance from urban space (residential, office, commercial)</td>
<td>0 mono functional land use</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 2 types of land uses</td>
<td>2 3 or more types of land uses</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>0 adjacent uses for homogeneous high-income social group</td>
<td>2</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>1 adjacent uses generally for high-income groups</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2 2 adjacent uses support multiple social groups</td>
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<tr>
<td></td>
<td>Diversity of land use: users</td>
<td>types of user groups within 5-min walking distance from urban space</td>
<td></td>
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<tr>
<td></td>
<td>Density of surrounding uses</td>
<td>dominant building pattern of surrounding urban environment</td>
<td>0 low-rise pattern (1-6 storey)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 middle-rise pattern (7-10 storey)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2 high-rise pattern (&gt;100m or more than 10-storey)</td>
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<tr>
<td></td>
<td>Magnet land uses</td>
<td>number of magnet land uses e.g. public use or services around or within urban space</td>
<td>0 non public service/amenities available</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 at least one or temporary public amenity/use available within/near space</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2 two or more types of public use/amenities provided within/near space</td>
<td></td>
<td></td>
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<tr>
<td>AC comfort</td>
<td>Protection against motorized traffic</td>
<td>degree of pedestrianization</td>
<td>0 space is overlaid by motorized traffic / not suitable for pedestrian traffic</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 space is occasionally motorized</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2 space is completely pedestrianized</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Protection against crime - security</td>
<td>availability of security measures e.g. security personal, CCTV, self-policing layout etc.</td>
<td>0 not exist</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 available</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2 space employs security measures</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Protection - night-time lighting</td>
<td>availability of night-time lighting</td>
<td>0 no night-time lighting available</td>
<td>2</td>
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<tr>
<td></td>
<td></td>
<td>1 available</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2 space employs security measures</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Protection against bad weather</td>
<td>degree of shelter within the space</td>
<td>0 non or very limited shelter (providing shading)</td>
<td>1</td>
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<tr>
<td></td>
<td></td>
<td>1 available</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2 multiple types and sufficient lighting at night</td>
<td></td>
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<tr>
<td></td>
<td>Relaxation - natural element</td>
<td>availability / amount of natural elements in or around space (natural light, green, water etc.)</td>
<td>0 non - very limited natural elements</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 available</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>2 large amount of natural elements</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Relaxation - clean and maintained</td>
<td>degree of maintenance of urban space</td>
<td>0 not maintained</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>environment</td>
<td>1 available</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>2 well maintained</td>
<td></td>
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<tr>
<td></td>
<td>Relaxation - human-scale interface</td>
<td>availability / amount of human-scale interface within urban space</td>
<td>0 non-human-scale/overscaled</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 available</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2 partly-human-scale interface</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Relaxation - staying possibilities</td>
<td>available / amount of elements for seating, leaning or lying down</td>
<td>0 no seating</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 one only type of stationary seating</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2 two or more types of seating or substantial moveable seating</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relaxation - air-control and</td>
<td>availability of air-control (micro-climate) and optimization facilities/mechanism</td>
<td>0 not available in the space</td>
<td>1</td>
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<tr>
<td></td>
<td>optimization</td>
<td>1 available</td>
<td></td>
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<td></td>
<td></td>
<td>2 space partly employs techniques to improve or enrich the air quality</td>
<td></td>
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<tr>
<td></td>
<td>Amenities/services e.g. food, drink, toilet services</td>
<td>availability / amount of amenities/services e.g. food, drink, toilets provided within or around urban space</td>
<td>0 non available</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 available</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2 food and drink available, customers-only or paid restrooms</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2 food and drink available, free restrooms available in vicinity (400m)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>Passive engagement</td>
<td>availability of supportive spatial layout between staying space and view / focal points</td>
<td>0 spatial layout does not support passive engagement</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 (spatial layout of) minor part supports passive engagement</td>
<td></td>
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<td></td>
<td></td>
<td>2 (spatial layout of) major part supports passive engagement</td>
<td></td>
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<tr>
<td></td>
<td>Active engagement</td>
<td>existence of special element/ visual focus / special activities within space</td>
<td>0 none present</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 one or two minor installations, statues or fountains</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2 major interactive installations; free performances/activitites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discovery and</td>
<td>Discovery unusual space</td>
<td>degree of contrast of apperance with surrounding context or distinctive from similar categories</td>
<td>0 non or obvious contrast</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>display</td>
<td>1 available</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 obvious contrast and distinctive</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discovery unusual space - flexibility</td>
<td>availability of change mechanism e.g. flexible, adjustable design within space</td>
<td>0 not available</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 available</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 available</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discovery unusual activities</td>
<td>availability / amount of animation programs within space</td>
<td>0 none present or selten</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 monthly or several times a year</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 weekly or several times a month</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Discovery different people</td>
<td>existence of amenities for different social groups to display themselves</td>
<td>0 none present</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 temporary: available through culture-oriented programs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 (part of) space permanently caters to alternative uses or user groups (subcultures)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connectivity to mass transportation network</td>
<td>Distance between urban space and nearest metro station</td>
<td>0 mass transportation is directly connected to the space, or near transit station</td>
<td>-1 mass transportation station less than 450m away, yet not directly connected</td>
<td>-2</td>
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Table 6.7  
Urban qualities of the Park of Wangjing SOHO - assessment result  
Source: author
6.5. Case study 5: Daxing Paradise Walk

6.5.1. Introduction

Basic information
Opened in 2016, Paradise walk is a residential-retail mixed-use development located about 25km from the city center in Daxing, one of the 11 planned “new towns” in the southern suburb of Beijing city. The project is the second mixed-use project in Beijing developed by Chinese developer Longfor (龙湖). The whole development’s GFA totals 670,000 m² (300,000 sqm commercial and 360,000 sqm residential) while the site area 250,000 m². The development consists of a west and east parcel linked by a pedestrian overpass. The project is characterized by a horizontal spatial layout of use components – the east parcel has been developed with dominant residential use in forms of gated high-rise community (2418 dwelling units) and service facilities, while the west part was developed with ca. 300,000 m² of commercial floor area, consisted of a 150,000-sqm “big-box” shopping center, low-rise stripe stores with outdoor pedestrian street, plazas, and freestanding commercial building, as well as two residential towers. The west parcel also comprises a metro station, which is directly integrated on the edge of the shopping center.

Urban space of investigation
Plazas (type III urban space - primary organizing space)
Several spacious outdoor plazas are provided in Paradise Walk, which are all located at the entrances of the mall. The largest plaza among which lies at the northeast corner of the west parcel, connecting the MXD with surrounding environment while offering a place of urban life. As the entrance plaza facilities the major circulation into the development, it is categorized as type III urban space within MXDs.
6.5.2. Making and shaping: Paradise Walk
6.5.2.1. Context of development and initiation

Context of development

• Historical context
Daxing is located at Beijing’s south suburb with about 25 km from the city center (Tiananmen Square). This area was historically a suburban township with dominant rural patterns. The development of Daxing as “New Town” was much influenced by the planning aim for a metropolitan circle, polycentric structure and south-city development of Beijing, which has been intensified since the beginning of the 21st century. In the Greater Beijing Plan 2004-2020, Daxing was upgraded into one of 11 suburban “new towns” of Beijing with 600,000 populations expected in 2020. After 2008, these areas became areas of intensive urbanization and real-estate development. Comparing to peri-urban districts, “New Town” areas such as Daxing have been less impacted by unplanned urban sprawl, providing much space and potential for new and systematic planning ideas (street network, open space, transport, density, land use etc.), which are much characterized by a “New Urbanism” ideology – featured by TOD and mixed-use.

• Regional urban planning
Concentration of population – New Towns such as Daxing have been planned with functions of embedding the city’s growing population and become new areas of urbanization. For Daxing, a population growth of 45% (from 420,000 to 600,000) in the time period from 2010-2020 was planned. Besides, according to the plan, the area would also house about 50 percent of “floating population” (people without local “Hukou”).

New industry zone - The regional plan also involves establishing new industrial development zones to boost the local economy and desired functional independence from the central city area. Daxing Biomedical Base - a national-level industrial development district - has been planned on the south part of Daxing New Town. The new industrial zone totals 11.24 km², while a 2.3 km² area to the east of it along the emergent metro line (where the project is located), has been planned with multiple functions serving the industrial zone, including residential, education, commercial, cultural entertainment etc. to provide services and promote the jobs-housing balance in this region. A green belt stretching north-south was planned in accordance with the existing Yongxing River as a buffer zone between these two functional areas.

TOD and New Urbanism ideas - the planning of New Town areas such as Daxing is characterized by ideas of TOD, in which urban development was conceptualized in accordance with development of new metro lines expansions. Major development axis of Daxing New Town were set along the two metro lines (M4 and M9). Besides, 1) Setting up high-density Transit-oriented development zones (TOD zones) along metro lines: the areas within 500m or 1000m radius distance of important metro stations were categorized as TOD zones which required a minimum FAR of 2.0; 2) TOD zones are encouraged for dense commercial, office and residential developments. The defined TOD zones were planned with relatively high density and mixed land use code allowing mixed-use developments. As was described in Daxing masterplan (2005-2020), “Development of land parcels of mixed-land use category is a critical way that simultaneously serves the interest of developers and public services, while promoting the new town’s vitality and attraction”. According to the plan, the mixed land use category (F) must comprise at least two land use functions – residential (R) and Public Service (e.g. office, business, cultural, educational, hygiene, sport beyond the residential community level). Besides, the positioning of mixed land use also responses to the TOD concept: parcels in TOD areas must also comprise supporting uses such as parking lots etc. Besides metro stations, the TOD zones have been also planned with other public facilities e.g. public parking lots, bus stations etc. 3) Emphasizing pedestrian environment and open space under “New Urbanism” instructions - The regional plan of Daxing adopted a regular street grid and systematic open/green space and
pedestrian network. Especially, the plan put emphasis on a good pedestrian environment in TOD zones. Zoning incentives have been included to encourage the provision of open spaces by private developers.

• Property market
As the possibilities for real-estate projects in the central city decreased, new chances were brought by the suburban urbanization and promising master plans (involving the new master plan, airport, industrial zone etc.) and expansion of transportation network. Especially, the planning conditions made sites around metro stations highly attractive for real-estate developers. New town areas are generally supported by a growing middle-end market.

Framework development condition
• Development entity
Longfor, the developer of Paradise Walk, is a private Chinese real-estate group which was originated in 1993 in southern China city Chongqing through the development of high-end market housing products. In 2011, as a strategic move responding to market potentials, the company began to shift its focus towards developing commercial and mixed-use projects in first- and second-tier Chinese cities. To guarantee the market success, three fac-
tors have been considered as critical criteria in site selection: 1) The area’s development trend – the urban planning must be promising; 2) The local economy – the local economy must support enough power of consumption, and 3) Traffic: development directly over metro station was considered optimal. The master-plan-led urban development and the opening of the metro lines in suburban “new town” areas have brought about huge opportunities for real-estate development around stations. In 2010, Longfor acquired the 250,000 sqm land as the site for Paradise Walk via public bidding with about 3.5 Billion RMB.

- **Site:**
  1) **surrounding context:** The idea of TOD predetermined a good connection between possible MXDs and metro transportation network. The metro station “Biomedical Base” of metro line No.4\(^{[23]}\) is directly available within the site of Paradise Walk (on the east edge of the west parcel). The major road and metro line lie in the middle, linking Daxing’s regional center and central city area of Beijing on the north. Green open space has been planned to the west of the site as a buffer zone between areas of industrial and residential function. Thanks to the TOD planning, the site is surrounded by urban patterns of a dense and mixed land use.
  2) **site condition:** The site of Paradise Walk consists of two rectangular parcels totaling 250,000 sqm.
  3) **site attached regulations:** As a TOD zone, the parcels were planned with mixed-use (code F3\(^{[24]}\)) comprising residential and public service(commercial) functions and allowed a density of FAR 2.8 (462946 sqm developable GFA). Besides, the site has also been planned with public open spaces and facilities such as “Daizheng” public green space and parking lots to support the TOD zone.
  4) **market potential:** The market analysis indicated a market for middle-end families and population which involves four essential types of consumers: 1) The residence of surrounding market housing quarters and emergent communities; 2) The original residence of Huangcun (the central county of Daxing); 3) The newly “urbanized” rural population of surrounding counties and villages; and 4) Population of further located areas in neighboring Heibei Province.

The regional urban planning predetermines certain urban qualities of spaces within the MXD project of Paradise Walk. Arranging public transportation and facilities in adjacency to land parcels with mixed-use and high-density development contributed to the urban qualities of spaces within the development in aspects of land use and reducing the physical barrier for entering it.

- on urban space quality:
  <physical barrier - connectivity to mass transportation network>
  <land use - density of surrounding uses>
  <land use - diversity of uses>
  <land use - diversity of users>
  <land use - magnet use>

\(^{[23]}\) The No.4 line is the first PPP rail transportation project between the city government and Beijing MTR Corporation, a joint venture of mainly of Hong Kong MTR and Beijing Capital. The experienced MTR of Hong Kong was able to participate and influence the design of station areas in early stages. The station was initially planned as a lifted station, however, MTR proposed a plan that allowed the line to remain underground and a coherent development of the station area, while also preserving possibilities of upper-floor connections between the station and adjacent development in the future. This made Biomedical Base one of the best-practice case of metro station through PPP.

\(^{[24]}\) F3: The residential use takes normally 60% - 80% of the total GFA, while public service, commercial/office etc. takes 20% - 40% of the total GFA
6.5.2.2. Conceptualization

Use concept

Type of uses: Following the planning instructions of mixed land use, commercial and residential uses were planned as the primary for-profit use components of Paradise Walk. Besides, public transportation facilities e.g. a metro station and public parking lots have been planned as an integrated part within the development of Paradise Walk.

<middle-end market positioning for family consumers>: positioned in response to the market potential in the region, the whole development targeted a middle-end market. Being coherently developed with a sizable residential component, the commercial section of Paradise Walk was positioned as a regional mall targeting middle-income families. The developer intended to create a “regional core and life center” and a one-stop commercial hub. To meet the needs of family consumers, the mall was planned with a variety of recreational, entertainment (cinema, ice rink, fitness club, supermarket, F&B services etc.) and a large ratio of children-oriented programs.

<introducing extra for-sale commercial spaces> Extra for-sale commercial spaces have bee conceived to reduce the financial risk of holding the mall. The marketing housing would be sold off while the mall would be held and operated by the developer. As holding the mall would lead to increased financial burden and risk in short-term for the developer, the developer transformed the rest of developable commercial floor area into an extra area of low-rise stores and pedestrian street – named as “Times Alley”. These commercial units were created to be directly and separately sold to generate more cash flow in short-term. This solution has indeed led to short-term profitability for the developer. However, it also resulted in the failure of these products and failed urban qualities in this area, because of its suboptimal positioning, lack of central operation, and potential competition with the existing mall component.

Spatial concept

Because of the large overall site area, the general spatial layout of Paradise Walk follows a horizontal composition. The characteristic of the site implied suitable placement of use components: the west parcel, because of the existence of metro station and the major Xinyuan Street, was considered more appropriate for commercial and public functions that thrive on people flow, while the separated east parcel and the west side of the west parcel were considered suitable for more private residential functions regarding to their positions. Residential use was mainly planned as an isolated part within the development. The major part of the ca. 360,000 sqm residential component took the form of a separated gated high-rise community (following the „paradigm“) comprising 13 towers, which was positioned on the east parcel of the site to gain privacy for the residential environment. A skywalk was planned to provide a direct pedestrian connection to the metro station. In addition, three free-standing residential towers were placed along the less exposed south-west edge of the west parcel.

Retail / Entertainment component: major commercial spaces were planned on the west parcel to take advantage of the people flow of metro station. The major retail/entertainment component was shaped into a 4-storied enclosed mall (150,000 FGA) with its major entrances towards the north and east side of the parcel, four major entrances were planned: one at the parcel’s northwest corner, the other three along Xinyuan Street, including one entrance directly connected with the metro station building, for which a grandiose atrium was planned, as well as two outdoor entrances with attached plazas. The second type of commercial space, the additionally planned stripe shops was placed at the less accessible backside of the mall, rather as a fill-up of the developable spaces within the site.
A plaza was arranged between the mall’s main gate, the major pedestrian flow, and the metro station. Such arrangement contributes essentially in two aspects to the MXD: 1) It maximizes the mall and project’s visibility from the surrounding context. 2) Such an arrangement also contributes to the accessibility of the project from the surrounding pedestrian network, especially that from the metro station. At the same time, such positioning also contribute to the urban qualities of the plaza in terms of connectivity to local pedestrian network, mass transportation network and visibility.

- supporting mechanism: spatial and functional synergy

A great size to enhance the visibility and spectacularity of the mall’s entrance, which also support large-scale events: the plazas were designed great in size: the major entrance plaza at the corner of the west parcel totals nearly 3000 sqm, designated next to a 1600 sqm parking lot- forming together the largest hard-grounded open space in the vicinity. Mutual benefit: On one hand, the vast size of the plaza enabled highly visible and iconic front entrance for the mall, and support large-scale commercial events, on the other hand, it also minimized the plaza’s visual barriers, while contributing to its capacity and flexibility for simultaneous diverse activities as urban space.

One tenant unit adjacent to the plaza was planned as a café, which opens to both the mall and plaza to take advantage of the visibility and population enabled by the plaza. In return, the café provides also F&B services and seating possibilities which promote the comfort quality of the plaza as urban space.

- arranging bus station near the plaza – arranging bus station near the plaza to further enhance the visibility and physical accessibility of the mall through increasing the number of people that perceive the plaza, and become potential consumers. This further promoted the physical accessibility of the plaza as urban space.
Management concept
The “daizheng” green space, public parking lot and metro station were planned to be managed by the city, while the remaining site is privately managed by the project’s management team. As attached space to the mall, the plazas would be managed and maintained by the management team of the commercial section, together with the mall, strip shops, and attached pedestrian streets.

Marketing concept
The focus of marketing has been put on the mixed-use urban lifestyle with landscaped residential community, multiple shopping and life-style services, and seamless connection to metro transportation. First, having commercial use and residential use near each other was considered profitable in marketing both these products. Second, for both residential and commercial parts, the seamless connection with the metro station was also viewed as an advantageous selling point; Third, the regional development potential of Daxing has also been emphasized in the marketing concept.

6.5.2.3. Implementation, operation, and use
Role/core functions of the entrance plaza
The plaza has been conceived with following role or core functions in the MXD project:

Role in marketing:
1) The entrance plaza is necessary for facilitating the connection between the retail component of the MXD and the surrounding pedestrian network, and promotes the visibility of the retail component. Besides, it was also conceived to enhance the overall public image for the development by introducing more people and public activities, which contributes to the project’s market performance. 2) The entrance plaza was conceived to provide unique features contributing to the project’s identity and attraction for potential customers; 3) It was also conceived as an outdoor venue for event marketing, which supports marketing activities that cause direct and indirect profits for the development. Intended use activities: The plaza should support unspecialized activities of both internal users and external visitors e.g. circulation and staying (leisure activities), and other activities in case of marketing events; Role in spatial configuration: the plaza connects the development with the surrounding pedestrian network and therefore necessitates visibility and physical access. It should also embed unique spatial design to establish identity and attraction for the project.

Programming
<introducing public leisure activity zone>
To support the plaza’s role in building up a friendly and inviting image of the development, an area for public leisure activities was introduced to the plaza. Eventually, the plaza was designed with two zones: one for commercial events and the other for public leisure activities. The introduction of public activity contribute to the urban quality of the space in terms of land use through enabling a larger range of users.
• on urban space quality:
<land use - diversity of users>

Detailed design
The detailed design activities support the conceived role of the plaza. Detailed design activities include 1) design and elements for enhancing the plaza’s visual attraction and identity; and 2) setting up interactive landscape facilities in the public activity area.

<designing visual attraction and identity>
1) Elevation design of mall: The design of the plaza-side elevation of the mall allowed the project to take advantage of the visibility and popularity staged by the plaza: first, the facade was designed with Paradise Walk’s logo and <lighting facade elements with changing colors> as a visual attractions to highlight the project’s presence and identity; Second,
residential

retail mall L1 - L4

retail L1 - L4

ground level

entrance plaza

retail B1

parking B2 - B3

major pedestrian circulation around site
secondary pedestrian circulation around site
major pedestrian circulation within site
major entrance / gate
major elevator
major escalator / stairs
metro line
food and drink service

Image 6.93
Spatial concept of Paradise Walk - Source: illustration by author
1) **back-lit billboards** and a sizable **LED screen** were integrated on the plaza-side elevation to maximize commercial profits through advertising, as the plaza’s spatial configuration makes the contents of these elements highly visible in the area. On the other hand, such facade design also simultaneously contributes to the plaza’s quality as urban space, in terms of night-time lighting (for protection), as visual attractions for discovery and as focal points for active engagement;

2) Elements were designed in the plazas as visual focal points enhancing the uniqueness and visual attraction of them. The main entrance plaza adopted a **fishtail sculpture with combined seating and lighting possibilities**, while **logo towers** were designed on other two entrance plazas;

3) **multiple types and styles of lighting** are adopted;

4) **ground pattern** and **ground lighting** – also contributing to visual access of the plaza

Interactive landscape elements have been planned in the public activity area e.g.:

5) **ground fountain**: serving comfort and activities, also serves as a focal point

6) **landscape furniture with seating possibilities**: landscape seating furniture has been placed in the public activity zone of the plaza, contributing to the quality of relaxation and passive engagement;

Management activities

The plazas, as attached space of the mall, are managed privately by the operation team of the mall of Paradise Walk. To support the desired goal and core functions of the plaza the managerial barrier has been minimized, which makes the plaza a 24-hour open space with very friendly appearance to external users:

1) **no access control** the plaza is 24-hours open to the external users;

2) **no subjective rules** no subjective rules are present to regulate the use of the plaza;

3) **soft-policing** the plaza is secured by mall staffs rather than private security personnels, which provides a friendly and inclusive spatial atmosphere.

* on urban space quality:
  - <managerial barrier - access control>
  - <managerial barrier - behavioral control>
  - <managerial barrier - policing>
Marketing activities
As a spatial feature building up the image of the MXD project, and a major venue for events and activities organized by the project operator and its tenants, the plaza is therefore much involved and communicated in the marketing process. Marketing activities including advertising and event marketing on the plaza.
1) <advertising through mass media>;
2) <building up a service platform on the social network>;
3) <holding various marketing and public relationship events>

<public event through cooperation with local government>
“Booming Daxing” is a public cultural performance campaign that was initiated in July 2017 by the Culture Committee of Daxing government. Within the framework of Daxing’s “cultural season” aiming to boost local communities and culture, “Booming Daxing” consists of a series of events organized around a public performance contest in aspects of singing, dancing, opera and other types of performing art. Conceived as a non-profit public event with an emphasis on the participation of local residents, the contest was open to every interested individual or group. In order to increase the cultural campaign’s public influence, the Culture Committee organized a warm-up event planned in the form of eye-catching “Flashmob”, which took place at the entrance plaza of Paradise Walk two weeks before the contests began.

While providing an attraction of discovery and promoting engagement, the public event also managed to offer public use activities and extend the range of users on the plaza, which contributes to the urban quality of the plaza in the aspect of land use. Besides, the involvement of public media also promoted the communication of the plaza.

• supporting mechanism - mutual benefit through cooperation on public events
The Culture Committee, in cooperation with a culture media company, invited professional performers and performing teams as central actors of the Flashmob. Besides, major media were also invited by the government to report the event intensively. For the organizers, the plaza was considered suitable for the event for its ideal location, size, design and functional attraction for concentrating a large amount of people; while holding such a public initiated event also benefit the development in terms of 1) attraction—utilizing public event’s attractive content to draw people to the mall; 2) communication – utilizing the public sector’s ability of mobilizing media; 3) creating a positive public image and relationship to acquire more customers; 4) keeping a good relationship with the government. As such, the “public event, private event” mode became feasible and created a mutually beneficial situation between the project operator and local government.
Users’ activities

*self-organized events of local residence*

Besides events organized by the operator and tenants of Paradise Walk, and public events by the government, events organized by the local residents themselves also frequently take place on the plaza. These events include various leisure activities, and most typically, various kinds of collective dance performances. On the evenings, self-organized dancing groups practice and perform on the plaza. Members of these groups are the residents living in nearby communities. The dance performances themselves become attractions and focal points on the plaza, which contribute to the urban quality of discovery and engagement of the plaza, and also the communication of the space through social media.

- on urban space quality:
  - discovery - unusual activities
  - engagement - passive and active engagement
  - communication - broadcasting through social media

- supporting mechanism: culture-specific use pattern of urban space

Obviously, the occurrence of self-organized events such as collective dance performances is largely related to the cultural-specific use pattern of urban space, which has been resulted in the special cultural and historical context of Beijing. Essentially, such use pattern has three characteristics: informal, temporary and collective use activities. First, the resident dance groups use the plaza quite naturally as their performing field, although the plaza was neither claimed to be public nor designed for such activities. Second, these activities are collectively practiced, which allows them to be even more spectacular. Influences on these characteristics can be traced back to the traditional and Socialist age (see Chapter 4).

6.5.3. Summary - Paradise Walk Daxing

6.5.3.1. Potentials in achieving urban space and qualities

1) “Shared qualities”

MXD - Urban qualities generally needed for large-scale MXD project

- secured, maintained and protected pedestrian environment
- dense, multi-use environment
- good connectivity to the mass urban transportation network

Type III urban space: Urban qualities contributing to the role of primary organizing space (type III space):

The case of Paradise Walk reflects following aspects of urban qualities, which are needed for, or attached to the entrance plaza as primary organizing space (type III urban space) to achieve its role and core function in the entire MXD project:

Comfort

Conceived as primary organizing space to contribute to a friendly image of the MXD project, qualities of comfort are also desired.

- comfort – staying possibilities
- comfort – natural element etc.
Activities of local residents on the entrance plaza of Paradise Walk
Source: photo by author
Discovery:
Unique spatial design or spatial elements and events are utilized to bring the attraction to the plaza for potential customers, and help the space to establish the identity for the entire MXD project. Besides, as the entrance plaza has also played the role as a venue being able to hold various events, spatial flexibility is also attached as desired quality of the plaza as primary organizing space.
<discovery – unusual space>
<discovery – unusual activities>
<discovery – different people>

Engagement:
Unique spatial elements or activity scene provide a spectacular focal point for active engagement. The involvement of major pedestrian circulation in and around the primary organizing space promotes the possibility of passive engagement.
<active engagement>
<engagement – passive engagement>

Physical barrier:
Minimization of the physical barrier is needed for the entrance plaza as primary organizing space to facilitate the pedestrian circulation between the development and surrounding context, and to enhance the desired exposure and visibility of the development.
<physical barrier - visibility>
<physical barrier - restrictions on boundaries>
<physical barrier – connectivity to local pedestrian network>

Managerial barrier:
To support the circulation of various internal and external users in the entrance plaza as primary organizing space, strict access control is usually not possible and not adopted. To create a friendly public image, behavioral control and policing may also be minimized. This contributes to the urban quality of less managerial barrier within the plaza as primary organizing space.
<management - access control> no access control
<management - behavioral control> when public image is desired
<management - policing> when public image is desired

Communication:
As a particular selling point and venue for event marketing, the primary organizing space is much involved in the marketing of the MXD project and therefore well communicated in the marketing process. The desire to create friendly public image may also lead to the communication of the space through decentralized social media.
<communicational barrier - advertising>
<communicational barrier – broadcasting through social media>
<communicational barrier – broadcasting through third-party platform>

Potential qualities through events:
The entrance plaza’s role as an event venue of the project also indicates potential urban qualities in many other aspects, which are beyond the above-listed qualities desired and attached to primary organizing space. Events can temporarily create different settings of a space’s spatial, functional, managerial, operational and communicational conditions and theoretically result in changes if urban qualities in almost all aspects. As has been particularly demonstrated in the case of Paradise Walk, events in cooperation with public sector have enhanced the urban quality of the entrance plaza in terms of land use, through introducing activities for diverse of users and use activities to the urban space.
almost all aspects of urban qualities, especially <land use>
2) “Supporting mechanism”

Supporting mechanisms related to the nature of large-scale MXD:
- functional and spatial synergy
- size (spatial size)
- possible active role of the public sector (TOD, supporting events etc.); mutual benefit through cooperation with the public sector in holding events. Particularly, the case of Paradise Walk reflects a possible high involvement and control of public sector on large-scale MXDs and the qualities of potential urban spaces within it primarily through urban planning activities. Besides, this case demonstrates again a possible mutual benefit of both MXD developer and public sector through cooperation on holding public events.
- coherently planned - adjustable system

The failure of "Times Alley" within Paradise Walk also reflects the fact that urban quality can also be undermined in satisfying other aspects of the project.

Supporting mechanism by context:
- culture-specific use pattern of urban space

As is shown in the case study, the informal and collective use pattern of urban space, which is a result of Beijing's special culture and historical development, has provided possibilities that external users and their spontaneously organized activities be involved as factors contributing to urban qualities of spaces within privately developed large-scale MXD projects;
- close relationship between government and operator of MXD

The close relationship between the government and private developer has contributed to their cooperation on holding public events;

3) “Techniques”

techniques of intervention
- TOD urban planning

In terms of techniques in achieving urban qualities through large-scale MXDs, the case of Paradise Walk demonstrates the effective contribution of transit-oriented development in urban planning practice. Essentially, the TOD planning concept provides a framework, which facilitates an intensive interweave between public facilities and private developments. Taking advantage of such proximity and interweaving, a win-win situation between large-scale MXD projects and urban space qualities have been created.

techniques of making
- introducing zones for public leisure activities to type III urban space

6.5.3.2. Quality of urban space - result of assessment

Entrance Plaza - As a result of the process of the large-scale MXD of Paradise Walk, the entrance plaza (type IV urban space) demonstrates the following characteristics regarding its urban quality (see the following table):

| Capacity: | high quality of catalyst as a result of comfort and active engagement. |
| Accessibility: | high attraction in the aspect of land use: which is mainly resulted by the TOD planning concept, and introducing a public leisure zone into the space; |
| | high attraction in the aspect of engagement: for it embeds the major circulation and events; |
| | low physical and managerial barrier: which is contributed by the soft-policing strategies; |
| | low communicational barrier: conceived as a major outdoor event space, the plaza is well communicated in various ways; |

Catalyst: high quality of catalyst as a result of comfort and active engagement.
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>size of space</td>
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<td>Paradise Walk</td>
<td>Entrance plaza</td>
<td>Type III</td>
<td>criteria</td>
<td>value</td>
</tr>
<tr>
<td>open time</td>
<td>number of daily open hours</td>
<td>24 hours / day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>size of space</td>
<td>area of space</td>
<td>4000 sqm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACCESSIBILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AU land use</td>
<td>diversity of land use: types of uses</td>
<td>types of land use within 5-min walking distance from urban space (residential, office, commercial)</td>
<td>0</td>
<td>mono functional land use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2 types of land uses</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>3 or more types of land uses</td>
<td></td>
</tr>
<tr>
<td>AU land use</td>
<td>diversity of land use: users</td>
<td>types of user groups within 5-min walking distance from urban space</td>
<td>0</td>
<td>adjacent uses for homogeneous high-income social group</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>adjacent uses generally for high-income groups</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>adjacent uses support multiple social groups</td>
<td></td>
</tr>
<tr>
<td>AC comfort (protection &amp; relaxation)</td>
<td>protection against motorized traffic</td>
<td>degree of pedestrianization</td>
<td>0</td>
<td>space is overlaid by motorized traffic / not suitable for pedestrian traffic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>space is occasionally motorized</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>space is completely pedestrianized</td>
<td></td>
</tr>
<tr>
<td>protection against crime - security</td>
<td>availability of security measures e.g. security personals, CCTV, self-policing layout etc.</td>
<td>0</td>
<td>not exist</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>protection - night-time lighting</td>
<td>availability of night-time lighting</td>
<td>0</td>
<td>no night-time lighting available</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>protection against bad weather</td>
<td>degree of shelter within the space</td>
<td>0</td>
<td>non or very limited shelter (providing shading)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>relaxation - natural element</td>
<td>availability / amount of natural elements in or around space (natural light, green, water etc.)</td>
<td>0</td>
<td>non - very limited natural elements</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>relaxation - clean and maintained environment</td>
<td>degree of maintenance of urban space</td>
<td>0</td>
<td>not maintained</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>partly maintained</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>well maintained</td>
<td></td>
</tr>
<tr>
<td>relaxation - human-scale interface</td>
<td>availability / amount of human-scale interface within urban space</td>
<td>0</td>
<td>non-human scale/overscaled</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>partly human-scale interface</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>human scale interface</td>
<td></td>
</tr>
<tr>
<td>relaxation - staying possibilities</td>
<td>available / amount of elements for seating, leaning or lying down</td>
<td>0</td>
<td>no seating</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>one only type of stationary seating</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>two or more types of seating or substantial moveable seating</td>
<td></td>
</tr>
<tr>
<td>relaxation - air-control and optimization</td>
<td>availability of air-control (micro-climate) and optimization facilities/mechanism</td>
<td>0</td>
<td>not available in the space</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>amenities/services e.g. food, drink, toilets</td>
<td>availability / amount of amenities/services e.g. food, drink, toilets provided within or around urban area</td>
<td>0</td>
<td>non available</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>(AE) engagement- (passive &amp; active)</td>
<td>passive engagement</td>
<td>availability of supportive spatial layout between staying space and view / focal points</td>
<td>0</td>
<td>spatial layout does not support passive engagement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>(spatial layout of) minor part supports passive engagement</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>(spatial layout of) major part supports passive engagement</td>
<td></td>
</tr>
<tr>
<td>active engagement</td>
<td>existence of special element/ visual focus / special activities within space</td>
<td>0</td>
<td>none present</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>one or two minor installations, statues or fountains</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>major interactive installations; free performances/activities</td>
<td></td>
</tr>
<tr>
<td>(AD) discovery and display</td>
<td>discovery unusual space</td>
<td>degree of contrast of appearance with surrounding context or distinctive from similar categories</td>
<td>0</td>
<td>non or unobvious contrast</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>discovery unusual space - flexibility</td>
<td>availability of change mechanism e.g. flexible, adjustable design within space</td>
<td>0</td>
<td>not available</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>discovery unusual activities</td>
<td>availability / amount of animation programs within space</td>
<td>0</td>
<td>non present or selten</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>discovery different people</td>
<td>existence of amenities for different social groups to display themselves</td>
<td>0</td>
<td>none present</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>connectivity to mass transportation network</td>
<td>distance between urban space and nearest metro station</td>
<td>0</td>
<td>mass transportation is directly connected to the space, or near transit station</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>mass transportation station less than 450m away, yet not directly connected</td>
<td></td>
</tr>
<tr>
<td>Source: author</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Table 6.8 Urban qualities of entrance plaza of Paradise Walk - assessment result</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BP physical barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>connectivity to local pedestrian network around site</td>
</tr>
<tr>
<td>number of access point / directions of urban space with surrounding pedestrian network</td>
</tr>
<tr>
<td>x 0 major connections in three or more cardinal directions (several access points)</td>
</tr>
<tr>
<td>-1 major connection in one cardinal direction (one major access point)</td>
</tr>
<tr>
<td>-2 not directly connected</td>
</tr>
<tr>
<td>restrictions on spatial boundary</td>
</tr>
<tr>
<td>degree of height-level difference on the boundary of urban space</td>
</tr>
<tr>
<td>x 0 no physical restrictions on spatial boundary</td>
</tr>
<tr>
<td>-1 height-level within 1 storey or bridged by escalators / elevators</td>
</tr>
<tr>
<td>-2 height level difference at least 2 stories</td>
</tr>
<tr>
<td>visual restrictions</td>
</tr>
<tr>
<td>degree of visibility / existence of visual signs and guidance</td>
</tr>
<tr>
<td>x 0 space is directly visible from major adjacent pedestrian flow</td>
</tr>
<tr>
<td>-1 space not directly visible yet well guided by signs</td>
</tr>
<tr>
<td>-2 space not visible, no signs and guidance present (at major pedestrian flow)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BM managerial barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>behavioral control</td>
</tr>
<tr>
<td>presence / amount of subjective rule and laws regulating users' behavior inside the space</td>
</tr>
<tr>
<td>x 0 non present</td>
</tr>
<tr>
<td>-1 one rule visibly posted</td>
</tr>
<tr>
<td>-2 two or more rules visibly posted</td>
</tr>
<tr>
<td>access control</td>
</tr>
<tr>
<td>degree / presence of access control</td>
</tr>
<tr>
<td>x 0 non present</td>
</tr>
<tr>
<td>-1 present in certain time period</td>
</tr>
<tr>
<td>-2 existence of entrance fee, permanent access control system</td>
</tr>
<tr>
<td>policing personals</td>
</tr>
<tr>
<td>degree of presence of security personals</td>
</tr>
<tr>
<td>x -1 policing through other personals or public police</td>
</tr>
<tr>
<td>-2 policing through private guards with strong presence</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BS symbolic barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>symbols and image</td>
</tr>
<tr>
<td>types of indicated user groups by symbols / signs of urban space</td>
</tr>
<tr>
<td>x -1 signs and symbols indicate neither public use nor specific user groups</td>
</tr>
<tr>
<td>-2 signs and symbols indicate specific user groups / exclusion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BC communication barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>advertising through mass media</td>
</tr>
<tr>
<td>availability of reports and advertising through mass media</td>
</tr>
<tr>
<td>x 0 spaces got reported through major mass media</td>
</tr>
<tr>
<td>-1 no report or advertising on major mass media</td>
</tr>
<tr>
<td>broadcasting through social media</td>
</tr>
<tr>
<td>availability internet infrastructure, spatial design, activities (recording and sharing activities through self-media)</td>
</tr>
<tr>
<td>x -1 only small part of the space or occasionally does the space encourage sharing activities</td>
</tr>
<tr>
<td>-2 spatial design or management do not encourage sharing activities</td>
</tr>
<tr>
<td>broadcasting through third-party platforms</td>
</tr>
<tr>
<td>availability of third-party service-platforms e.g. e-maps, smart phone app, Wechat etc.</td>
</tr>
<tr>
<td>x 0 space is visible in major service platforms</td>
</tr>
<tr>
<td>-1 space is only visible in major service platforms</td>
</tr>
<tr>
<td>-2 space not visible in any service platform</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATALYST duration of stay: comfort</th>
</tr>
</thead>
<tbody>
<tr>
<td>total score comfort</td>
</tr>
<tr>
<td>1,6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>possibilities for interaction: active engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>total score active engagement</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paradise Walk - entrance plaza</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type III</td>
</tr>
<tr>
<td>open time: 24 hours/ day</td>
</tr>
<tr>
<td>size: 4000 sqm</td>
</tr>
</tbody>
</table>

Diagram: paradise walk engagement and comfort scores

Diagram: paradise walk land use and communication scores
6.6. Summary

Through the case-study of five large-scale MXD projects in Beijing, this chapter reveals the critical mechanisms and activities, which have shaped the qualities of the urban spaces investigated. Three essential aspects of factors can be identified, which consist the potential of achieving urban spaces and urban qualities through the process of large-scale MXD, which are: 1) "shared qualities", 2) "supporting mechanism" and 3) "techniques".

Besides explaining the mechanism of urban space making and shaping by these case studies, the seven urban spaces investigated in this chapter have been evaluated using the assessment tool developed in Chapter 2. The result reveals that different urban space typologies show different characteristics regarding their qualities, which is much related to their role or core functions conceived for the large-scale MXD project. Taking advantage of the “supporting mechanisms”, “Techniques” can be developed to extend the urban qualities of space within large-scale MXDs beyond their originally conceived “shared qualities”. The case studies also provide references for possible strategies that help to release the urban potential in the process of large-scale MXDs.

<table>
<thead>
<tr>
<th>The Place</th>
<th>Parkview Green</th>
<th>Indigo</th>
<th>Wangjing SOHO</th>
<th>Paradise Walk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Planned Business District</td>
<td>Central City Area</td>
<td>Peri-urban Area</td>
<td>Peri-urban Area</td>
<td>New Town</td>
</tr>
<tr>
<td>Type I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type III</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type IV</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6.9
Overview - assessment result
Source: author
Chapter 7. Conclusion
7.1. Reflection on contemporary hybrid urban spaces and their qualities

1) Re-framing contemporary urban space and its qualities - This research provides a new understanding of the ideology and core value of contemporary space within cities. It proposes a way of understanding urban space that starts from identifying the core value or instrumentality of contemporary physical spaces within cities. Such a “fundamental” perspective prevents a mono-dimensional view of urban space ideology, while opening up possibilities for recognizing the potentials of unconventional and emergent urban space typologies in the contemporary hybrid urban situations. Such understanding enables a more appropriate framework in describing and accessing contemporary urban space qualities.

2) Assessment tool - The assessment tool developed in this research allows us to grasp the diverse characteristics of contemporary urban spaces and examine their qualities in a practical way. The assessment tool can be applied to examine spaces within large-scale MXDs, as well as to examine any other kinds of spaces, especially emergent spaces with hybrid characteristics. It can also be utilized to investigate the existing urban spaces within a defined region, and to guide the provision of new urban spaces through new projects in the region. Realizing that it is either possible or correct to demand every space for all dimensions of qualities, an investigation of qualities and characteristics of existing spaces enabled by the assessment tool can serve as critical reference and guidance contributing for concepts of new urban spaces.

3) Multi-dimensional nature of urban space - Observation in this research reflects a multi-dimensional nature of contemporary hybrid urban spaces. As has been demonstrated in the case studies of Beijing, hybrid developments have brought about different urban spaces typologies with different characteristics and qualities. This research has identified four types of potential urban spaces within large-scale MXDs, which are: type I. Common space within use component, type II. Public / civic use component, type III. Primary organizing space and type IV. Law-defined public open space. These types of spaces demonstrate different urban qualities in dimensions of capacity, accessibility, and catalyst. It is also found that the different roles these spaces play (or their core functions) within a large-scale MXD project greatly determine their urban characteristics and qualities.

4) Analytical framework bridging the making process of large-scale MXD and urban space (qualities)
This research offers a framework for analyzing the mechanisms and logic in the development process of large-scale MXD, which shape urban spaces within MXDs and their qualities. This analytical framework bridges on one side the contextual factors, logics and activities in the process of a large-scale MXD project, and on the other side the urban spaces and their qualities that are shaped by the process. The framework shows that the mechanism of making and shaping urban space qualities through large-scale MXD is both multi-level and multi-dimensional, involving the general background of urban development in a defined region and time period, interrelated activities ranging from urban planning and policy-making to project initiation, conceptualization, implementation, operation and users’ activities, and actors and actions in multiple aspects or professional fields e.g. financing, planning/design, management, animation and communication. Besides, this analytical framework fundamentally helps to identify the key mechanisms, actors and activities that have enabled urban spaces within MXD and shaped their qualities. Moreover, it can also be used to guide the implementation of possible strategies and interventions to achieve the desired typologies or qualities of urban spaces through the process of large-scale MXD.
7.2. Towards an “Urban Mutualism“
- the potential of large-scale MXD in urban space making and shaping

Most critically, explorations of this research demonstrate the potentials of achieving a “mutualism” between the city i.e. urban space (interests of city or general urban users) and the MXD itself (interests of the developer, internal users etc.) in the making and shaping process of such projects. “Mutualism”, in a biological explanation, refers to the way two organisms of different species exist in a relationship in which each individual benefits from the other. Case studies in this research show how a mutualistic relationship have been achieved, in which both MXD and urban space benefit from each other - while large-scale MXD benefits from the urban space within it, urban space have been introduced and certain qualities of it are enhanced through the process of large-scale MXD. The “urban mutualism” discovered in this research indicates the fact that large-scale MXD can become a feasible mode of urban space provision, in which both critical stakeholders of government and developers are motivated.

This research identifies three essential aspects of factors in the process of large-scale MXD, which contribute to an “Urban Mutualism”, that are: 1) “Shared qualities”, 2) “Supporting mechanisms” and 3) “Techniques”. The following diagram shows how these factors co-contribute in achieving urban space qualities in the process of large-scale MXDs.
1) “Shared qualities”

Large-scale MXDs need and can benefit from certain urban spaces and qualities to achieve their development objectives. First, large-scale MXD itself thrives on multi-functionality and qualities of a comfortable, secured and maintained pedestrian environment and good connectivity with urban transportation network, and communication. Second, as a system, large-scale MXDs inevitably necessitate physical spaces with certain urban qualities for achieving its desired functionality and development objectives. This research identifies four types of potential urban spaces within large-scale MXDs: type I. Common space within use component, type II. Public/civic use component, type III. Primary organizing space and type IV. Law-defined public open space. Each type of these spaces needs, or is attached with, certain urban qualities to achieve their intended role or core functions within the large-scale MXD project, which contribute to the overall market success of the development. These “shared qualities”, which are simultaneously contributive to both urban space and the success of large-scale MXD, bring about fundamentally the motivation of makers in introducing urban spaces and qualities in the creation of large-scale MXDs. Also, spaces to be created within large-scale MXD are preset with certain urban qualities. The role/core functions and “shared qualities” of different types of urban spaces are summarized in the following tables: (left: “shared qualities”, right: roles/core functions of different urban space typologies)

<table>
<thead>
<tr>
<th>Type I</th>
<th>Type II</th>
<th>Type III</th>
<th>Type IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Space</td>
<td>urban space</td>
<td>Urban Space</td>
<td>Urban Space</td>
</tr>
<tr>
<td>common space within use component</td>
<td>public / civic use component</td>
<td>primary organizing space</td>
<td>law-define public open space</td>
</tr>
<tr>
<td>museum</td>
<td>park</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAPACITY</th>
<th>ACCESSIBILIT Y</th>
<th>land use</th>
<th>comfort (protection &amp; relaxation)</th>
<th>engagement</th>
<th>discovery and display</th>
<th>physical barrier</th>
<th>managerial barrier</th>
<th>symbolic communicational barrier</th>
<th>CATALYST</th>
</tr>
</thead>
<tbody>
<tr>
<td>open time</td>
<td>size of space</td>
<td>diversity of land use: types of uses</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
</tr>
<tr>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>diversity of land use: users</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
</tr>
<tr>
<td>density of surrounding uses</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
</tr>
<tr>
<td>magnet land uses</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
</tr>
<tr>
<td>protection against motorized traffic</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
</tr>
<tr>
<td>protection against crime - security</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
<td>MXD</td>
</tr>
<tr>
<td>protection - night-time lighting</td>
<td>MXD</td>
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<td>relaxation - human-scale interface</td>
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<td>broadcasting through third-party platforms</td>
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<td>duration of stay: comfort</td>
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<tr>
<td>possibilities for interaction: active engagement</td>
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</tr>
</tbody>
</table>

Source: illustration by author
### Type I Urban Space: Common space within use component

**role in marketing**
- enhancing desired qualities of use component - introducing natural elements, people watching (spatial enhancement), or providing resting and other functions (functional enhancement)
- selling point through unique feature – unusual spatial appearance, function program, or activities/people
- as venue for immediate marketing communication (events)

**role in use:**
- use activities: Unspecialized activities serving the use component; other activities in case of event
- users: users of use component, possibly broader range of users in event occasions

**role in spatial configuration**
- positioned within use component, connection primarily with other part of use component
- possible as a unique spatial feature for the component or entire MXD project

**management**
- usually managed by the operator of use component
- managed to support the intended users and use activities
- management to support event marketing

### Type II Urban Space: Public / Civic use component

**role in marketing**
- enhancing desired qualities of the whole project or certain use component e.g. public transportation, public/civic services for convenience of users, visual enhancement (park etc.)
- selling point - as unique feature for the MXD project – unusual use combination e.g. combining shopping with art exhibition

**role in use:**
- use activities: specialized activities as core function
- users: general public users

**role in spatial configuration**
- can be positioned within other use component or as individual component
- physical connection with other component when functional enhancement/synergy is desired;
- visual connection with other component when spatial enhancement/synergy is desired;

**management**
- management task: management and maintenance supporting the core activities of public users in the space
- manager: private or public operator, public manager or delegated management may be necessary and involved, support of public sector in management may be necessary

**Financing**
- does not produce substantial revenue
- can bring therefore extra financing burden to the development - the developer is capable, financing support from public sector or other sources can be necessary

### Type III Urban Space: Primary organizing space

**role in marketing**
- enhancing desired qualities of use component or project through providing physical and visual connections
- providing selling point for being a spatial element particularly available in a MXD project;
- providing selling point through supporting/embedding unique features to differentiate the project with competitors
- unusual spatial appearance, function program, or activities/people
- as venue for immediate marketing communication (event)

**role in use:**
- use activities: unspecialized activities (circulation), other activities in case of event
- users: both internal users and external visitors

**role in spatial configuration**
- Facilitating connection between MXD and surrounding environment
- Facilitating major connection between components of MXD
- Spatial features desired as key strength selling point: unique spatial appearance

**management**
- management task: management and maintenance supporting the activities of internal and external users
- usually managed by project operator, the public manager may be involved (district management)
- management to support event marketing

### Type IV Urban Space: Law-defined public open space

**role in marketing**
- can be taken advantage to enhancing desired qualities of use component e.g. view of green landscape
- can be selling point through unique feature

**role in use:**
- use activities: unspecialized activities
- users: general public users

**role in spatial configuration**
- position defined by law / planning orginance
- connection and access by public is prioritized
- can be taken advantage for spatial enhancement

**management**
- management to support public users and unspecialized activities
- manager: private manager-delegated management, or public management

**Financing**
- public financing or incentives/policies are usually involved
2) “Supporting mechanisms”
The making of large-scale MXD projects involves mechanisms (logic and rules) that can be utilized in realizing the desired urban spaces and urban qualities while also contributing to the success of the large-scale MXD project. Such mechanisms are on one hand provided by the nature of large-scale MXDs and on the other hand by the broader context in which a large-scale MXD is situated. Based on these mechanisms, making and shaping activities and strategies can be developed to introduce urban spaces and urban qualities to an MXD project and support the achieving of the “urban mutualism”.

Supporting mechanisms related to the nature of large-scale MXD are caused by the essential characteristics of large-scale MXD, which include unusual size, multiple uses and being simultaneously a coherently planned real-estate product, urban project (part of the city) and man-made artifact:

- synergy through proximity of spaces and activities (functional and spatial synergy)
  When physical and/or visual connections are available, the activities or spatial features of one space may contribute to the desired functionality and/or visual quality of the other, and vice versa. Large-scale MXD, with its dense form of spatial composition, provides more possibility of proximity and realization of such synergy than other forms of built environment. In terms of urban space quality, this mechanism can contribute to two aspects: 1) urban space (spaces with urban qualities) may be introduced in an MXD as it can benefit other parts of the development; 2) On the other hand, the enhancement of qualities of an urban space can also be provided by other parts of an MXD when proper connections and relationships are provided.

- coherent development – adjustable system
  Development of an MXD project means the coherent conceptualization of multiple components and spaces, and multiple interrelated aspects including use (programming), spatial configuration, management, marketing and financing. It is the development objective of the entire project - rather than that of its parts - that determines the overarching goal. As a coherent and adjustable system, large-scale MXD thus provides the possibility of varying certain components or aspects of the project to support the desired features and possibly urban qualities of other components or spaces while keeping the feasibility and overarching objective of the whole project unchanged. In the cases of the Place, adjustment have been made about the type of uses and ways of revenue production of the retail component, which enabled an operation structure advantageous for providing urban qualities.

- size (in space, capital, and organization)
  Supporting mechanisms are also enabled by the unconventional size of large-scale MXD, including its unusual size in space, capital involved and organization (power), which can be taken advantage for the provision of urban spaces and qualities. First, the spatial size of the development possibly contributes to the unique spatial feature and performances of spaces within it. Second, the large capital involved in large-scale MXD projects allows the introduction and adoption of costly technologies (e.g. technologies of the Skyscreen in the case of the Place), which opens up new possibilities for the provision of urban space qualities. Third, the possible large power and organizational forces of the development entity of large-scale MXD allows the negotiation between the makers of large-scale MXDs and public authority for changes of planning conditions, which may be favoring the provision of urban spaces or qualities.

- spatial autonomy
  The size of large-scale MXD also enables its spatial autonomy – through manipulating the spatial boundaries and visual connections with the surrounding environment, makers of large-scale MXDs can create sizable spaces that are much independent from the sur-
rounding context, or spaces that are integrated as an extension of surrounding context as well. The spatial autonomy provides the possibility of introducing favorable features or prevent unfavorable influences in the context to create the desired urban space and qualities within a large-scale MXD project. Similarly, within the project, spatial boundaries can be configured to both allow synergy between urban space and other spaces, and prevent negative visual and spatial effects between spaces.

• juristic/managerial autonomy
Privately owned and managed MXD or its components allows certain degree of managerial autonomy of its spaces. Activities within a space can occur within a private framework or private contracts, which may even provide an environment with much easier approval process and less restrictions for certain activities (especially activities which are not strictly legal or formal, as is demonstrated in the case of Country Fair in Indigo) than spaces managed by public authority, and promote the chances for alternative activities and events to happen within it, and wider range of visitors. Besides, the developer can act as a powerful entity in negotiation with authorities for a favorable condition towards urban space qualities.

• active role of public sector
Large-scale MXD projects inevitably involve much attention and participation of public sectors, especially in situations of important city areas, and integration with public infrastructure and facilities. This provides potential for a more active and powerful role of public sector/authority in intervening the process of large-scale MXD to achieve the desired urban spaces and qualities.

• mutual benefit through holding public events
As has been learned from the case study, holding public events within large-scale MXDs through cooperation with public sectors or organizations can benefit both the project owner and the public sector or social organization. In this mutual beneficial mode of “public event, private space”, the (space within) large-scale MXD provides primarily a suitable event venue, while the public sector or social organization provides influential activities and organizational efforts, which can promote the attraction, image, and communication of the MXD project. Public events can enhance the urban quality of the event venue by expanding the range of uses and users inside of it. Therefore, the mechanism of mutual benefit can be utilized to promote the occurrence of public events in large-scale MXD projects, and eventually contribute to urban space qualities.

• personal influences
As an artifact created by man, large-scale MXD projects provide possible strong influence of the developer’s personal preference in introducing urban space and qualities. Developer’s personal intentions can be the key reason for introducing the urban spaces and urban qualities in the process of large-scale MXD. This mechanism suggests the possibility of promoting urban space making within large-scale MXDs by changing the personal idea of their makers.

• uniqueness for marketability
As a real-estate product, the uniqueness of the project, which differentiates it from potential competitors, leads to better market positioning and contributes to its marketability. The uniqueness can be created through unconventional spatial appearance, activities, and experiences. While the uniqueness can lead to urban quality of discovery, it also provides chances for public/civic uses to be combined into an MXD project to create unconventional use programs and experiences - It is the combination itself and the experience this combination generates, rather than the profitability of uses combined, that is important in this mechanism. Such a mechanism can be taken advantage of in introducing various public-oriented uses and urban spaces into large-scale MXD projects.
Supporting mechanism provided by the specific context of Beijing include (to be discussed in section 7.3.):

- four typical contexts of large-scale MXD projects in Beijing;
- power of public sector / close relationship between public sector and the private developer
- culture-specific use pattern of urban space

3) “Techniques”

The “techniques”, or innovative making and shaping strategies can also contribute to the creation of urban spaces and urban space qualities. While satisfying the “shared qualities”, innovative strategies can be developed based on the “supporting mechanisms” to bring about, or promote other aspects of urban space qualities, bringing extra qualities than initially intended and conceptualized to a large-scale MXD project and space within it. As such, the “techniques” provide potentials for achieving urban space and qualities beyond the urban qualities necessary for large-scale MXD. “Techniques” contribute to introducing urban space into the MXD and/or promoting the qualities of urban space within an MXD. They can be developed for different stages (initiation, conceptualization, implementation operation and use) and aspects in the making of large-scale MXD projects, including activities of both the intervenor and (direct) makers. Generally concluded and suggested, “techniques” in the different stages should be made towards following key tasks:

Initiation:
- Creating advantageous site conditions - through urban planning interventions e.g. TOD, delegated public space etc.; and control of MXD development using regulations;
- Guaranteeing or promoting the overall involvement of the public sector in the project;

Conceptualization:
- Introducing possible urban spaces within the framework development condition;
- Shaping certain qualities of urban space introduced e.g. size, connection to the surrounding urban network - qualities resulted by space’s relationship with other parts of large-scale MXD project;
- Making a favorable condition for activities in the implementation stage, which includes guaranteeing a central operation of (properties around) the space, public management, financing the urban spaces, and defining the space as selling-point of the project etc;

Implementation and operation:
- Developing making and shaping activities which satisfy the “shared qualities” necessary for the large-scale MXD, while contributing to more aspects of urban space qualities through e.g. innovative and “compact solutions” such as holding events, adopting advanced technologies (as demonstrated by the case of Skyscreen, micro-climatic envelope, structural solutions etc.).

The following table provides an overview of some possible strategies of urban space making and shaping in the process of large-scale MXD. The author believes that a huge amount of possible “techniques” remain to be discovered and developed, along with the deepening understanding of the nature, process and “supporting mechanisms” of large-scale MXDs, and with the technological development in many other related fields.
### STRATEGIES IN LARGE-SCALE MXD PROCESS

<table>
<thead>
<tr>
<th>Context and Initiation</th>
<th>URBAN QUALITIES OF SPECIFIC SPACE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1) Creating advantageous site conditions</strong></td>
<td>BP - connectivity to mass transportation network</td>
</tr>
<tr>
<td>Site / surrounding context providing mixed-use sites/land parcels with:</td>
<td>AU - density of surrounding uses</td>
</tr>
<tr>
<td>• coverage of public transporation (within 5-min walking distance);</td>
<td>AU - diversity of land use: types of uses</td>
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<tr>
<td>• mixed-use area or district;</td>
<td>AU - magnet land uses</td>
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<tr>
<td>• diversity of users (policies controlling e.g. economic housing etc.) on site or in surrounding area;</td>
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<tr>
<td>• dense environment;</td>
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<tr>
<td>• Public facilities and spaces on/near site: e.g. delegated green space (can also promote the emergence of type IV urban space);</td>
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<tr>
<td>• structured (public) open space: (can also promote the emergence of type III urban space);</td>
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<tr>
<td><strong>2) Guaranteeing or promoting the overall involvement of public sector in the project</strong></td>
<td>CP - open time</td>
</tr>
<tr>
<td>Development entity</td>
<td>AU - density of surrounding uses</td>
</tr>
<tr>
<td>• controlling the financial capacity/profit goal of development entity in this project;</td>
<td>AU - diversity of land use: types of uses</td>
</tr>
<tr>
<td>• guaranteeing/promoting the involvement of public sector (through e.g. TOD, Public-Private Partnership, defining key development area etc.);</td>
<td>AU - diversity of land use: users</td>
</tr>
<tr>
<td><strong>Conceptualization</strong></td>
<td>CP - size of space</td>
</tr>
<tr>
<td><strong>1) Introducing possible urban spaces within the development framework</strong></td>
<td>BP - connectivity to local pedestrian network around site</td>
</tr>
<tr>
<td>• introducing sizable common space within use components (Type I urban space);</td>
<td>BP - physical restrictions (height level difference) on boundary</td>
</tr>
<tr>
<td>• introducing public / civic use component to the project (Type II urban space);</td>
<td></td>
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<tr>
<td>• arranging primary organizing space as an extension/integrated part of open space system surrounding the site (Type III urban space);</td>
<td></td>
</tr>
<tr>
<td><strong>2) Shaping certain qualities of urban space</strong></td>
<td>BP - visual restrictions</td>
</tr>
<tr>
<td>• introducing public use component into MXD project or urban space;</td>
<td>AC - amenities/services e.g. food, drink, toilets</td>
</tr>
<tr>
<td>• introducing programs for lower-end groups into MXD or urban space;</td>
<td>AC - protection against motorized traffic</td>
</tr>
<tr>
<td>• adopting large-scale of urban space (primary organizing space and common space within component, flexibility and capacity);</td>
<td>AC - protection against crime - security</td>
</tr>
<tr>
<td>• placing urban space on the same level of major pedestrian circulation around site;</td>
<td>AC - protection against bad weather</td>
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<tr>
<td>• placing urban space in adjacency to public transportation (metro) station;</td>
<td>AC - relaxation - natural element</td>
</tr>
<tr>
<td>• guaranteeing visibility of urban space from pedestrian flow around site;</td>
<td>AE - passive engagement</td>
</tr>
<tr>
<td><strong>3) Making a favorable condition for activities in the implementation stage</strong></td>
<td>AD - discovery unusual space</td>
</tr>
<tr>
<td>• guaranteeing central management and operation (holding the properties around urban space);</td>
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<tr>
<td>• promoting management of space by public sector;</td>
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<tr>
<td>• defining the urban space as selling point of the large-scale MXD project;</td>
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<tr>
<td>• financing the urban space</td>
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</tbody>
</table>

Table 7.3
Overview of possible strategies of urban space making and shaping in the process of large-scale MXD
Source: Illustration by author
Implementation Operation and Use

**Programming**
- introducing public use programs into the space - through e.g. defining public use zone, or public events etc.;
- introducing programs for special groups into the space through zones for different social groups, or events;
- introducing programs for lower-end groups into urban space;

**Design**
- temporarily pedestrianize the space through events;
- providing night-time lighting (can take advantage of billboard, sculpture etc.);
- in case the space is outdoor, providing shelter elements to the space (can also provided through events);
- arranging / introducing amenities e.g. food, drink, toilets into the space;
- introducing natural light to into the space through transparent facade or ceiling/skylight;
- enabling (view of) natural element e.g. vegetation and water through design (arranging natural elements within space, or providing visual connection) or event;
- adopting human-scale design of spatial interface;
- providing seating possibilities through design or events;
- adopting technologies of air-control and optimization;
- arranging resting space or staying possibilities in adjacent to pedestrian flow allow passive engagement;
- providing spectacular focal points within the space through design, and/or activities e.g. performances (events) to promote active engagement;
- adopting distinctive design - taking advantage of the space's positioning within large-scale MXD;
- adopting flexible design / structure / facilities / installation;
- using transparent facade or visual guidance to enhance the visibility of the space;
- avoiding using architectural language indicating or excluding specific groups of users;

**Management / maintenance:**
- minimizing behavioral rules within the space / changing management condition through events marketing;
- adopting security measures within space to prevent crime;
- adopting soft policing / chaining the policing situation through events;
- minimizing access control / extending the open time through events;
- guaranteeing the maintenance of the space through e.g. maintenance personals;
- using obvious sign to demonstrate public use of the space (in case this is intended);

**Marketing:**
- holding events within the space
  - event in accordance with public festivals/celebration/occasions;
  - public event in cooperation with public sectors / city-scale events;
  - event in cooperation with social organizations;
- advertising through mass media;
- promoting broadcasting through social media - through e.g. staging public activities, spectacular scenes and interactive programs;
- promoting broadcasting through third-party platforms - establishing service platforms by developer or public sector;

**Innovative and "compact solutions"**
- e.g. events, Skyscreen, micro-climatic envelope, multi-functional zone etc., which can simultaneously contribute to multiple urban qualities of the space.
7.3. Reflection on Beijing as the context of large-scale MXD

• Contextual factors influencing MXD
This research also reveals the relationship between large-scale MXD and the urban development of Beijing as context. As the general background of large-scale MXDs of Beijing, the city’s post-reform urban transformation has been investigated, which is characterized by urbanization, marketization, decentralization, and globalization. Influential contextual factors have been identified in aspects of the property market, public regulations and policies, and cultural ideas. As is shown by the research, the city’s property market is characterized by a strong planned feature due to the public ownership of land and strong governmental control on the land supply, the top-down system, and policies shaping the demand of property market. Urban planning and policies have therefore played a dominant role in influencing large-scale MXD projects in Beijing. Especially, through the investigation on how large-scale MXD projects have developed along the urban development history after the late 1980s, this research has also identified the key factors influencing the development and spatial distribution of large-scale MXD projects in Beijing, which include:
1) the urban structure framed by the city’s master plans and the transformation of the city’s spatial structure;
2) Master planned business districts;
3) Mass public transportation network - especially the urban metro network;
4) “International influences” - e.g. corridor between international airport and city center, embassy districts, representative spaces of the city e.g. along the two spiritual axes etc.

• Four typical development conditions, characteristics of MXDs and urban spaces
This research identifies four typical development conditions of large-scale MXDs of Beijing: 1) master-planned business district; 2) central city area; 3) peri-urban area and 4) new town. Each condition provides a distinctive framework development condition for large-scale MXD projects and offers different support for urban spaces and qualities of large-scale MXDs developed within them. The correlation between the type of development condition, characteristics of large-scale MXDs and urban space typologies emerged within large MXDs has also been investigated and revealed in this research (see Chapter 5). Through the case studies of 7 urban space within 5 MXD projects in all these four development conditions, this research provides an insight on how large-scale MXDs and urban spaces within these projects have been made and shaped in response to the different framework development conditions, and how different conditions support different urban space typologies.

• A close relationship between public sector and private developers
Case studies in this research show a close relationship between public authority and developer/operator of large-scale MXD projects, or a strong power and involvement of public sector in large-scale MXD projects in their creation (planning interventions e.g. TOD, “Daizheng” spaces and facilities etc.) or/and operation process (e.g. utilizing MXDs as venues for public events). First, this could lead to more influence of public sector; Second, a result led by such close relationship has been the cooperation of both actors in the provision of public events in private properties, which has shown potentials in contributing to urban qualities to space within MXDs.

• Culture-specific use pattern of urban space
Obviously, the informal, temporary and collective use patterns e.g. collective dance performances observed in many cases of large-scale MXD projects are resulted by the special cultural and historical development of the city. Such use patterns have actually allowed external users and their informal activities to become part of the factors, which make and shape urban spaces and urban qualities within private large-scale MXD projects.
7.4. Towards an Urban Mutualism - suggestions

7.4.1. A space-centered approach

The creation of urban space should follow a coherent concept that is developed in response to the urban space network in its context, and through a systematic approach, which coordinates different actors and aspects and levels of making and shaping strategies. The space-centered view and approach proposed by this research include two essential aspects:

1) Including urban space (quality) concept as guidance for MXD

Traditionally, the urban spaces within MXDs are usually created as a by-product and serving element for MXD, which usually lead to similar appearance and dull performance of urban spaces within MXDs, undermining the huge potential value of urban space for both the city and the market success of an MXD project itself.

In comparison, the space-centered approach suggests a process in which the MXD is guided by the urban space (qualities) conceptualized at the early stage of development: At the beginning, a process of assessing existing urban spaces in the surrounding context is introduced, in which the assessment tool developed in this research can be used. The result of this assessment provides a finer description of the characteristics of existing urban spaces in the area and serves as a critical reference for conceptualizing the new urban spaces and qualities to be created. Based on the result of this evaluation, and the framework development condition, a concept of urban space with desired qualities and characteristics can be developed. Using the analytical framework (developed in this research), strategies can then be identified for the MXD project to achieve the conceptualized urban space and qualities, and possible “urban mutualism”.

This approach helps to establish a unique characteristic of urban space which is generated from the areal urban context where a large-scale MXD is situated and helps to guarantee the desired qualities of urban spaces which are generated in the process of large-scale MXD.
2) Establishing a coherent plan with interrelated strategies for defined urban space
As is pointed out previously, making and shaping of urban space quality through large-scale MXD is a process involving multi-level and multi-dimensional actors and activities. Therefore, to control the resulted urban space and qualities needs the combination and coordination between multiple actors and actions from different professions and both private and public sectors. While in the existing working structure, the making and shaping activities are divided into different operational levels and disciplines, a space-centered approach is suggested to enable a coherent plan with interrelated strategies to achieve the desired urban space qualities. To achieve this, an organizational suggestion is the establishment of a special sector or working package, which takes a defined urban space as central task, and coherently conceptualize, coordinate and control the making and shaping strategies of urban space in the process of large-scale MXD.

7.4.2. Change of view: large-scale MXD as urban infrastructure
It is necessary for public sectors, private makers of MXDs, as well as general users of the city to go beyond the preconceived view of large-scale MXDs through recognizing the shifting value of contemporary urban space, and to realize the potential of MXD as a feasible model in achieving such value - the potential for an “urban mutualism”, as is demonstrated by this research. Far beyond being merely an answer to the real estate market and places of consumption, large-scale MXDs should be viewed and dealt with as chances for providing a critical urban social infrastructure that is instrumental in preserving and enhancing the core value of physical space with the contemporary cities - infrastructure which facilitates face-to-face interaction between various people and groups. If this is understood, city government and urban planners definitely need to pay more attention for integrating large-scale MXDs into the city’s urban infrastructural network, and more precise control is needed regarding the urban spaces and qualities (to be) provided through these developments. Meanwhile, it is also critical for developers to realize the shifting value of contemporary urban space and large-scale MXD’s potential in achieving this value. Only when the unique value is achieved within a product, can it be irreplaceable in the market. For general city users, large-scale MXDs are chances where they can actively participate in the creation of urban space qualities and intensified urban experience.

The increasing recognition of the core value of (physical) spaces within the city in the society can eventually lead to changes of both user’s demand and the spatial practice towards the desired qualities and values. The built environment, which is significantly related to the values we hold (see Harvey, 2008), can, in turn, enhance or restrain such values. “In making the city man has remade himself”. (Park, 1967). Therefore, promoting the recognition of such value and demonstrating the potential of large-scale MXDs in achieving such value for all - public authority, developers, investors, planners, designers, managers, operators, and general city users - also belong to the key intentions of this research.
7.5. **Recommendations for future research**

Although intended for an objective evaluation, the assessment tool developed in this research (Chapter 2) can still be improved through introducing more or more objective criteria. Survey results of users can be used in the future to verify and improve the assessment tool.

The analytical framework developed in this research (Chapter 3) explains a complex mechanism of urban space making and shaping through the process of large-scale MXD. To make this framework more capable and the process of analysis more efficient, a software tool can be developed.

The four types of potential urban spaces within large-scale MXD (see Chapter 3) is a general classification. Further investigations are needed to explore the various sub-types of spaces within these general categories. For example, as has been shown in the case studies, both being type II urban space, the museum of Parkview Green and the park of Indigo have shown some evident differences regarding their urban qualities. Further researches should include the empirical study of more spatial typologies.

The conclusions of this research have been drawn through the case studies of Beijing. To refine the theories proposed in this research, more empirical investigations are needed for emergent types of large-scale MXD projects and hybrid urban spaces in other contexts.
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SE = State-enterprise  
SF = State/City + Foreign capital Joint Venture  
P = Private Local developer  
I = International background (including Hong Kong)  
L = Local
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9.1. Basic information on large-scale MXD projects in central city area of Beijing
Basic information on large-scale MXD projects in new towns of Beijing

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**Note:**
- **SE** = State-enterprise
- **SF** = State/city + Foreign capital Joint Venture
- **PF** = Private foreign or joint development entity(Incl. Hong Kong)
- **P** = Private local developer
- **International**
- **Local**
### Basic information on large-scale MXD projects in peri-urban areas of Beijing

<table>
<thead>
<tr>
<th>ID</th>
<th>Name, Ch</th>
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<th>total floor area</th>
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<th>serviced appartmen</th>
<th>office</th>
<th>Hotel</th>
<th>Retail &amp; Entertainment</th>
<th>Other uses</th>
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</tbody>
</table>

SE = State-enterprise
SF = State/city + Foreign capital Joint Venture
PF = Private Foreign or joint development entity(incl. Hong Kong)
P = Private Local developer
I = International background (including Hong Kong)
L = Local
9.2. Mapping - Large-scale MXD projects in Beijing (by 2018)

1. Landgent Center
2. East Gate Plaza
3. Beijing New World Centre
4. Beijing Viva / R & F City
5. Oriental Plaza
6. Indo Mansion
7. Beijing Fortune Plaza
8. Dacheng International Centre
9. GTC-Global Trade Center
10. Wanda Plaza
11. Xihuan Square
12. The Gate City Mall
13. The Place
14. The Place
15. Jianwai SOHO
16. Wangjing ICC
17. Focus square
18. SOHO New Town
19. Pingan International Financial Center
20. China Central Place
21. Pengrun IFM
22. Beijing Yintai Centre
23. Wanda Plaza
24. Xidan Plaza
25. Xidan Plaza
26. U-Town
27. Jinding Plaza
28. Glory City
29. Raffles City
30. China World Trade Center
31. China World Trade Center
32. Pangu Plaza
33. Midtown GC
34. Poly Golden Plaza
35. Beijing Guoson Center
36. Sanlitun SOHO
37. GYDF
38. Phoenix Place
39. Office Park
40. Seasons Place
41. SOHO Galaxy
42. Gongsan Plaza
43. LDHY Plaza
44. Jinmao Centre
45. Indigo
46. Kylin Zone
47. Tunsanli
48. Oriental Paris
49. Dreamport
50. Parkview Green
51. Beijing linked Hybrid
52. Sino-Ocena land We-Life Plaza
53. Gemdaleplaza
54. Taikoo Li Sanlitun
55. Paradise Walk
56. Wangjing SOHO
57. Greenland
58. SOHO Shangdu
59. Chaowai SOHO
60. Guanghualu SOHO 2
61. Chaoyang JoyCity
62. Oriental Kenzo
63. Beiyuan North Star
64. Henderson Center
65. COFCO Plaza
66. Kerry Center
67. Tongzhou Wanda Plaza
68. Lippo Plaza
69. Urban Rural Century Plaza
70. FUNMIX
71. Greenland Center Tongzhou
72. Greenland Center
73. Hademen
74. Harmony Plaza
75. Tiejian Plaza
76. Jinghang Plaza
77. Han’s Plaza
78. World Flower Holiday Plaza
79. Times Paradise Walk
80. Fengke Wanda Plaza
81. Changan Center
82. Jing Guang Center
83. Canal One
84. Rainbow Gate
85. New Beijing Center
86. International center of Chinese Merchants
87. Pearl River International Center
88. Greenland Center
89. Dacheng International Centre
90. Beijing Fortune Plaza
9.2. Mapping - Relationship between large-scale MXDs and metro network
Red = location of large-scale MXD (500m radius)

50 Parkview Green
51 Beijing linked Hybrid
52 Sino-Ocena land We-Life Plaza
53 Gemdaleplaza
54 Taikoo Li Sanlitun
55 Paradise Walk
56 Wangjing SOHO
57 Greenland
58 SOHO Shangdu
59 Chaowai SOHO
60 Guanghualu SOHO 2
61 Chaoyang JoyCity
62 Oriental Kenzo
63 Beiyuan North Star
64 Henderson Center
65 COFCO Plaza
66 Kerry Center
67 Tongzhou Wanda Plaza
68 Lippo Plaza
69 Urban Rural Century Plaza
70 FUNMIX
71 Greenland Center
72 Hademen
73 Harmony Plaza
74 Times Paradise Walk
75 Tiejian Plaza
76 Jinghang Plaza
77 Han’s Plaza
78 World Flower Holiday Plaza
79 Times Paradise Walk
80 Fengke Wanda Plaza
81 Changan Center
82 Jing Guang Center
83 Canal One
84 Rainbow Gate
85 Rainbow Gate
86 New Beijing Center
87 Pearl River International Center
88 Greenland Center Tongzhou
89 R&F Canal 10
90 International Center of Chinese Merchants

Source:
illustration by author
9.2. Mapping - Total floor area of large-scale MXD projects in Beijing

Source: illustration by author
9.2. Mapping - Site area of large-scale MXD projects in Beijing

Source: illustration by author
9.3. Outline: Semi-structured Interview

(Semi-structured interviews have been taken from 2016-2018 about the five selected large-scale MXD cases and seven urban spaces. All the interviews have been taken in Chinese, the appendix shows therefore only the structure and questions of the semi-structured interviews translated in English)

Interviewer: the author
Interviewee: chief project manager/developer of the large-scale MXD case investigated

Part 1. INTRODUCTION:
Dear Ms./Mr. X. Thank you very much for the time on this interview. This interview is part of my doctoral research. The main purpose of this interview is to understand the making process of this project and the urban spaces within it, and the key actors, activities and strategies and mechanisms that have influenced this process. All the information collected in this interview will be used exclusively for academic purposes. This interview is semi-structured, questioned will be asked to which you may provide open answers. The duration of this interview is about 1.5 hours.

Part 2. MAIN QUESTIONS:
General information:
# First, would you please introduce briefly the development process of the project and the role you have played?

Questions on Context and Initiation:
• Site conditions:
  # Which special conditions e.g. planning regulations or intentions of local authority have been attached to the site?

• Property market:
  # Which special market conditions have influenced the initiation of this project?

• Development entity and objectives:
  # How has this project been initiated?
  # Which are the main initiators and objectives of the project?

Questions on Conceptualization
• Financing concept
  # What is the financing concept of the project? How are its components financed?
  # Which are the main source of revenue and maintenance?
  # Which strategies have been used in conceptualizing the financing program?

• Functional/Use concept:
  # What is the functional concept of the project? Which are the main ideas behind this concept?
  # Which strategies have been used in conceptualizing the functions?

• Spatial concept
  # What is the spatial concept of this project? What are the ideas behind the massing and positioning of each use component?)
Which design strategies have been used?

• Managerial concept:
  # What is the management structure of this project? How are management responsibilities distributed?
  # Which management strategies have been used?

• Marketing concept:
  # What is the marketing concept and positioning of this development?
  # Which marketing strategies have been used?

• Role of urban space:
  # Why was this urban space created, or which role was the space supposed to play in this project?
  # Which types of users and use activities are intended for this space?

Questions on Implementation
• Detailed design
  # Which detailed design activities have been adopted on the project and the specific space?

• Management activities
  # Which management activities and strategies have been adopted on managing the space?

• Marketing activities
  # Which marketing strategies and activities and programs have been adopted on the space?

• Detailed program
  # Which detailed functions/program have been adopted on the space?

Questions on Operation and Use
# Which kinds of users and use activities can be usually found in the space?
# What is the relationship between users’ activities and the operation and management of the space?

Part 3. SUMMARY:
• Other information
  # Is there anything else special you would like mention about this project?
  Thank you again for taking this interview!
(End)
9.4. Academic background of the author

Yang Li

Since 2018
Research Associate
Department of Urban Design and Development
(Entwerfen und Stadtentwicklung - EST)
Faculty of Architecture, Technische Universität Darmstadt
Darmstadt, Germany

2013-2018
Doctoral research - “Towards an Urban Mutualism - the Making and Shaping of Urban Space through Large-scale Mixed-use Development: case study Beijing”
Funded by a 4-year scholarship provided by Chia Scholarship Council (CSC)
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(Entwerfen und Stadtentwicklung - EST)
Faculty of Architecture, Technische Universität Darmstadt
Darmstadt, Germany

Since 2016
Oversea editor of Chinese academic journal <Beijing Planning Review>

2013 - 2018
Research Assistant
Department of Urban Design and Development
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2012
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Wandel-Hoefer-Lorch Architekten
Saarbrücken, Germany

2010-2013
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Darmstadt, Germany

2009
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FCJZ Atelier
Beijing, China

2005-2010
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Tianjin, China