Contemporary Urban Design in Chinese Cities

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Background: China’s urbanization and the demand for urban space

Many scholars have listed China’s rapid urbanization one of the world’s most important events in the 21st century. China’s urbanization has four notable characteristics: huge population base; a fluctuating trajectory; rapid growth since the 1980s; and an uneven distribution pattern. These characteristics should be attributed largely to China’s history, culture norms, and urban policies after 1949 when the communist party won the civil war and took over the power.

With a total population of 1.34 billion and an urban population of 711 million in 2012, China is the largest country in the world in terms of population. However, urban population was less than 20% before the 1980s. The 2012 urbanization level was 52.6%, comparing to the level of 39.1% in 2002, showing an increase of urban population of 13.5%, or at a growth rate of 34.5% in 10 years. The population size and the rapid increase of urban residents make urban development a priority on government agenda. (Fig. 1)

The increased urban population are distributed unevenly across the nation, as well as the urbanization process took place unevenly over the last 60 years. Most of the urban residents and economic activities were concentrated in the east coast region, and rapid urban population increase was recorded in the reform era after the 1980s. (Fig. 2 and Fig. 3)

China’s urban development pattern at the national level experiences ups and downs. Government policy was the single most influential factor to the urbanization pace before the 1980 reform in this underdeveloped socialist country. Since China’s economic reform of the 1980s, economic growth and urbanization with an uneven development patterns have been the products of the joint forces of the marketplace and public policy. The emergence of the land and housing markets both were not allowed before the reform plays an important role contributing to the uneven development pattern at both the national and the local level.

Fig. 1  China’s urbanization 1949-2014
Fig. 2 Trajectory of China’s urbanization


Fig. 3 China’s four regions

Source: National Statistics Bureau of China, 2004

*Urban population refers to “registered urban population” excluding migrants
The rapid urban population growth in a short period of time and a fast booming economy in the east coast region which is rich in capital and human resources provide the background of the demand for urban space and the promotion of large scale urban design projects in China, the east coast cities in particular.

Types of contemporary urban design projects

Three types of urban design projects could be identified in classifying contemporary urban design activities.
First, urban renewal projects in all Chinese cities. These projects are usually an important part of the place-making efforts aiming to attract investment and/or visitors at global as well as domestic markets; they are supported by local government but could be funded by both the public and private investors. The main driving force of government support is to pursue local economic growth. The place –making practice is sometimes a competition strategy between cities.
2. New towns in large cities (with a population of at least over 5 million), such as new towns/ new districts in Shanghai, Beijing, Hangzhou, and Suzhou. In general, Chinese new towns follow the development model of the new town movement in European cities after the WWII, but the main purpose is not only to redistribute the growing urban population but also to stimulate economic growth by constructing new infrastructure and manufacturing factories in new towns. Over construction of new towns has become a concern to the central government in a slow housing market in the recent years.
3. Design projects for “Big Events” including the 2008 Olympic Games in Beijing, the 2010 World Expo in Shanghai and the 2011 Asia Games in Guangzhou. These projects are called “state projects” and attract world’s top designers. As a result, the design work for Big Events represents trends of the contemporary urban design profession in the world.
To summarize, we could find some common characteristics of China’s new urban design projects since the 1990s.

First, most projects are government invested and government led, and located in the developed east coast zones. These projects play a critical role in China’s successful economic growth and marketing cities for investors and visitors at the global stage. The majority of the urban design projects is for public space and public buildings in the public domain. The investment on urban design work from the private sector limits on housing projects, a common practice is high quality design work for gated communities.

Second, many projects are with huge investment and at a large scale. For instance, The 2010 Shanghai Expo project received $70 billion from the municipal government including $40 billion in upgrading infrastructure and constructing several new subway lines and new streets. The local government took loans and issued bonds for project financing. Considered Chinese people’s high saving rate (about 36% to 41%), the public sector affords the risk of huge debt. However, the increasing municipal debt has been warned by the central government since 2012, new policies have been issued to reduce the debt risk.

Third, these projects often have multiple purposes: stimulating economic growth; creating new jobs to rural-urban migrants (total of 275 million in 2013); showing government’s achievements by providing social stability and getting political legitimacy. These purposes are achieved to a certain extent.

Forth, a large number of projects are designed by top American and European design firms and architects (SOM, Sasaki, Piano, KPF, Haddid...) so these projects represent the world-class contemporary urban design trends and directions. The design work applies principles of New-urbanism (such as mixed use and TOD) and sustainable development (including green space and eco-friendly technique). Fig. 4 to Fig. 10 provide some cases showing the high design quality.
Fig. 4 Pudong New District in Shanghai (the city has a total population 23 million and a territory of 6600 sq. km)

Fig. 5 Urban renewal projects in Shanghai: new CBD in Pudong New District
Fig. 6 Urban renewal projects in Shanghai: mixed use as a tradition and as a urban design principle

Fig. 7 Newtown in Hangzhou: the Qiangjing Newtown by Canadian designer teams (shown in a model)
Fig. 8 Newtown in Hangzhou: the Qiangjing Newtown by Canadian designer teams (photos from a field visit in 2013 after the completion of the project). This is a showcase of the city’s economic achievement and the government’s political legitimacy.
Fig. 9 Projects for "Big Events": the 2008 Olympic Games, Beijing. The design team consists of Swiss, German and Chinese designers.

Fig. 10, Place making in the globalization ear: China National Performing Arts Center, designed jointly by French and Chinese architecture firms.

Costs of urban renewal and challenges facing Chinese cities

While most of the urban design projects are considered successful architecturally and politically, there are costs of these rapid developments and the costly place-making activities. Also, there are policy issues to be addressed. Fig. 11 to Fig 14 illustrate some of the issues to be addressed.

First, social, economic and environmental costs. The main social issue with urban renewal projects is relocation of residents, which in some cases even causes social unrest, similar to what happened in the US during the 1950-1960 urban renewal period. There are reports revealing the seriousness of the problem: about 60% of local court cases and appeals are relocation related in the 2000s.

From the economic perspective, pursuing rapid growth and confronting competition among neighboring cities stimulate local governments to encourage more renew projects which contributes to over-building, a problem causing urban sprawl, under usage as well as wasting investment. The problem is especially serious in so called second and third tie cities. Some new towns have been named “ghost towns” since 90% of the housing and commercial properties there are empty.

Urban sprawl and over building cause environmental damage. Also, construction waste and air pollution and over usage of China’s water resource are all related to rapid growth.
Researcher have expressed their concerns over challenges facing Chinese cities in the future.

1. Uneven development and the issue of sustainability. China’s GINI index was as high as 0.48 in 2013 according to IMF. Whereas the rich east coast zone is booming and getting more migrants, provinces in the west and northeast zones are losing population and facing a slow economy. Although the central government initiates more investment and public projects in these underdeveloped zones, the uneven development pattern seems hard to reverse in the near future. The 2010 Census found that Guangdong Province, the richest one in China, has become the largest province in terms of population, replacing Sichuan and Henan provinces in the west and northeast zones, both were listed the largest population provinces in the 1950s to 1990s. More migrants to the east coast cities also put burdens on the cities financially, physically, environmentally and socially.

2. Modernization and Chinese tradition: allowing more influence from the west or protecting the Chinese culture in urban development? Globalization benefits China’s economic success and introduces western culture and ideology at the same time. Westernization is a main concern to the Chinese Communist Party as well as many Chinese urban designers who could participate in joint projects with foreigners only as draft-men. It is fair to say that west firms are better in generating design ideas and developing themes, but they tend to search for “creative” forms rather than studying vernacular Chinese architectural styles. It should also point out that China’s local leaders often prefer hiring foreign firms to local designers because they want to show their “taste” following the “international fashion”. China’s young generation expresses a mixed feeling to the western culture including the imported urban design style, although at the same time they also expresses interests in the contemporary west design style.

3. Physical improvement vs. social change. The theme of the 2010 World Expo in Shanghai was “Better City, Better Life”. Some sociologists criticize that the theme should be applied into the whole society rather than to city residents in physical terms given the huge size of rural-urban migrants and the large underdeveloped zones. Many are expecting better social services to underserved residents in poor provinces.

As a conclusion, we may address concerns while giving credits to China’s new urban design projects. If the costs could not be overcome at least to a certain degree, could the “China development model” be sustainable, and working in other developing nations?
Fig. 11 New commercial projects by and for foreign firms are the focus of new development

Fig. 12 Efforts to preserving the traditional Chinese cityscape
Fig. 13 Shanghai’s backyard: gap between the rich and the poor

Fig. 14 City capacity showing high density—but how high is high? Chongqing’s downtown area

Reference