# Urban Design Practice in "Instant New Towns:" Case Study of Longgang District, a New Town of Shenzhen Special Economic Zone, China

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## PART I: BACKGROUND AND PROBLEMS Project introduction

## Description of the present economic status of SEZ and district of Longgang

Shenzhen is a lengendary city booming out from a small fishing village within ten years. It is situated at the south end of China, along eastern side of the Pearl River opening to the South China Sea. As one of the earliest of four Special Economic Zones in China since 1981, Shenzhen has enjoyed a set of privileged economic policies and turned into an energetic metropolis with population of over three million.

According to the strategic planning, Shenzhen will expand to an area of nearly 2000 square kilometers from 300 square kilometers right now. The local government seeks to realize 100% urbanization in Shenzhen in a short time. In other words, the whole outskirts and rural area will be urbanized.

In the conprehensive plannning, the surburb, formerly Baoan county, is becoming another two districts (Baoan and Longgang) besides the existing three districts (Luohu, Futian, and Nanshan). The grouped structure of urban layout in the planning attempts to organize the present villages and towns in the outskirts into 8 groups (4 in each district), which are assigned different priority urban functions such as transportation, communication, industry, tourism, district centre, etc.

Generalization of the project of Longgang District Planning Our project is concerned with the zone planning of the central group in Longgang district. It consists of Longgang, Pingdi, and Pingdi Centre, covers an area of over 180 square kilometers, and holds population of 200,000. According to the strategic plan, the group is to develop into the future admistrative, commercial, and cultural center of Longgang district. The study of urban design is one important field in our project.

## Problems

Urban design used to be disregarded by planners and developers. As China steps into the time of rapid economic development, there appeared large quantities of new towns needing to be planned or replanned. The area in our project represents this type of instant new town, possessing energetic power of development and active economic activities, but lacking the regards of culture, humanity, environment, and aesthetics. The problems could be demonstrated in particular as below:

Overdevelopment and devastating of the natural environment Since the new land policy has been implemented, in order to compete for foreign investments, many local governments are eager to expand the urban area and developers tend to trade raw lands without further construction. Then hills are levelled, wetlands are filled, woods are cut, and the local ecology increasingly deteriorates.

### Lack of open space

In China you rarely see the cozy plazas which are universal in European cities. Especially in

those new cities like Shenzhen, there are relatively sophisticated infrastructures compared with older cities, and yet much less public open spaces for civic activities. In other words, the instant new towns are becoming tedious economic machines without rich urban personalities.

## Anarchy of land use at micro level

As the market system was conducted in land policies, land use planning is turning from supply or plan-oriented to demand-oriented. Like two sides of a coin, when it propelled the instant new towns, it also brings about a sort of anarchy of land use, which severely ruins the local environment and degrades the life quality there. For example, in Shenzhen, shopping, residences, and offices are mixed up and are easily transformed to each other if profitable. The super blocks of residences are seldom seen here other than in some inland cities like Bejing, Shanghai, and Guangzhong.

## PART II: THE PRACTICAL STUDY OF URBAN DESIGN PRACTICE FOR INSTANT NEW TOWNS (THE CASE STUDY OF LONGGANG DISTRICT, SHENZHEN) Concept Definition

"Instant new town" is a typical form of those fast developing settlements in China. Most of them appeared around costal cities like Shenzhen. Since the Chinese government wanted to raise the urbanization level several years ago, instant new towns represent a very important phenomenon in present urban construction activities in China.

As the market economic system is entering the coastal cities quickly and strongly, urbanization of those instant new towns currently has totally different characteristics. Shenzhen is said to be more capitalist than some of its counterparts in Europe. Unlike urbanization in western countries, where peasants were driven to cities during the Industrial Revolution for livelihoods, here local farmers trade their lands with developers (technically, those fields still belong to the nation in name) while they became the town's nouveau riche.

Urban Design Practice in these new towns is not only an exploration of aesthetics, but furthermore a balance between planning control and development activities. Actually urban design was included in the Chinese planning system only in recent years when a lot of old cities set about historic conservation work. So it was sort of "view planning," which may include urban layouts, open space systems, walk systems, protection of historical buildings, skylines, etc. It was quite independent of economics. When those new towns began to boom under the market system, the current design methodology met the real chanllege: How to survive?

#### Case Study

In order to facilitate understanding, we chose the project of Longgang as our research case.

Longgang is the fastest growing suburb of Shenzhen. It holds an area of more than 900 square kilometers, three times the size of the present S.E.Z. It consists of four planned groups called: 1. Great Center; 2. Great Transportation; 3. Great Tourism; and 4. Great Infrastructure. "Great Center" is our planning site.

In the project we have several difficulties:

- 1. Complicated Planning Background
- 2. Ambitious target of urbanization

In 1993 the Shenzhen government set a goal to reach 100% urbanization and to catch up with the four "economic dragons" in Asia by 2020. Thereafter the related serial policies sped up the urban development drastically until the end of 1994, when the nationwide economic recession began. In our plan, we have to deal with the following problems:

- How to keep as much as feasible from the previous plans because quite a few among them have already been constructed by the former local town or village governments.
- How to coordinate the contradictory parts of the previous plans which may include land use, roads patterns, and service facilities.
- How to balance the interests of different institutions like the governments of different levels (village, town, district, and municipal).

3. Lack of consideration of urban design

Urban design has not reached its deserved position in

urban construction activities of China.

Under the market system, developers and goverments emphasize profits even with the loss of some quality in urban design. The phenomenon is also very obvious in our planning area.

We suggest local government urban design be included in different levels of planning. With their support we could step further in this field.

We feel the study of urban design must be connected with that of other problems like land use, infrastructure, etc. We attempt to establish a pattern which could put urban design to practical measures and be operated easily by local goverment. It will be elaborated in the following several sections.

#### **Dynamic land use control**

Land use is one of the most difficult issues we have been dealing with in the project. Former Chinese methodology of land use planning is purely functional, resulting from the planned economic system. It could not match the situation of Longggang, where the private sector is a main part of local investments. Here we will make further exploration in three directons:

1. Land ownership

Our planning site consists of two towns (Longgang and Pingdi) which include altogether 17 official villages. According to the Chinese constitution, lands belong to the nation. The rustic fields used to be recruited by a city goverment mandatorily if the city could get enough investment or a grant. Besides the very low and symbolic pay, a citizenship is the most compensation a farmer could expect.

But now in Longgang, an official village become the basic cell of local urban development. Foreign investers come to the village directly for speculation. Local farmers turn from land holders into stockholders by trading their fields with those foreign buyers. In view of land use, an official village contains industry, office, retail, commercial, and schools. The existing towns are just a rural hodgepodge of these villages instead of an urban integrity.

2. Investment entry

Investment is one of the important elements we have to consider in the project. Former Chinese planners took much less into their accounts because the investment primarily came from municipal appropriations. But now most of the new developments or instant new towns could not have been set up without the entry of private investment that comes from outside China. In most cases, those foreign investers hope the staff dormitories and the factories in which they invest could be built near to each other. Especially in an instant new town like Longgang center, most lands are rustic and lack infrastructure, while independent villages have already formed self-sustained service systems.

How to balance the investers' demand and urban land use

division rules? That is the problem we have to solve at this time. The failure of preceding planning proposals was that the land use planning was just a simple land use division, which may functionally conform to related academic regulations but practically conflict with the local economic situations.

3. Urbanization velocity

This is actually an extension of the above question. In order to realize the 100% urbanization goal within a short period, we may have to sacrifice some usual land use rules and compromise the existing conditions. We may not do perfect planning but a phased planning, which is feasible for the situation.

Based upon the above analysis, we are introducing an original land use pattern — which could be called "actively mixed land use system." It originated from the concept of "compatibility." As a criterion, compatibility has been used in land use control in China for many years. For it just passively compromises the existing situation, it finally loses the control of land use especially in district like Longgang district.

The new pattern we suggest keeps the ideal of compatibility of different land use, moreover it attempts to guide the developers into an idealistic planning track in an economic way. Firstly, we endeavored to mark the administrative boundaries of those villages so we could understand the investment boundaries. Secondly, we tried to integrate the similar land use in adjacent villages based upon the existing conditions. Thirdly, we made adjustments in the new land use pattern and fit it closer to the standard land use pattern — that is our phased plan, which is actually a balance between the existing and the perfect.

In the field of urban design, the pattern suggests setting up a package of policies, which encourage the increase of green space ratio (GSR), open space ratio (OSR), and recreational space ratio (RSR) with privileged floor area ratio (FAR).

## **Urban Design Study and Implementation**

Only after we discussed the land use as urban design research does the scheme achieve meaning.

A lot of urban design proposals are most disadvantaged because they are just staying in the blueprints and are quite separated from development activities. In the project, we attempt to combine each part of urban design with the implementation system.

1. Three domains

The planning area is defined into three domains that contain different urban themes.

- Domain A: the western part. It will develop into future CBD with many offices, banks, and mega-commerce.
- Domain B: the southern part. It will develop into an old town holding many shopping malls. Human scaled space should be the main theme.
- Domain C: the northern part. It will become the center for education, sports, tourism, and middle and high-

classed residences. It may be characterized by a quantity of green lands with beautiful landscape and natural tranquility.

2. Open Space creation

It is our priority to create and keep serial open spaces in our planning site. Because of high land values, those open spaces in blueprints use to be devoured by the shrewd developers. In Shenzhen many plazas are becoming parking lots, flea markets, or ever constructon sites. How to keep open spaces from those poachers? It is the question we try to answer in our study.

Our solution is to connect the open spaces with public facilities. By investigation, we know that the local government strictly stipulates the land for schools, hospitals, libraries, sports, and parks, etc. We planned open spaces together with these public facilities and suggested that the local government see them as an integrity. In our plan, open space creation is not only systematic, but also very physically functional, supported by public service facilities.

3. Green Ring

We planned a ring of green belt among three domains. It is composed of waterfront greenland along the Longgang River, a pedestrian system independent of the road network, boulevards, and green separators. In the southeast there is a green passage which holds the potential infrastructure facilities for the future like sewage, water supply, waste disposal, and power stations. The other part of the ring connects the different types of open spaces together with the public facilities, which could also be accessible by vehicles. Within the green ring, the users (those are on their way to schools, libraries, or work, including tourists) could enjoy the beauty of nature, which is increasing far from the urban inhabitants. The green ring puts the three domains into an integrity. It is "the spine of the city."

## PART III: CONCLUSION

1. The role of economics in urban design practice is decisive.

Especially in instant new towns like Longgang, any attempt or plan about urban design must be connected much to local economic development. That might be a compromise but a very practical way in China.

2. Social mentality is another important element we should consider.

Considering the lack of understanding of urban design in localities, how to promote the conception to local developers and governments is another sensible task for planners. There is really a long way to go in this field.

3. A good urban design plan shoud be firstly operational. In particular, the harmonious cooperation between planners and government is key to feasibility of the urban design plan. In a sense, urban design practice conflicts with local economic development and under the present market mechanism, the understanding and intervention of the local government is most powerful tool we could use to keep urban design practice in our planning.

Therefore not only did we set guidelines in urban design, but we put emphasis on how to establish the operational network in our plan, which may be in very physical details (for example the digitalized control of land use intensity) under the consultations with local governmental agencies.

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#### REFERENCES

- Planning Theory and Philosophy, Travistock Publications Ltd. 1979
- Gungahlin Policy Plan: Implementation Plan, Published by the National Capital Development Comission, Canberra ACT Australia, 1988
- The Strategic Plan of Longgang District, Shenzhen 1995, by Longgang Branch, the Planning Design Institute of Shenzhen.
- Urban Planning Methods: Research and Policy Analysis, by Ian Bracken, Published in 1981 by Methuen & Co. Ltd.
- The Comprehensive Research of Protection of Natural Environment in Longgang, by The Institute of Environmental Research in Beijing, 1995