Urban Integrated Activity Zone (UIAZ) in Shanghai

Shunyao Zhang1, Yi Chen2

Abstract
Urban integrated activity zone (UIAZ) refers to multi-functional area that can provide various services. Integrated activity zone (IAZ), which is based on the existing financial district and Central Business District (CBD), often weakens administrative boundaries and changes the original single functional partition. It emphasizes the mixture of different functions and the vitality of the central area. The construction of IAZ is different from the simple space construction of economy and material production. IAZ emphasizes the participation of city dwellers in urban renewal process. Shanghai IAZs are those vigorous public activity centers in Shanghai. Just like those active cells, IAZs in Shanghai are to inspire and improve the comprehensive competitiveness and vitality of the city at macro, intermediate, and micro level, they are the public places in which urban cultural life takes place, develops, and precipitates. This paper provides broad and profound presentation on IAZ structure planning in Shanghai: mix-used function, multi-dimensions scale, people oriented development (POD) transportation, commercial development, and city form vitality. This paper provides not only qualitative analysis, but also makes a serious attempt to quantify the result and statement.

Keywords
Integrated activity zone (IAZ), mix-used function, city vitality

Shanghai metropolis is the largest city of Yangzi River Delta in China. Its role as the financial and economic hub for South-Eastern China has resulted in a large number of rushing in population and rapid growth in construction. The population of Shanghai metropolis has increased from 16.1 million in 2000 to 18.6 million in 2007. The ongoing urbanization in Shanghai has been posing a huge pressure on the development of the city center. It requires integrating the traditional city center to develop the key functional areas in the city.

The past 10 years can be regarded as a period of fairly good progress for Shanghai. However, viewed from an overall perspective and compared with the international metropolis, there are some problems that might curb the development of Shanghai in the future, e.g., the expansion of the city is out of order, the single downtown structure is not properly tackled, the way how the land is used has turned from concentrated mode into extensive mode which causes the problem of encroachments of land; financial and business sector are only 12% of the economy (New York is 32%, London is the same, and Berlin is 22%), etc.

1Lanzhou University of Technology, China; Tongji University, China
2Tongji University, China

Correspondent Author:
Shunyao Zhang, College of Art and Design, Lanzhou University of Technology, Langongping Road 287, Qilihe District, Lanzhou 730050, Gansu, China
E-mail: 2011shunyao_zhang@tongji.edu.cn

When it comes to the competitiveness in different social aspects, there is a big gap between Shanghai and those cities in the world. Taking Tokyo as an example, Tokyo is the third in the overall competitiveness, while it is the first in education, service, manufacturing, hi-tech industry, technology innovation, and social management, it is the fourth in financial industry (Shanghai is the 26th), it is the 26th in humanity environment (Shanghai is the 102nd).

Taking another Asian city as an example, Seoul is the 12th in its comprehensive competitiveness, however, it is the seventh in education in the world (Shanghai is the 11th), it is the 63rd in humanity environment (Shanghai is the 102nd), Seoul is the eighth in hi-tech (Shanghai is the 40th), it is the 35th in technology innovation, while Shanghai is the 54th in the world. It is the 37th in public service (Shanghai is the 124th). Compared with Tokyo and Seoul, Shanghai is less competitive in financial industry, service industry, manufacturing, hi-tech, technology innovation, education, humanity environment, public service, and social management. It is even far less competitive if compared with New York, London, and Paris.

According to this report, Shanghai is not as competitive as some cities in China, e.g., it comes the second (including Hong Kong, Taipei, and Macao) in education, it is the fourth in financial industry, service industry, industrial structure, and humanity environment. It is the fifth in manufacturing and living environment, it is the sixth in social management, eighth in natural environment, 10th in public service, 12th in security of society, 13th in company culture, 14th in shopping environment, and 16th in natural environment and accommodation.

The report from Lavabo University stated that when it comes to the overall competitiveness, Shanghai is in the third group, while New York, London, Paris, and Tokyo belong to the first group. To be more competitive, some actions are needed to raise the rate of the percentage of financial industry, business, and service industry in Shanghai’s economy. The third industry has to be further developed, public service system and city environment have to be improved, unbalanced discrepancy between different areas in the city has to be narrowed down, city function has to be broadened, and used land has to be reused to improve the efficiency of land use. To achieve the goal, the integrated activity zone (IAZ) is a good choice.

The idea of IAZ is the combination of the idea of sustainable city: eco city, green city, low carbon city, culture city, and innovative city. The IAZ theory aims to improve the city environment, balance the development of city center, and explore the advantages of activity zone to the full. It is expected to promote efficient land use while satisfying the needs of industry upgrade and increased expectation of living standard from people. The theory is important to develop the city space in Shanghai. It is one of the most important strategies in propelling this process to promote the quality of urbanization of Shanghai.

There are similar theories and practice in developed countries, such as the concept of Central Activity Zone (CAZ) of London, it aims to integrate the traditional city center and develop global key functional city center.

Even though New York did not have the similar theory, New York City center has the typical features of IAZ. World-class banks, insurance companies,
international companies can be seen in Wall Street in New York’s key functional area, the Fifth Avenue which is famous for the world-class brands, Broadway which attracts world famous dramatists and dramas can be seen in the key functional area in New York, business and entertainment facilities are available in these areas.

The aim of this study is to explore ways the competitiveness of Shanghai as a global metropolis can be improved. This was achieved by using related domestic and western theories to investigate the urban integrated activity zone (UIAZ) that makes up the city of Shanghai. By using UIAZ, city vitality and urban planning theories as references, a broad intensive review was undertaken of UIAZ structure planning in Shanghai: the mix-used function, multi-dimension scale, and people oriented development (POD). Transportation, commercial development, and city vitality in relation to Shanghai are also discussed in this paper. A background study of successful historical examples of the implementation of the theories in both London and New York has provided valuable information for the continuing debate on strengths and weaknesses of modern metropolis with relation to the subject city.

SWOT (STRENGTHS WEAKNESSES OPPORTUNITIES THREATS) ANALYSIS OF SHANGHAI

In order to briefly examine the strengths, weaknesses, opportunities and challenges relating to the subject city, a SWOT (Strengths Weaknesses Opportunities Threats) analysis was undertaken.

The strengths of Shanghai are:
(1) Geographical advantage: The city is situated on the coast and the Yangtze River Delta;
(2) Historically: The city has always been an important port city;
(3) The city has an efficient regional traffic network;
(4) There is a strong stable local economy;
(5) Rich technological environment;
(6) Good infrastructure;
(7) There are rich tourism resources;
(8) The city received a strong economic push from the 2010 Shanghai Expo.

The weaknesses of Shanghai are:
(1) An inadequate concentration of financial organizations and professionals;
(2) Too much administrative control of the financial market;
(3) Under-developed and inefficient use of resources;
(4) Under-developed information network;
(5) Poor quality of service in the service sector;
(6) Unbalanced patterns of consumption (with regards to housing and food);
(7) Disregard of cultural value objects and structures when developing urban landscapes.

The opportunities in Shanghai are:
(1) Opportunity to engage with globalization;
(2) Rapid development of the Chinese economy;
(3) The ongoing developing importance of Shanghai as a world-class city;
(4) Continuing support from the Chinese Central Government;
(5) The local economy was boosted by 2010 Shanghai Expo;
(6) The integration of the service sector within other related industries.

The threats in Shanghai are:
(1) Pressure from being an international finance centre;
(2) Challenges and competition from other important Chinese cities, for example, Hong Kong, Shenzhen, and Hangzhou;
(3) Problems resulting from the recent global financial crisis;
(4) The fierce competition of globalization could
result in a negative impact on Shanghai.

THE THEORY OF UIAZ

In the study entitled “urban integrated activity zone in Shanghai” by Shanghai Municipal Planning and Land Resource Bureau, a proposal was put forward to build UIAZ in the core functional areas of Shanghai. The aim is to establish an integrated central network of different activities in order to strengthen the concentration of social and business related activity in the city centre. This proposed network included current and future planned comprehensive activity areas, with a number of centres of different sizes and functions linked by the public transport system. It was proposed that the service radius of these integrated zones would overlap with each other in order to make it easier for people to work and socialize within those areas. UIAZ focused on the efficient use of land and resources and industrial upgrading to meet the demand of people’s rising living standards and expectations (see Figure 1 and Figure 2).

Similar theories have been put forward and acted upon in Europe and the United States, for example, London uses CAZ, New York has not put forward the concept of “urban comprehensive activity area” as their central activity area in New York which relies on the development of the Central Business District (CBD).

It is becoming increasingly important to improve the competitiveness of the international metropolis in this age of globalization. Some cities are struggling to be competitive, while others already benefit from being attractive and fascinating metropolises. The following question can then be posed. Why do some cities survive in the global competition, while others are unable to? It might not just be a question of economic development, but also a question of how to organize and plan the city.

The past 40 years have witnessed rapid development in Shanghai and now it is one of the largest cities in the Yangzi River Delta of China. But, according to the report of Ga WC (Globalization and World Cities) conducted by Loughborough University. Compared with many other international metropolises, Shanghai is only on the third line (level) of world cities, with medium income level, medium creativity, and medium growth rates, while London, Tokyo, New York, and Paris are on the first line (level) of world cities. The report points out that London and New York are typical examples of the most successful metropolises in the world.

New York City has world-class banks, insurance companies, multinational company headquarters, Wall Street, Fifth Avenue, and a world of dramatic art Broadway. It can easily be seen that commercial representative offices, business, and entertainment facilities are all within easy reach of each other.

London’s central activity areas are the core functional areas, they are not only the centre of development of financial and business, but also the centre of tourism, culture, and recreation.

Some common features that both London and New York central activity areas share are:

1. In addition to being the centres of commercial offices, finance, insurance, information consultation, and commercial retail, they are also a centralized traffic location;

2. There are centres of public facilities: At the core of the cities, there are leisure squares, cafes, bars, restaurants, museums, exhibition halls and other large cultural and entertainment facilities, like cinemas, theatres, diverse places of performance and high quality entertainment, experiences, and leisure.

Apart from the obvious historical attractions of London, the two cities have other things in common:

1. Both cities have mixed functional areas with business, commercial, financial, cultural, residential, recreational, and exhibition centres in the city;

2. Both cities are the place of intense concentration of capital and talents;

3. Both are centres of communication and
Figure 1. Shanghai City IAZ Multi-Scale Network Structure.
Figure 2. Shanghai City IAZ Multi-Functions Network Structure.

(4) Both are places with relaxing environments and leisure attractions.

Drawing on the examples of London and New York, the proposal was put forward for consideration by Shanghai Municipal Planning and Land Resource Bureau to build multi-functional IAZ in Shanghai, in order to enhance the vitality of Shanghai and increase the attraction of the city. Taking Shanghai’s development goals and the present situation into account, the main objectives of building IAZ in Shanghai are listed below:

(1) Mix the functions of finance, business, commerce, culture, exhibitions, entertainment, and dwelling in order to create a vibrant city;
(2) Attract capital investment and talented personnel;
(3) Cultural centre for fashion, the arts and frequent information exchange (as witnessed at the 2010 World Expo);
(4) Centre for diverse entertainment: providing people with spaces for relaxation, socializing, and diverse experiences;
(5) Accessible transportation: People need to easily access public transport and walk friendly areas as in Hong Kong;
(6) Pleasant environment: provided by parks and trees.

The aim of building an integrated urban activity
zone in Shanghai is to improve the urban spatial layout of Shanghai, by improving urban environment, balancing the development of the city centre, with mixed functions that complement each other and enabling Shanghai to develop in a sustainable way.

**PROBLEMS IN SHANGHAI**

The SWOT analysis identified some current problems with Shanghai’s business district. They are:

1. Intense population density in the city center;
2. The historical problem of intense development and uneven distribution;
3. The spread of urbanization;
4. Single center of the urban space structure;
5. An extensive adverse historical pattern of land use (low building density and plot ratio);
6. Limited space and environment for financial development;
7. Culture played a less important role in the city’s past development plans;
8. Insufficient concentration of Shanghai’s financial and economic centers;
9. Inadequate sub-centers in Shanghai;
10. Thoughtless and careless use of land, before the metro construction;
11. Uneconomical scattered green areas;
12. Increase in maintenance costs of the present spread of urban green spaces.

**METHODOLOGY & STUDY DESIGN**

Based on the comparison between Shanghai and other metropolis in the world, the development and evolution of the IAZ in Shanghai were analyzed in detail, development strategy and resolution were discussed.

**Study Sample**

The city center in Shanghai is studied within the framework of space network of integrated activity zone; field study is carried out in Renmin Square, the walking street of Nanjing Road, the Bund Square, and xiaolujiazui. Observation and analysis are carried out in Xujiahui and the peripheral areas.

**SHANGHAI’S IAZ STRUCTURE PLANNING**

With the pressures of globalization and the development of the Yangtze River Delta, Shanghai is becoming the major economic center of the area. Shanghai is connected to Jiangsu, Zhejiang, and Anhui provinces and the world’s major global cities by economy, culture, and trade. According to “The Twelfth Five-Year Plan” and “Shanghai’s 2040 master and zoning plan”, the proposed IAZ structure planning of Shanghai is one of multicenter and open space networks (see Figure 3). According to the plan, there will be one core IAZ and five important IAZs within Shanghai, they are: Hongqiao IAZ, Jiangwan-Wujiaochang IAZ, Huamu-Pudong airport areas IAZs, World Expo Garden area IAZ, and several other main IAZs, like Zhongshan Park main IAZ, etc.

The core IAZ includes the original financial center, the Pudong-Lujiazui financial center, the Bund Financial Center, and the north area along the Bund financial district. The land area is about 30 km². The area concentrates on the global oriented financial and service facilities and provides more than 30% jobs in the city. It enjoys easy access to high quality living and life service facilities. The plan is to expand the present core IAZ, by reorganizing two single CBD with a business center, culture, recreational and activity areas. The proposal is that the city center must be reorganized to fit it for an industrial structure transformation. This will promote intensive land and business development.

A regeneration of the city center, for residential purposes, offices, Foreign Consulate Offices, and retail stores has been proposed. The public environment is to be improved and walking and cycling encouraged, so reducing traffic pressure on the
environment. Public spaces will be returned to residents and visitors in order to enable communication, recreation, and exercise to promote urban vitality and comprehensive competitive power.

**CONCLUSIONS**

The aim of Shanghai’s UIAZ Planning is to increase the city’s vitality and competitiveness and pave the way for Shanghai to participate in global economic competition and cooperation. At the same time, Shanghai’s UIAZ Planning is a space transformation strategy, to enable the city to adapt to the transformation from investment driven to innovation/industrial driven economic development.

**Acknowledgements**

The authors would like to thank Professor Shiling Zheng for his kind help and support.

**Funding**

This research is supported by Shanghai Municipal Planning, Land & Resources Administration (Gtz20100010) and NSFC
References


Bios

Shunyao Zhang, Ph.D. candidate, Tongji University, lecturer, Lanzhou University of Technology, Lanzhou, Gansu, China; research fields: the theory and practice of the ecological city and sustainable architectural design.

Yi Chen, Ph.D., professor, Tongji University; research fields: the theory and practice of the sustainable architectural design.