Title:
“Quality-oriented urban development pattern? – Case studies in Shanghai against economic transition”

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Abstract:
After more than 30 years' growth, Chinese cities, especially in the eastern region, are confronting the great challenge of economic transition. The further economic development is depending more and more on the capacity of whole social and environmental foundation. The former pattern with one-sided emphasis on GDP growth cannot continue.

This paper will concentrate on the transition efforts in urban development pattern with case studies on different spatial levels. A hypothesis, quality-oriented urban development pattern will be discussed. Improvement of spatial quality in the existing urban space will play the central role to make balance among the economic, social and environmental aspects in the future.

Since Shanghai is seen as one of the most important cities in China for economic transition, city government has also announced its new development concepts. Economic growth is not seen as the only important goal any more. Social and environmental issues have gained more and more
attentions, which are seen as the basic foundation for sustainable development.

The transformation's path from the former to the new pattern will also be analyzed. The value system in the urban development will be adjusted in solving the constantly emerging problems. Concerning such significant changes occurred in a very short period, the author will also discuss different critical factors (integration into global economy system, rise of service sector, renovation of development concept as well as urbanization and regional cooperation, in development frameworks) and related criterions (organizational pattern in public sectors, learning new life style, ecological planning efforts, urban regeneration efforts with cluster cultivation, great Leap in infrastructure, extroverted urban structure) as embodiment in urban planning practice.

After the host of EXPO in 2010, Shanghai has gained great influences in the media world and improved its infrastructure standard. Based on these achievements, Shanghai’s efforts to pursue world city’s status try to cultivate better life quality in the city. Knowledge economy has been taken as one important development model in the economic transition’s process. Accessibility and life quality for the investor and corporations as well as high-qualified work forces have gained attention to the decision maker. At the same time, a more balanced development in the regional structure is also showing its importance at the same time. The networks in the whole city region with multiple-centered spatial structure will be strengthened in the urbanization’s process.

Two case studies will introduce the transformation in goals setting and implementation process with the focuses on the accessibility and life quality.

One case is about development plan for Hongqiao Business Park, one of three focus development areas for Shanghai. The city government has developed a comprehensive Hongqiao Transport Hub in the nearby, including airport, railway station as well as regional coach system on the national and regional level. This project aims to develop a series of service sectors with the support of this Transport Hub. The ideas like carbon natural development or mixed land use to develop an attractive business community are implemented.

The other case locates in the south direction of the first case and has good connection with each other. A new development strategy for one area with about 126 km² in the outskirts of Shanghai’s city center is been advanced. This new area is seen as the center with great science park and hi-tech industry for Shanghai’s global city efforts. The accessibility from the Hongqiao Transport Hub and the cultivation of local life quality are seen the interconnected sides between each other. On the regional level, Huangpu River flows through the planning area and connect different parts in the whole region. E.g. the city centre as financial center will take more cooperation with this area for the regional development in fields like R & D, Hi-tech production as well as residential functions.

1 Reorientation in urban development after mega-events

With reestablishment of market economy, China’s reform policy has achieved over 30 years’ economic boom. Authorities in decision making for urban development have been authorized from national government to city government. Economic structure in China has also reflected the update from an agricultural country to an industrial country. Even several developed cities in China’s eastern region begin to experience deindustrialization process.
This transformation is marked with hosts of a series of mega-events, e.g. Beijing's Olympic Game in 2008 and Shanghai's Expo in 2010. Such developed cities and regions have assumed the mission in connection with global economy. Their further development will also to a large extent depend on their own respective roles with global economy. The development of service sectors were accordingly accelerated in a short period. As a result, such cities are confronting a series of challenges of economic transition.

A hypothesis, quality-oriented urban development pattern will be discussed in this paper. Improvement of spatial quality in the existing urban space will be taken seriously as important strategy by decision maker in the economic transition's process. Concerning such significant changes occurred in a very short period, the author will discuss different critical factors in development frameworks and related criterions as embodiment in urban planning practice. Thereafter, this reorientation process will be concretized with two case studies in Shanghai. One case as a key development project has been implemented during the Expo. The other case as strategic planning study just delineates reconsideration of development concept and related development path for the local decision maker after host of Expo.

2 Transformation of development frameworks

2.1 Factor 1: Integration into global economy system

Host of mega-events epitomizes the efforts for integration into global economy system. A series of strategic projects and communication activities have provided extensive chances both in material and in immaterial categories for international cooperation. The participation of stakeholders from different spatial levels has been more and more strengthened in this process.

These cities will also play the leading role in the China’s modernization strategy according to national government. Although the whole country is still in a generally industrialization stage with rapid urbanization, Beijing and Shanghai have already expressed their ambition to become world city like London, Paris and Tokyo, which play important role for world economy.

And this opened a new era for China’s spatial development. These cities begin to change themselves as important node in global urban system. The efforts are reflected in above-mentioned projects, strategic investment with support from national government, as well as transformation in planning value system for decision maker. The spatial structure of these cities and regions has reflected these transformations in many aspects.

2.2 Factor 2: Rise of service sector

Compared with exemplar references, world city building is analyzed and a series of operational criterions have been prepared for real development program. In general, the further strategy concentrates in service sector development, especially in global oriented sectors such as finance, commerce and trade, transportation, research and education, culture industry, tourism etc.

Except for such policy reason for updating of economic structure, the strengthening of global economy in above mentioned sectors lead to immediate pressures on property rent for existing economic sectors like manufacturing. This process was also strengthened by related city marketing strategy, that investors on global and national levels and world-wide tourists can be encouraged to achieve their existence in urban space.
2.3 Factor 3: Renovation of development concept

It is also realized that such economic sectors have high requirements in the spatial quality and host of such mega-events provides great chances for city government to adjust the spatial characteristics according to these requirements.

In this meaning, service sectors’ development requires a systematic adjustment in urban space. With experiences learned in the mega-events, city government also noticed the gap in reaching such goal. As a result, their perspective and goals setting for development concept have been gradually adjusted. Economic growth will not be taken as relatively independent works as before. Its further development in relation with service sector depends on to which extend the social and environmental issues will be integrated into a new development pattern.

This consciousness has been certified by the interview from Shanghai’s mayor Han, Zheng.

“Shanghai’s further development cannot continue the old pattern in one-sided pursuing GDP growth. Not only in daily work but also in the contemporary study on Shanghai’s ‘12th Five Year Economic Plan’, we have already weakened the privileged status of GDP growth and correspondingly transformed our understanding with emphasis on issues like structure, quality as well as efficiency in economic development.” – Interview with “Caijing” Magazine 2010.09.21. Translated by author.

(Caijing (财经) is an independent, Beijing-based magazine devoted to information on companies in China. The publication’s title means "Finance and Economics Magazine.")

2.4 Factor 4: Urbanization and regional cooperation

Relying on economic achievements, cities with leading role have attracted large amount of population from other parts of the country. And this further promoted the expansion of existing built area. With the rapid modernization in transportation infrastructure facilities, existing city centre and other suburban area are closely connected with each other. Many key development projects have been also consciously guided into specific suburban areas with support from city government.

As a result, spatial development for cities with leading role is experiencing the transition of its development scale from city level to the regional level. In this process, the city centre and its suburban area will assume different roles respectively based on the economic cooperation. City centre is mainly undertaking the service functions on the international, national and regional levels. Suburban area will develop other different functional branches for the regional economic system. For the whole regional development, city government will try to make sure specific development corridors, so that the economic cooperation could be strengthened with each other among different municipalities according to this spatial structure.

Although the attitude of city government is still important to allocate resources and set up regulation with development priority for different area in the suburb, the different characteristics based on respective resources and location provided the extensive space for the urbanization and economic development on a regional level.
3 Criterions in urban planning practice

3.1 Criteria 1: Organizational pattern in public sectors

In the early stage of reform policy, Chinese cities were organized basically by centrally-planned economy system. The decision making will be exclusively carried out within public sectors. Private sectors have very limited influences in this process. The urban planning practice concentrated mainly in specific industry project. Land use programs were carried out to meet the direct demand of such program. The service functions were restricted in a very limited scope.

The new goal to develop service industry, in which the related requirements in scale, complexity and space characteristics are totally different from former pattern with specific industry project, has shown the necessity to make adjustment in organizational pattern for urban planning establishment and implementation.

With experiences in a series of projects, especially in mega-events, the new cooperation pattern Public-Private Partnership has been introduced into urban planning practice for Chinese administrational system. City marketing strategy has also achieved more and more attentions to city governments. In this way, although the decision making’s process is still mainly carried out within administrational system, the authorities and goals setting from different levels and different sectors have already been differentiated and these sectors have tried to make cooperation with each other as well as with private sectors. In last several years, the development trend of service sectors has strengthened the diversification’s process in land use pattern.

Besides, concerning the more and more complicated requirements of service sectors, the efficiency and organizational structure of public sectors have to begin to make a series of adjustment. Public sectors also contribute to develop specific platform to meet diversified requirements for the service sectors.

3.2 Criteria 2: Learning new life style

Besides the dramatic changes in economic field, the transformation in social and cultural fields could not be neglected in this process. For city government, integration into global economy system means not only necessary preparation in hardware aspects such as investment in related infrastructure and facilities. A proper milieu and cultural atmosphere for global economy will be also greatly required. For this reason, during the host of mega-events, the international communication concentrated in the introduction of global consumption culture. At the same time, the economic growth in China created a newly rising middle class in last several years. The global consumption culture has been strongly accepted by the middle class.

The international communication has introduced extensive information for Chinese urbanities. A series of projects such as grand projects, the new design works by international architects have significantly shown the new taste.

As a result, consumption culture and related service sectors have achieved great importance for economic development in these cities. The city government has also noticed the great potentialities in economic growth in such sectors. Beijing has even taken culture related industry as key industry sector for its future efforts in building world cities. In Shanghai, except for tourism development, culture related sectors were utilized to redevelop the existing industry structure. The historical
elements have shown important economic attractiveness for tourists, investors.

In this meaning, the new learned life style during international communication plays an important role in whole economic transformation process. In the globalization era, the global consuming culture has greatly enlarged its influences in such cities pursuing to enhance their status in the global urban hierarchy.

3.3 Criteria 3: Ecological planning efforts

As catalyst factors, host of mega-events has strict environmental standard and this leads to the popularity of ecological concept in China’s urban development. Besides, city marketing strategy concentrates a lot discussion in sustainable development in contemporary Chinese decision making process. In this way, the host of mega-events has even provided important chance to demonstrate the ideal image of sustainable development in a series of development projects. Especially in many new development areas, the concurrence strategy aims to cultivate attractive atmosphere for enterprises and high qualified labor force. And this is also supported by the preference of investors.

With the consciousness to cultivate suitable spatial quality for service sector, the ecological planning practice has obtained much more attention to decision maker and also to the developer than before. As a result, the related topics, such as ecological planning, energy saving as well as low carbon, have gained a distinguished status. In real urban planning practice, the works e.g.in fields of urban form and density, urban infrastructure and mobility, landscape, as well as energetic renewal projects, will also reflect this new trend and bring the new pattern into reality through a series of projects.

3.4 Criteria 4: Urban regeneration efforts with cluster cultivation

With reference to world cities, Chinese city tries to provide a suitable space for service sector. As a result, the aesthetic issues were taken as serious instrument in the urban regeneration process, so that the inner city and other important development area will attract the investors and enterprise properly.

The development projects will also concentrated the potential economic factors for the spatial layout and other related issues in urban design projects. In this way, the efforts to cluster cultivation have been also introduced into today urban development in Chinese cities.

Different from former role with centrally-planned economy color in old industry area, public sector needs to prepare service platform for diversified enterprise and other related factors, so that the economic activities can be supported with each other. In this way, production- and consumption-oriented service sectors will locate together, so that a series of clusters could be cultivated.

3.5 Criteria 5: Great Leap in infrastructure

Actually, the above-mentioned aspects in urban planning practice depend fundamentally on the development of infrastructure. And this provided the foundation for further economic transformation. Urban regeneration program is always supported by infrastructure development. As one of most important issues, national government will assume the development like renovation in infrastructure on national level for stimulating economic growth. For example, China has finished long distance construction of high speed railway system in last several years.

The host of mega-events brought great leap for the modernization standard in urban infrastructure.
The new high way, subway system, airports, as well as other municipalities in environment and energy fields, contribute drastically for economic growth. In this meaning, the efforts of public sectors have significantly accelerated the integration into global economy by means of infrastructure development. Concerning the complexity of service sectors, the public sector will concentrate their efforts in the field of infrastructure and platform building instead of direct intervening in the enterprise operation.

3.6 Criteria 6: Extroverted urban structure

Efforts to integration into global economy system and corresponding adjustment of spatial structure on regional level have the related reflection on an extroverted urban structure. The networks in the whole city region with multiple-centered spatial structure will be strengthened in the urbanization’s process. City centre and suburban area will assume different functions for the cooperation on the regional level. The former introverted pattern in centrally-planned economy cannot continue any more, in which specific industrial projects regulated land use and determined the layout for facilities.

Besides, since the existing city centre cannot provide enough space because of over density, the existing land use tends to be converted into sectors for international, national and regional clients, other existing land use and new projects in such categories will be transferred in the suburban area.

In regions with leading economic roles, the immigration speed will keep a high level in the foreseeable future. Consequently, rapid urbanization on the regional scale will coordinate with the structure adjustment in the city centre. The extroverted urban structure will contribute to cooperation among different sectors, so that the integral capacity of whole region can be strengthened.

4 Case 1: Hongqiao Business centre

4.1 Outline

In the process to organize Expo in 2010, Shanghai has gained great influences in the media world and improved its infrastructure standard. Based on these achievements, Shanghai’s efforts to pursue world city’s status try to cultivate better life quality in the city instead of one-sided emphasis on immediate economic growth. Knowledge economy has been taken as one important development perspective in the economic transition’s process. Accessibility and life quality for the investor and corporations as well as high-qualified work forces have gained attention to the decision maker.

The first case study, Hongqiao Business Park, is one of strategic projects during Shanghai’s Expo preparation. With the aid of national government, city government developed a comprehensive Transportation Hub including airport, high speed railway station as well as regional coach system on the basis of existing Hongqiao airport. With help of Hongqiao Transportation Hub, this business park will assume the mission as Shanghai’s gateway in connection with other cities in the whole country as well as the adjacent regions in Yangtze Delta.

With such importance goals setting, Hongqiao area has been positioned as one of three focus development area on the city level. (The other two are Pudong Financial Center and Expo Park.) Its location in the near suburb area will also contribute to improving spatial structure for Shanghai’s region.
An international competition with high design standard was started. A German planning office won the first prize and got the following cooperation’s work with local national planning office for concreted design as well as consulting in legal planning establishment.

4.2 Platform for diversified service sectors

In a suburban area, there were already developed a series of industry park in the nearby. Considering the intensive concurrence other business parks, development will be carried out according to a differentiated competition strategy. Hongqiao Business Park will aim to create attractive business park with high efficiency for different enterprises in service industry. The development of Hongqiao Transportation Hub will provide extensive support for this business park like investment for infrastructure for the whole area as well as accessibility from international, national and regional levels.

According to the decision making for this project, Hongqiao Business Park will strengthen Shanghai’s capacity in the field of trade and commerce. The design team has furthermore analyzed the spectrum of different target groups in service sectors with consideration of location factors and Expo influences. On the regional level, regionalization in Yangtze-Delta provides great supports in this process. Shanghai located in a predominant status in the national railway system. This provides a very positive influence for a business park.

Furthermore, the location of Hongqiao area in near suburb implies the potential attractive environment quality with relatively low density as attractive characteristics. A mixed use land use strategy will contribute agglomeration effects among different sectors.
As research result, economic orientation concentrates in the cultivation of different clusters. Different sectors like logistics, information service industry, exhibition and tourism, retail, Leisure and entertainment as well as hotel are taken as main functions. The proportion of different industry sectors were also made sure with case studies in European cities like Frankfurt Airport, Hamburg’s Hafencity and so on. In this way, office function was mixed with public facility, hotel, culture & entertainment, conference as well as commercial activity.

At the same time, cultivation of community identity was emphasized. The capacity to provide high quality in production and consumption sectors was developed. Different categories with respective concepts such as livable environment and attractive atmosphere, social service platform, communication space as well as high quality life are also emphasized.

### 4.3 Low carbon Business Park

Except for the support in investment and accessibility, one of most important instruments for Business Park’s development is known as city marketing strategy. As one of subordinate project for the Expo, whose slogan with “Better City, Better Life”, Hongqiao Business Park is considered to be developed with high quality in Low Carbon technologies with related ecological planning methods.

With the technical support from German researchers, the operational standard for Low Carbon has also been defined. The goals of the Copenhagen criteria’s and to assume a reduction of CO₂-emission by 45% compared with the current Shanghai standard for buildings and compared with the average for mobility.
In the site of Business Park, a series of demonstration projects were implemented with Low Carbon characters. Different technologies in municipal facilities, public transportation, landscape, regenerative energy as well as building techniques were proposed in this process.

Public transportation will be developed both on the city and quarter levels. Subway system is developed to connect Hongqiao Transportation Hub as well as other areas in the city. A bus line system is to be built to reduce the traffic flow in the whole business park and improve the environment quality.

Except for technical aspects, the communication function is also emphasized in cultivation of public space. The spatial structure of Business Park aims to create continuity of urban space. The layout of public facilities and traffic lines will also help to cultivate this system. A pedestrian plan in the whole area was taken into serious consideration. In every block, open space like squires were connected with each other so that the design concept for community in strong communication characters can be realized.
As a result, a high qualified urban space is realized with above mentioned Low carbon techniques. These instruments were already in western countries discussed for a period. But because of the limited urban development demand, project in China’s urban development lead way in implementation of such technical accumulation in a large enough scale.
4.4 Integration into existing institutional frameworks

Except for the efforts in design to create attractive urban space and to utilize Low Carbon technologies, one of most important work concentrated in solving confliction between design concepts with integration into existing institutional framework for urban planning practice.

Since Chinese land use pattern has still a strong character of functional division. The idea for mixed use cannot directly find corresponding support in the prescription from existing land use regulations. The cultivation of public space and continuity of pedestrian system require strong control effort from city government. However, such requirements have not yet got enough attentions on the institutional level for the cultivation of urban space quality.

In this special case, the importance of this strategic project helped to overcome such difficulties. City government has accepted to take this project as special case and even allowed the foreign office to take part in the following legal planning establishment, in which the affairs of later is normally carried out within public sectors. With the support of decision maker, the foreign planning office has then assumed the guideline establishment for and participated into legal planning establishment.
Furthermore, such requirements like low carbon technologies and related planning method are even reflected into the "tender and bidding documents" to developer. The developer is required not only to provide high enough prices in land conveyance, but also to reach technical standard in a series of criterions in low carbon technologies such as energy saving etc.

Fig. 07  Urban design guideline in cooperation with local planning institute

5  Case 2: Strategic planning along with Huangpu River in Minhang District

5.1  Outline

The other case study locates in the south side of Hongqiao Transportation Hub and in the near outskirt of Shanghai’s city center and has good connection with each other. A new development strategy has discussed for one new area with district scale of about 126 km² area. This case is one part of Huangpu River in the new suburb of Shanghai. This part locates in Minhang District with more than 26 km length. This part is between the Expo Park in the downstream near city center and another part for drinking water conservation in the west part in upstream.

After host of Expo, Shanghai confronted a series of challenges. The booming period with great amount of investment during preparation of Expo is finished. A lot of new infrastructure and facilities
are taken into reality. However, the problems in the integration into global economic system, such as significant rise of property price and deindustrialization, have also been greatly intensified in this process. Besides, the international and national economic conditions also situated in difficult place since burst of world financial crisis.

Against such background, the new development policy with great attentions to social and environmental issues has been furthermore strengthened by Shanghai’s city government. The former development concept with GDP privileged goal settings is explicitly negated. The exemplar world city like London and Paris were analyzed with this new perspective. Finance and commerce sectors obtained privileged status in this process. Creativity and technological innovation capacity are also greatly emphasized.

In spatial aspects, Shanghai tries to put forward spatial organization on regional level. Several development key area and development axis are defined as main motors. Except for the three above-mentioned strategic areas, the Huangpu River will be seen as development corridor for the whole region.

5.2 Knowledge based development concept

Because of restrictions in urban planning practice market on this level, international office has not yet taken part in very much in the field of strategic planning. However, today’s urban transformation in leading Chinese cities like in Shanghai and Beijing. The rise of market economy as well as urgent demand to strengthen international relationship leads to changes in this field.

Since the efforts for international communication last only for several years, the expectation of city government for international economy locates still in very limited field for financial and related extroverted sectors or specific Hi-tech industry sectors. The systematic coordination on the whole city or
regional level for integration into global economic system is just obtaining the attention to the decision maker.

Basically, this project focuses on the accessibility and life quality for the urban development on a new city level with over one million populations and more 126 km$^2$ area.

This new area with district scale is seen as the center with great science park and hi-tech industry for Shanghai’s global city efforts. The accessibility from the Hongqiao Transportation Hub and the cultivation of local spatial quality are seen the interconnected sides between each other. On the regional level, the Huangpu River flows through the planning area and connect different parts in the whole region. E.g. the city centre as financial center will take more cooperation with this area for the regional development in fields like R & D, Hi-tech production as well as residential functions.

5.3 Water front development in cooperation with regional development

From the mission statement, the limitation of development concept from city government has been noticed. The original mission state showed a clear perspective for water front area development with reference in city center. The goals setting concentrate to create attractive urban space along with river side. The local conditions of study area, which located in the suburban area and is still in an urbanization stage, have not yet been properly evaluated. At the same time, the mission statement has also allowed enough free space for the urban planner to use international experiences and helpful concept to show the new direction for the spatial development in this area.

For existing development situation in Minhang district, the manufacturing sectors still holds the predominant place. And some industry park is confronting serious problems in renovation and serious critics in environment pollution and low efficiency in economic production in comparison with the land occupation.

With the general understanding in above-mentioned characteristics, the local situations are categorized as a suburban area in Shanghai’s region, in which there is great potentiality because of its location in the main development corridor as well as good accessibility with Hongqiao Transportation Hub.

![Fig. 10 Comparison of development relationship between river side and hinterland area](image-url)
Since Huangpu River has its length of over 300 km, the mission of river side development has been transferred from exclusive water front area urban design in city center to other area for a comprehensive urban development in the city and suburb area in the whole river range.

A dramatic transition in the goals setting from urban regeneration to regional development is needed. In this meaning, this strategic plan has shown the development concept to combine the water front development in connection with regional development along with Huangpu River. Since this river has been taken as main development axis for Shanghai, the financial centre as global node in inner city is connected with other areas with different divisions of functions and different development standard. The development in the inner city and Expo Park has already been carried out for several years. But the other parts situate actually still in a neglect status. The city government paid not enough attentions to these parts. This project has just provided a good chance to introduce some new concept for the decision maker.

5.4 Efforts in accessibility and quality cultivation

Another than the first case with emphasis on implementation, the second case concentrates in the goals establishment for an area of district scale and the related implementation path. Based on the understandings in Shanghai’s development in past 10 years, the integration into global economy systems brought both chances and challenges in this process. Against the more and more intensive international competition, capacities based on regional cluster have obtained attentions to planners. This Minhang Riverside area also provides a transformation’s possibility. A large spatial area has located several most important themes for the urban development. There is one successful Zizhu Science Park developed with national support, several most important universities in Shanghai or even with national reputation, an old industry area with strong centrally-planned characters, as well as several new great neighborhood areas experiencing rapid population immigration. This area has a good accessibility with Hongqiao transportation centre. Huangpu River provides also an important relationship in connection with other key area on city level e.g. Expo Park and Pudong financial center.

The main problem for the development in this area is the limitation in development concept. According to existing master plan, this area is still seen as a less intensively urbanized area, although it is experiencing rapid urbanization process and will not assume the main tasks for Shanghai’s economic transformation. The development goals like public facilities scale and standard reflect its secondary role according to existing development concept. This strategic planning aims to change the attitude of decision maker with persuasive thesis and references for the decision maker.

The concepts of knowledge based development as well as the space-related pattern in cluster economy have been proposed for the further development. The whole area is seen as open community and business park in broad meaning.
As a reflection in showing a new spatial organization pattern for city and local government, planners try to focus on dual sides to enhance the development possibility for this area, regional accessibility on international, national and regional level on one hand, life quality cultivation on the local levels on the other hand. The existing successful Zizhu Science Park and old industry area can contribute to upgrading process of Shanghai’s economic structure by means of cooperation with each other.

The plan as spatial embodiment shows also the double sides in development concept. Four development axes are advanced. Two development axes (see axis A/B in Fig. 12) contribute to connections among the area with Hongqiao Transportation Hub outside as well as the east and west parts across Huangpu River within the whole area.

At the same time, to solve the existing isolated spatial structure, the other two axes (see axis C/D in Fig. 12) are proposed to connect the existing science park, industry area as well as other local communities such as neighborhood and villages. With references in European projects, several existing infrastructure will be converted for new function. For example, the space of an existing railway (see axis C in Fig. 12) for transporting coals in power plant will be reserved and developed as a new open space in connecting different parts. Other open space in between such different parts has also attracted the interests of planners. For putting forward participation among different authorities, investors, enterprises as well as local citizens, the layout of public facilities will be allocated along with such open space.
The last axis (see axis D in Fig. 12) is connecting the communities from west to east for the cooperation. Since the west part has already developed lots of industry sectors, the east part is experiencing a rapid urbanization process. The new immigrants are both from Shanghai’s city center and from the other adjacent cities in the whole region. A well balanced structure between work and residence can be developed with strengthening accessibility between west and east sides.

Fig. 12 Spatial structure with four development axes
6 Conclusion

From such case studies, several experiences can be concluded. Chinese cities with leading roles for integrating into the global economy have to assume the economic transition to the service sector-based economy. Its urban space is experiencing a series of transformation in development patterns with the emphasis on the quality cultivation. The related spatial development will be carried out based on interaction among different spatial levels in the globalization process.

In the near future, the experiences, which were developed by western countries in the last 40 years, will have the chances for systematic implementation in China’s urban transformation process. The new development pattern will not only have flagship projects in separate plots, but also require the systematic coordination on the quarter, district or city level. And this provides new chances not only for the western architects but also for the urban planners.

Reference