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CONTEMPORARY URBANISATION IN CHINA: AN OVERVIEW AND THE PROJECT FOR SHANGHAI

WSPÓŁCZESNA URBANIZACJA W CHINACH: OMÓWIENIE TEMATU I PROJEKT DLA SZANGHAJU

Abstract

The major metropolises of the world face several problems due to their rapid growth. From among these, it is considered that Chinese cities in particular deserve special attention due to the diversity of challenges they face. Out of the 1,367,820,000 population of China in 2014, 54.77% constituted the urban population¹ – this figure takes on more relevance when we consider that only sixty-five years ago, just 10.64% of the population was urban. From the total population of the country, about 17% live in the ten most major cities and their metropolitan areas². Taking into account the relevance of the metropolis in the Chinese context, we propose a set of topics, challenges and trends in contemporary urbanization in China.

Keywords: urban design, contemporary urbanization, Asian metropolises, urban competitions

Streszczenie

Główne metropolie świata stają przed szeregiem problemów spowodowanych ich gwałtownym wzrostem. Spośród nich uważa się, że chińskie miasta zasługują na szczególną uwagę ze względu na różnorodność wyzwań, jakim muszą stawić czoła. 54,77% ogółu społeczeństwa chińskiego liczącego sobie 1 367 820 000 mieszkańców w roku 2014 stanowiło populację miejską – ta liczba nabiera szczególnego znaczenia, gdy weźmiemy pod uwagę fakt, że sześćdziesiąt pięć lat temu tylko 10,64% ludności Chin zamieszkiwało miasta. Z całej populacja kraju, ok. 17% ludności mieszka w dziesięciu największych miastach i na terenie otaczających ich obszarów metropolitarnych. Pamiętając o tym, że rozpatrywanie problemu metropolii w kontekście Chin ma swoje głębokie uzasadnienie, proponujemy omówienie zestawu tematów, wyzwań i trendów zachodzących we współczesnej urbanizacji Chin.

Słowa kluczowe: projekt urbanistyczny, urbanizacja współczesna, metropolie azjatyckie, konkursy urbanistyczne

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¹ National Bureau of Statistics of China: <http://www.stats.gov.cn/tjsj/ndsj/2015/indexeh.htm> (accesss: 28.11.2016).

² The ten major cities (including its metropolitan areas) in China are: Guangzhou, Shanghai, Chongqing, Beijing, Hangzhou, Wuhan, Chengdu, Tianjin, Xi'an and Jinan, totalling around 233 million inhabitants, which is around one third of the total European population, according to the National Census, 2010.

1. Trends in contemporary urbanisation in China

Big cities with high densities and rapid development tend to create huge mega-city regions. Three such regions are emerging – Beijing-Tianjin, the Yangtze Delta (Shanghai-Nanjing-Hangzhou) and the Pearl River (Guangzhou-Shenzhen-Hong Kong). The high-speed railway network plays a major role in structuring the megacities as well as the system of main urban hubs in the interior of the country (Wuhan, Xian, Chengdu, Chongqing, Changsha).

The national urban plans for the next decade are trying to drive the rural migration towards cities in the interior of the country instead of to the coastal regions. For this reason, the government has taken the strategy of ‘townification’ in order to house the future migration of the rural population into urban environments; however, this strategy has created the phenomenon of ghost cities – entire cities or urban developments which remain empty and unfinished.

In these giant urban concentrations, environmental problems arise and reach crucial levels. The main issue is air and water pollution. Food security is also a concern for most of the urban Chinese population. Achieving sustainable mobility becomes a key challenge when attempting to reduce pollution, increase the efficiency of transportation and make possible policies to improve the quality of public space. The extension of transit systems, particularly metro networks, in the main cities is absolutely crucial. At the same time, the necessary networks of expressways raise the issue of the architectural design of infrastructure in order to integrate them with their urban surroundings. The future role of bicycles, which have been decreasing in the major cities, and motorcycles, which are present everywhere, should also be considered.

Chinese cities also set out important issues concerning urban policies and management. A big problem to tackle is that of the floating population. Because of the *hukou* system (in which authorities issue members of the population with official permission to settle in the cities), there are many urban immigrants not considered in the official accounts of population – they become urban dwellers without rights. Secondly, because of singular laws on land property (the total land is public owned), the land policies in China become a particular and complex world in themselves with regard to the purchase, expropriation, rental or development of lands. At the same time, it is very difficult (because of very rigid sectoral rules) to coordinate different landlords, who always look for separate properties that are easy to manage in autonomous ways. Therefore, this makes it difficult to implement hybrid complex urban programs. Finally, the decision making processes at the urban level lacks transparency and this favours corruption.

Identity is another great concern not only for scholars interested in China but also for many Chinese people. In the rapid current urbanisation, many urban developments look similar to each other and they are lacking in their *genius loci*. The preservation of heritage (from singular monuments to the renewal of the historic urban fabric such as *hutongs* or *lilongs*) is not always enough. In this sense, we must take into account the fact that Chinese culture has a different sense of authenticity. It is used to rebuild its architectural monuments many times over the centuries and to find in literature and other arts, a key element of continuity and tradition. Then, beside heritage, urban identity in Chinese cities can be found in other aspects such as the intense urban life, the natural landscape features, the urban structure or the artistic evocations.

A singularity of Chinese urban landscape is the fact that many developments are walled, enclosed into themselves; in such situations, the relationship between the built complexes and the public streets is not direct, but through different forms of gates and walls. It is a long urban tradition coming from the classic cities of the Tang dynasty (in the second half of the first millennium) and preserved during Maoist China, through the *danwei* system (mixed units of production and residence). At the end of 2015, a national directive encouraged cities to remove many of these urban walls. Such a process could deeply change Chinese urban landscape.

2. Infrastructural Nature: an urbanisation project in inner Shanghai

We present a project that won a second prize in an international student competition held by Shanghai International Tendering Co. Ltd. We were finalists alongside Harvard University, the Massachusetts Institute of Technology, Tongji University, Cardiff University and the Southeast University of Nanjing. The team consisted of students and teachers from the undergraduate and postgraduate research programs of the Department of Urban and Regional Planning at the Universitat Politècnica de Catalunya.

For many years, we devoted much of our research to study and understand the urban culture of China and we also created the Observatory on Urban China to hold different academic experiences around this topic, such as courses, lectures, international workshops and exhibitions.

Like Shanghai, our city, Barcelona, has experienced one of the most significant urban transformations in the world. Both cities have a significant importance in the global trading system, sharing a certain port tradition. In this sense, a number of teachers from our Department at the University contributed to the elaboration of the plans and projects that allowed great changes in our city. For example, the transformation of the waterfront, which both opened up the city to the sea and integrated the infrastructural transport network – creating new transversal connections which previously did not exist.

The requirements of the competition consisted in the transformation of an area to the east of Shanghai Railway Station. This sector is currently occupied by railway tracks at the end of the line and represents a barrier for the urban fabric and the connections in the area. The proposal that we present, intends to actively contribute to the improvement of the urban conditions of Zhabei district, creating an important newly equipped park. The project also aims to resolve the district's major problem of connections, which would substantially improve the life of its citizens and achieve a more harmonious, sustainable and prosperous city.

Although the competition required an intervention in the Zhabei district, located north of Suzhou creek, our project starts from a metropolitan perspective, analysing and understanding the whole city. Its proximity to watercourses should be a key issue throughout the intervention process.

Framed into the 2020–2040 Master Plan, the intention is to enhance the existing green areas and intensify the green network around Shanghai, closing the unfinished green rings. The proposal is to also strengthen this metropolitan green structure with a new equipped park, connecting the new park with other urban open spaces to stimulate ecological continuity.



III. 1. The intervention area, aerial view



III. 2. The intervention area, view from the street

The completion of the green ring could potentiate the green vectors that cut through the ring, expanding them both inwards and outwards. In this sense, the Huangpu river and Suzhou creek help to connect the green corridors with the water network.

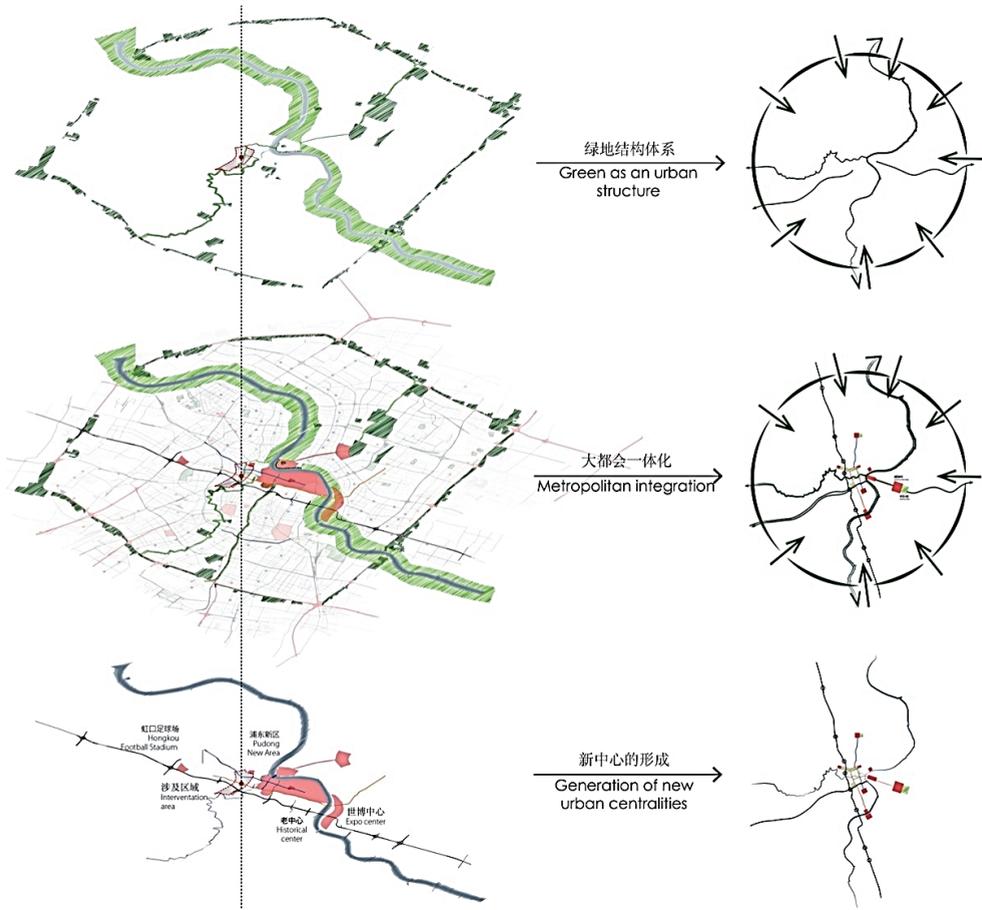
Considering this, the core idea of the project is to build an open park with amenities of around forty hectares and more than 2 km in length. This park would cover the railway tracks, which we propose to be partially underground, to create a transversal permeability that is non-existent today.

Concerning the urban structure, the North-South Elevated Road and Xizang North Road are two main urban arteries that connect and cross the intervention area. In addition, Baoshan Rd. represents an extra connection to the site. Thanks to this urban structure, our area has all the possibilities to become a new centrality and be a part of the set of Shanghai centralities.

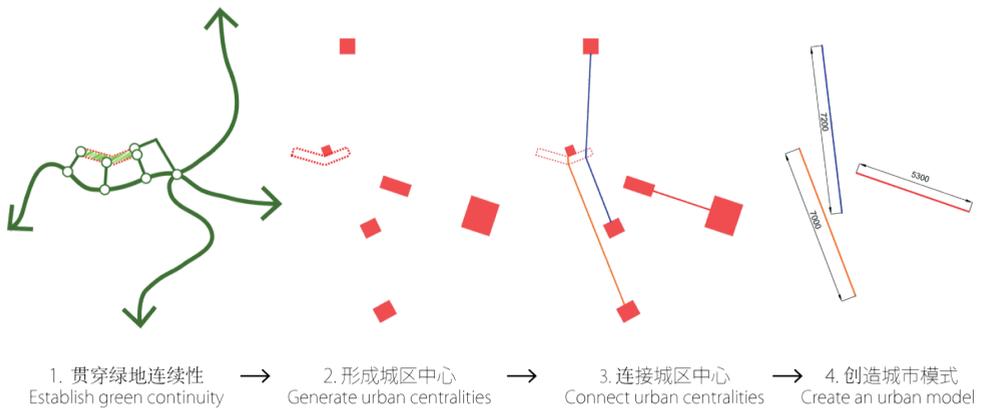
Taking into account the barrier that currently represents the railway tracks, our idea is to generate new pedestrian continuities across the park to improve the accessibility and movement in Zhabei. For this reason, we seek to ensure the crossing and permeability on the ground level. The idea is to create an urban zipper that would solve connectivity issues existing in the area.

The link between the city centre and the Shanghai Railway Station would be possible thanks to the covering of the railway tracks – this would create an area that would have intense and diverse usage.

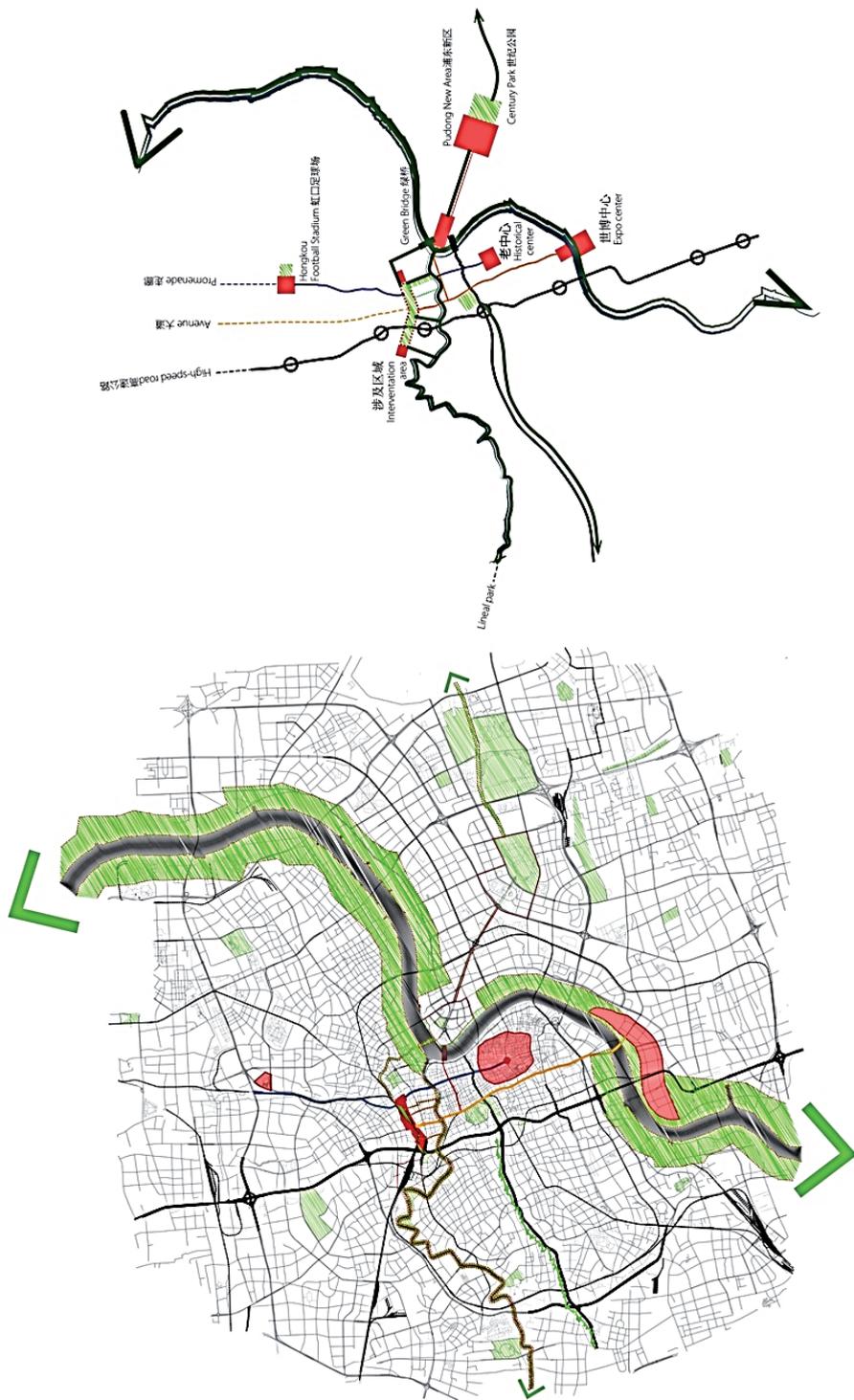
The proposal develops three urban nodes along the park. A new downtown centre is located above a slab covering the train tracks on the western side and filled with multiple mixed-use buildings and metropolitan activities. The Hub (intermodal centre) area, a place where metro lines 3, 4 and 8, connect, is the essential action of the project to relate the area with the whole city. Eventually, a third new centrality around the north of Baoshan Road, links the metro station and the existing market together with the adjoining *lilong* – a set of traditional houses.



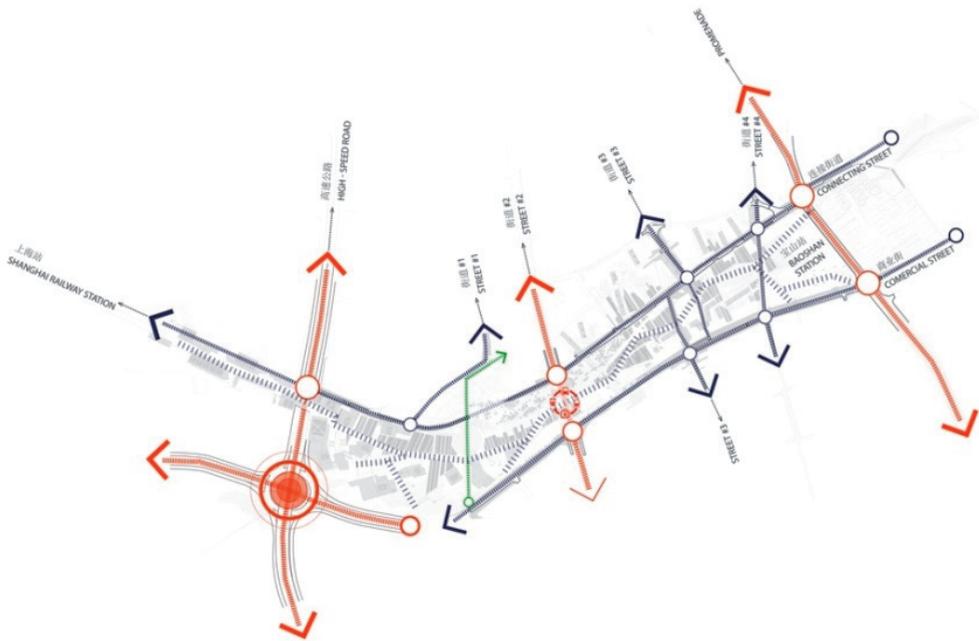
III. 3. Metropolitan strategies I



III. 4. Metropolitan strategies II



III. 5. Urban strategies



Ill. 6. Connectivity and transversality

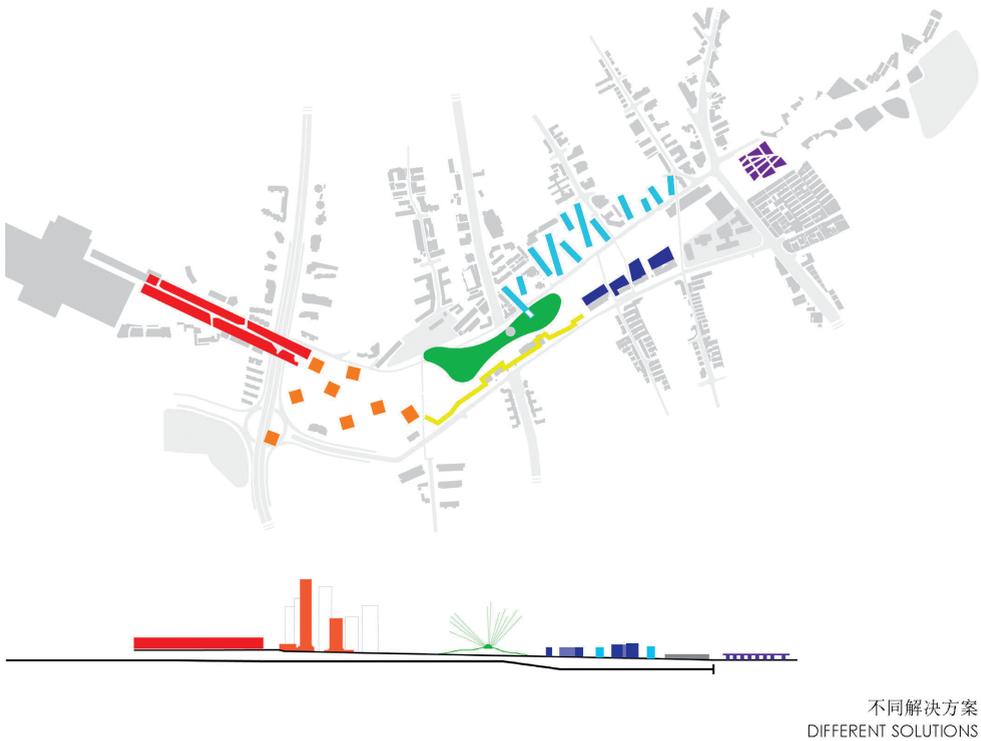
Broadly speaking, we can identify seven different areas (project units) involved in the whole transformation: a market area, with a proposal for global remodelling; the demolition of degraded buildings combined with the construction of new housing stock and a technological park; the creation of an artificial hill formed by the accumulated material from digging and demolitions; a new linear park giving urban identity to the whole plan and creating a space of opportunity to host major cultural and leisure events; the completion of the housing grid in Haining Road; a commercial axis located above the train tracks, providing intense activity; eight skyscrapers, combining offices and public usage, hotels and residences, located at the intersection of the major roads. These towers, due to their associative condition, are conceived as a group, a part of a bigger unit, not as individual elements.

In the project, we combine five kinds of uses – nature, transportation, leisure and sport, culture and technology. The combination of these elements constitutes a hybrid park. The facilities for these five different uses located along the linear green space are: a natural green carpet or ‘the green corridor’; an entertainment and sports infrastructure, including a sports centre and a skate park; a culture and technology network, comprised of, for example, a convention centre and a theatre, with the intention of consolidating a cultural district; a commercial string that links the market with the *boulevard* and the shopping mall; an intensive and efficient transport network.

The lack of transversal continuity is an important point that we should take into account. There is an opportunity to increase the connectivity and mobility of the area, not only from the metropolitan perspective but also from the pedestrian point of view. From this pedestrian vision, the idea is to ensure permeability to the park and all the streets surrounding it.



III. 7. General view of the proposal



III. 8. Project units

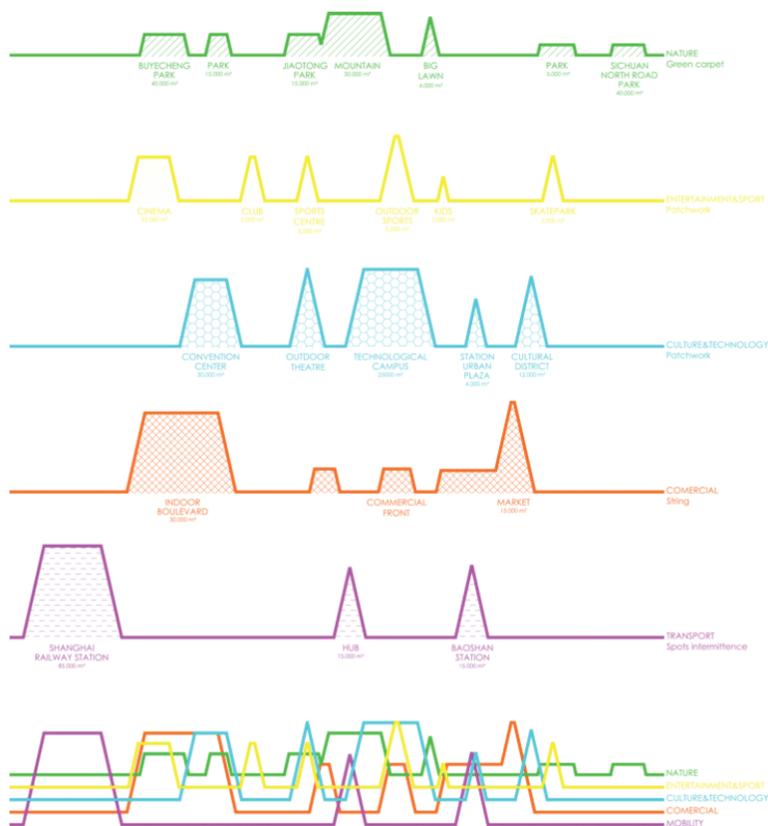
The creation of the transportation hub and parking areas is associated with major road and rail infrastructures. Several connecting points are proposed to articulate the great metropolitan access (encouraging public transport) with a permeable pedestrian and bicycle network that structures the project.

In the whole project, it has been essential to work with sections to define continuities at different levels and approach the urban complexity.

If the entire project has its climax in the downtown towers, the linear park has its own climax on the mountain. The hillside oriented to the park has a series of ‘grandstands’ able to accommodate a large number of people as if it were a Greek Theatre. Thus, the cultural mountain, the magic mountain or the mountain as a spiritual symbol would become one of the icons of the park, a stage for all kinds of shows and events and a privileged point of view from which we could observe the park and its surroundings.

Given the nature and complexity of Zhabei, the area to be transformed, the proposed urban development is planned in three phases in order to contribute to the technical and economic viability of the project. In other words, each phase must be self-sufficient and must generate a positive economical balance.

Considering that the initial land is 100% public, the expected economic return for the public stakeholders could be through administrative concessions, ground rights, taxes and other possible means of value capture; for private stakeholders, the economic returns would be through the sales or renting of the final real state products.

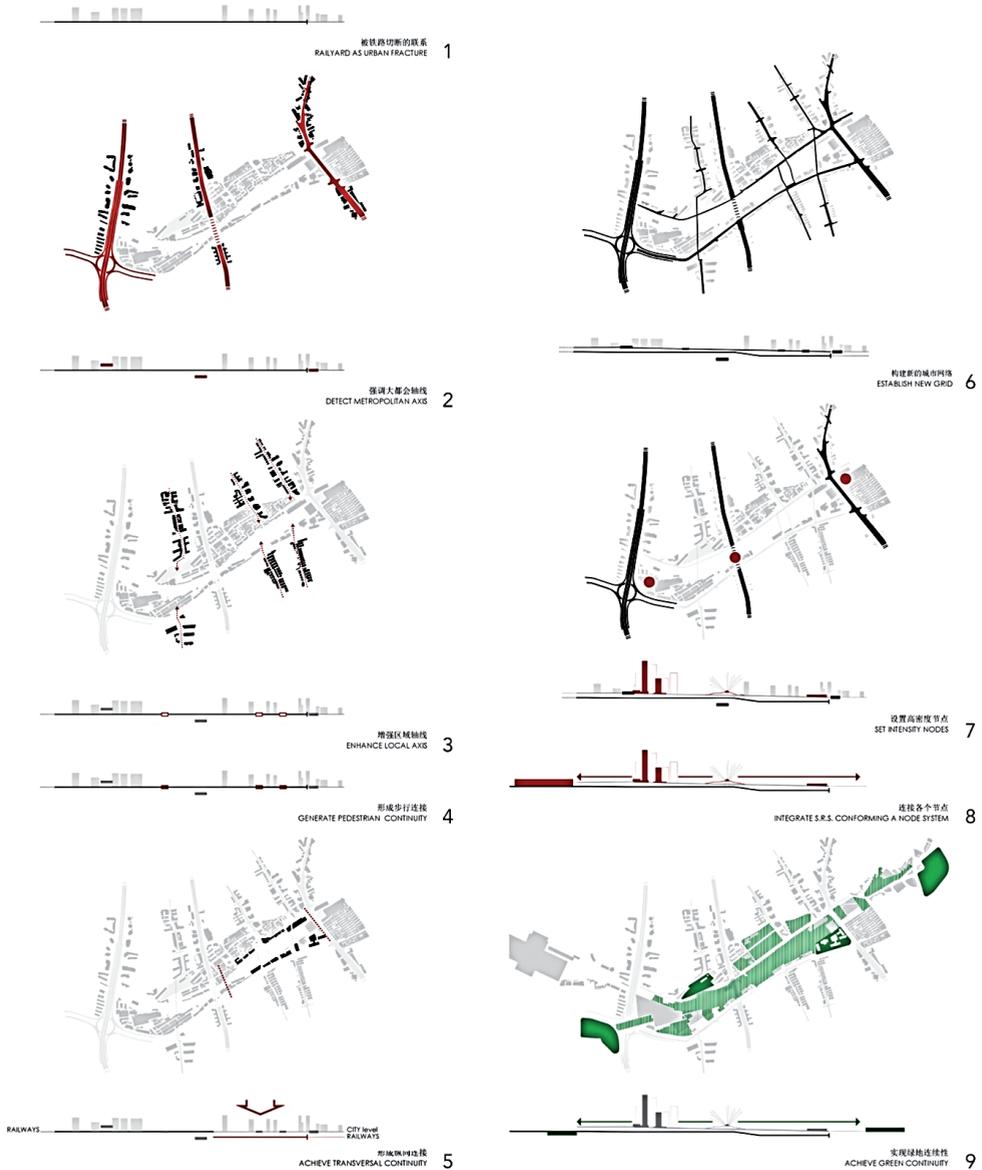


III. 9. Program's hybridisation diagram

The first phase would be the development of the downtown proposed in the central part of the considered area. This part of the project implies to cover the train tracks with a slab. Over it, the eight towers dedicated to tertiary activities concentrate much of the urban uses of the operation. This phase of the project would produce economic benefits that would enable the generation of resources that would contribute to funding the second phase.

The second phase involves the excavation of the final stretch of the railways to allow maximum permeability at the ground level of the city³. It includes the topographical transformation of the area in order to create the hill (located mostly in the area of the first phase) with the remains of demolished buildings from the neighbourhood located north of the railways. This development phase involves the construction of large open spaces with public facilities and residential and technological buildings which contribute to the shape of the urban facades of the area. Besides, it also considers the renewal of the existing *lilong* south of the market.

³ As an example, Tolbiac's development, in Paris, is a clear reference of how to use prefabricated systems in platform construction.



III. 10. Project steps

The new volumes allow cross-permeability and they shape the urban façades of the southern boundary of the area. Furthermore, the shape of the buildings permits the sun to reach every dwelling.

The green continuity is the main *leitmotiv* of the park and the whole urban area. The intention is to select vegetation for landscaping and roadside trees adaptable to new climatic conditions, with a special preference for Shanghai's own species.



III. 11. General view from the park

The mountain covers the metro line while the new buildings, a closed block system that absorbs some of the pre-existing buildings, generates a new façade for the park.

The third phase consists of a commercial mall and facilities linking the future downtown area with Zhabei railway station. This part is located outside the given area of intervention, but we think it is a key aspect for the urban project to be perfectly embedded in its metropolitan context.

To sum up, our proposal tries to condense these following concepts:

- NETWORK CITY, interconnected through transportation infrastructures and new technologies.
- INCLUSIVE CITY. Designed for all kinds of users, integrating a social approach and taking care of accessibility, avoiding architectural barriers.
- SMART CITY. Able to apply innovative solutions in the management of its services and resources in order to improve the quality of life for all citizens.
- SUSTAINABLE CITY. Ecologically, economically and socially.

We hope that this proposal may be able to become a reality. For this to happen, two essential conditions are required. Firstly, the people of Shanghai must believe wholeheartedly in the proposal. Secondly, the stakeholders, both public and private, must make the project their own. We have complete confidence that the people of Shanghai will be able to take advantage of a unique opportunity for creating a new high quality green and public space in a city of more than 20 million inhabitants. This would contribute to a better city, for a better life, following the main idea of the International Exhibition of Shanghai 2010.