“High-speed railway as a tool for (re-) making cities in China”

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1. Introduction

Over the past decade, high-speed railway (HSR) system has been both enthusiastically planned and implemented in China. Up until 2014, the length of Chinese HSR in service has already reached 11,000 km, ranking the first in the world[I]. Along with such a rapid network extension is a new round of HSR station construction upsurge. At the end of 2012, 804 newly planned HSR stations have been constructed and put into operation (Zheng, 2009).

The proliferation of these state-led mega-projects will no doubt fundamentally change the existing urban structures and environments. One noticeable phenomenon is that the Chinese municipalities always take the HSR station as a seed and growth pole to make or remake cities: if the HSR station is completely newly built and located in the periphery of the city, the common practice is to plan a HSR new town or district around it; if the HSR station is the conversion and upgrading of existing conventional station and located in the urban centre, then the territorial integration of its surrounding area is more renewal-related, for example, to reuse the former freight yards, idle railway equipment place or unoccupied and less developed urban areas for the new development.

Although both developing new sub-centres in the urban periphery and regenerating conventional station areas in the existing urban centre are all caused by the arrival of HSR, the underling logics and aspirations of the two urban development patterns are different. However, the systematic research about the embedded rationalities of the two urban development strategies has seldom been found in existing literatures. Therefore, this research aims to answer important questions as follows: what have been the characteristics of, and differences in, HSR new district/town development strategies and HSR city centre redevelopment strategies? What embedded rationalities can explain these differences

[I] Source: Report on the work of the Government 2014, delivered at the second session of the twelfth National Peoples Congress

between two types of urbanity? What roles the state actors (central and local government, the Chinese Ministry of Railway, etc.) and the non-state actors (private developers, passengers, etc.) have played in forming different strategies?

In order to answer these questions, as well as decode different HSR urban development patterns among multiple actors and systems, a case-based study will be firstly selected as the research method. The comparison between the Beijing-Shanghai national HSR line and the Nanjing-Shanghai intercity HSR line affords excellent examples, which well reflect typical urban integration strategies around HSR stations. Besides, a multi-disciplinary method is also required in order to fill in the gap of the ubiquitous dichotomy between HSR infrastructure planning and related urban planning at local level. Last but not the least, in this research, as the actors involved in the HSR urban development process are in the centre of interest, a relational approach will also be adopted as the research method.

The presentation will be structured in five parts. Part 1 begins with a brief introduction of the research. Part 2 will mainly focus on the classification and selection of the cases. Part 3 will describe and summarize the typical urban (re) development patterns around different HSR lines. Part 4 is the main body of the research, which will attempt to explore the major actors' role in forming the urban development strategies, from different institutional parameters. Part 5 is the conclusion part.

2. High-speed railway planning and selected cases

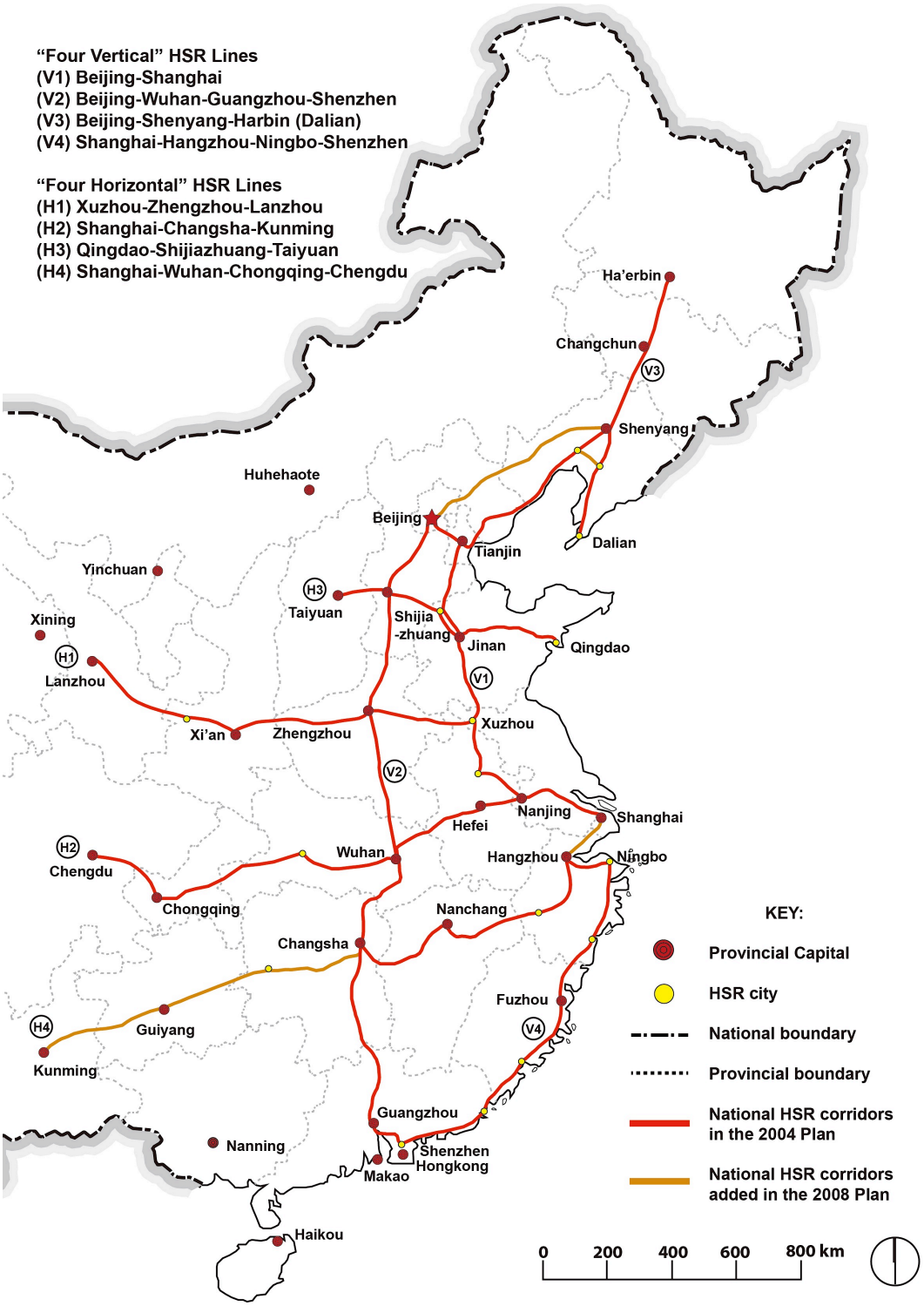
2.1 Chinese high-speed railway system

The HSR network in China is planned and guided in the Mid-to-Long Term Railway Development Plan[2]. The Plan was manipulated as a long-range plan till 2020 in accordance with the investment, planning, construction and operation of the HSR railway system. Because all the relevant working programs of HSR are subsequently compiled to implement this central policy, the Plan is the most important guiding document for the future HSR development.

According to the Plan, China's high-speed railway network composes two major parts: the national grid of passenger-dedicated line, or the national high-speed railway (NHSR), and the regional passenger-dedicated line, or the intercity high-speed railway (IHSR). The national high-speed railway network refers to the eight trunk high-speed railway lines connecting major provincial cities across the country, and the intercity high-speed railway system refers to the high-speed railway lines designed to connect a group of cities within integrated metropolitan areas. Such a classification is primarily based on different territorial scales.

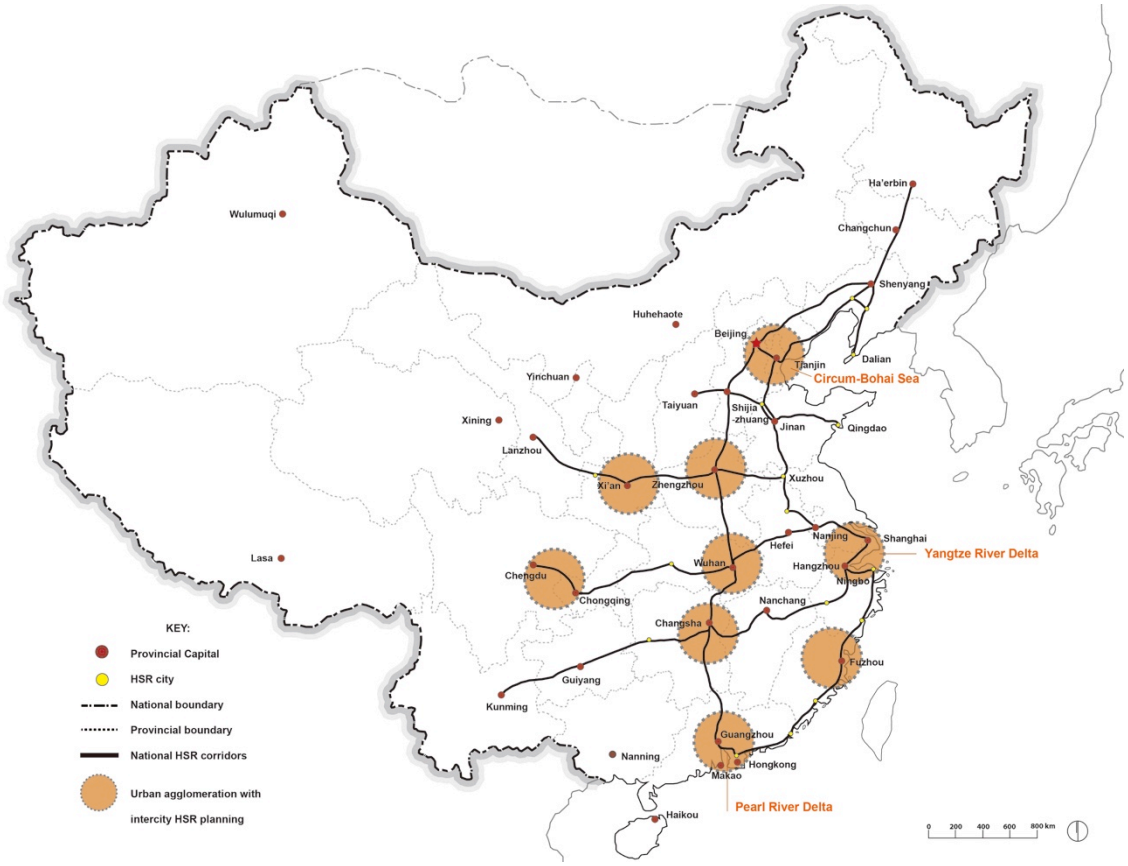
Figure 1 illustrates the high-speed railway network in the 2004-2008 Plan encompassing eight national HSR trunk lines. Based on the different direction, the eight HSR lines are further subdivided into two groups - the "Four Vertical" and "Four Horizontal" lines. These HSR trunk lines connect most of Provincial capital cities together and cover most of the cities with population more than one million, severing as the backbone of the Chinese HSR network.

[2] The Mid-to-Long Term Railway Development Plan was firstly issued by the Chinese Ministry of Railway in 2004 and then was revised in 2008. Hereafter the Mid-to-Long Term Railway Development Plan refers to as the Plan, the one issued in 2004 refers to as the 2004 Plan, and the one revised in 2008 refers to as the 2008 Plan.



[fig.1] National high-speed railway trunk lines in the Mid-to-Long Term Railway Development Plan. Source: elaborated by the author, based on the map from the Mid-to-Long Term Railway Development Plan (2008 version).

Beside the national HSR system, the intercity HSR system has also been aggressively planned. In the 2004 Plan, the intercity high-speed railway system is only planned in three most important urban agglomerations in China, namely Circum-Bohai Sea, Yangtze River Delta and Pearl River Delta agglomeration. However, in the 2008 Plan, the number of agglomerations that have the intercity high-speed railway planning increases to nine (see fig. 2). Although the nine urban agglomerations only account 18.45% of the national territory, their populations account nearly 60% of the total, and their GDPs account 77% of the whole nation (see table 1). Apparently, the intercity high-speed railway system is designed to deal with the extremely high concentration of population, economic and social activities.



[fig.2]Nine urban agglomerations with intercity HSR connection. Source: elaborated by the author.

Name of urban agglomeration	Prefecture-level cities or above	Size (10,000 km2)	Population (10,000 person)	GDP (10 million Yuan)
Circum-Bohai Sea	44	52.27	23037	77564.68
Yangtze River Delta	30	16.63	14997	69522.11
Pearl River Delta	31	17.98	9544	35696.46
Chang-Zhu-Tan	3	2.81	1322.17	4565.33
Cheng-Yu	22	56.84	11095	17602.91
Zhongyuan	8	4.4	3534.97	8814.45
Wuhan	9	5.8	3168.78	3132.85
Guanzhong	6	7.97	2540.12	4461.07
Fujian	9	12.4	3477	10823.11
Total	162	177.1	72716.04	232182.97

Table 1. General information of nine urban agglomerations with intercity connection in China in 2008. Source: compiled by author based on the statistics from China's Statistical Year Book 2009.

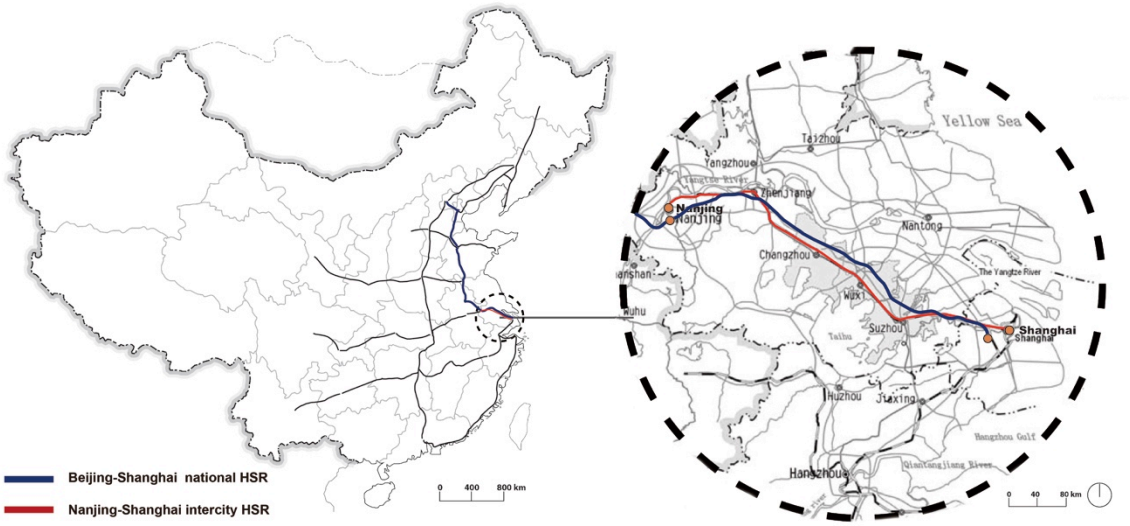
2.2 Selected two high-speed rail lines as study cases

In this research, two HSR lines, namely Beijing-Shanghai national HSR and Nanjing-Shanghai Intercity HSR, will be selected as study cases. The Beijing-Shanghai national HSR is a 1,318 km long HSR line that connects two major economic zones - the Circum-Bohai Sea and the Yangtze River Delta in China. The Nanjing-Shanghai intercity HSR is a 301 km long line that locates within the Yangtze River Delta region.

HSR Line	Length (km)	Designed Speed (km/h)	Number of stations	Average distance between stations (km)	Average travel time of the whole journey (Hours)
Beijing-Shanghai NHSR	1318	350	23	57	5.6
Shanghai-Nanjing IHSR	301	350	21	15	2

Table 2: Overview of the two selected case study HSR lines. Source: China's Railway Statistical Year Book and the official website of the Chinese Railway Costumer Service Centre.

From table 2 we can see that both of the two lines take the same designed speed of 350 km/h. Numbers of stations of the two lines are quite close, too - 23 stations for the NHSR line and 21 stations for the IHSR line. However, Due to the different length, the interval between stations and total travel time are different. More specifically, the NHSR is three times higher than the IHSR in terms of interval distance and travel time of the whole journey. Because those two lines are one of the earliest national or intercity HSR line planned in China having great guiding significance for the planning of other lines, and also because the two lines are spatially overlapped in certain sections (see fig. 3), in this research I choose them as study cases. The intertwining of the two lines will provide us the direct observation of the spatial relationships between the lines, stations, and related urban planning in the same territory.



[fig.3]Spatial overlapping of Beijing-Shanghai NHSR and Nanjing-Shanghai IHSR between the city Nanjing and Shanghai. Source: elaborated by the author.

3. Urban planning typologies of HSR station areas along two HSR lines

3.1 Location of the HSR station versus the city

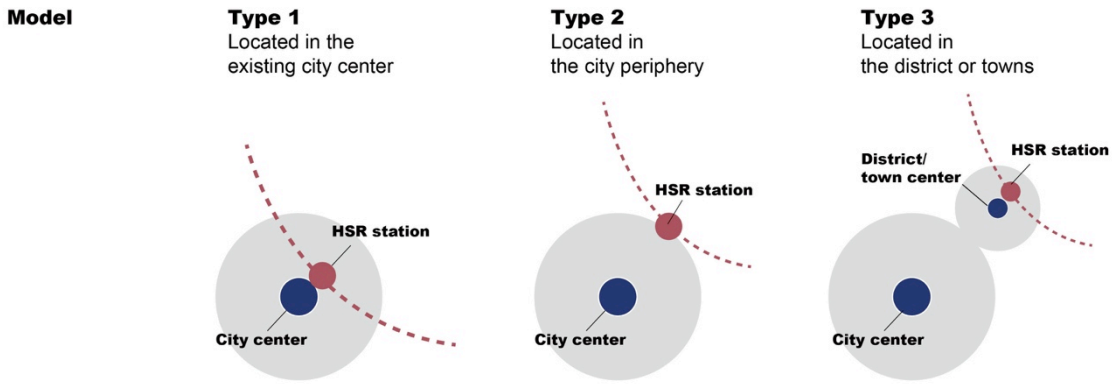
The location of the HSR station versus the existing city can be classified into three categories as follows:

Type 1: HSR station locates in the city centre;

Type 2: HSR station locates in the urban periphery;

Type 3: HSR station locates in the city new district or town / townships affiliated to the city.

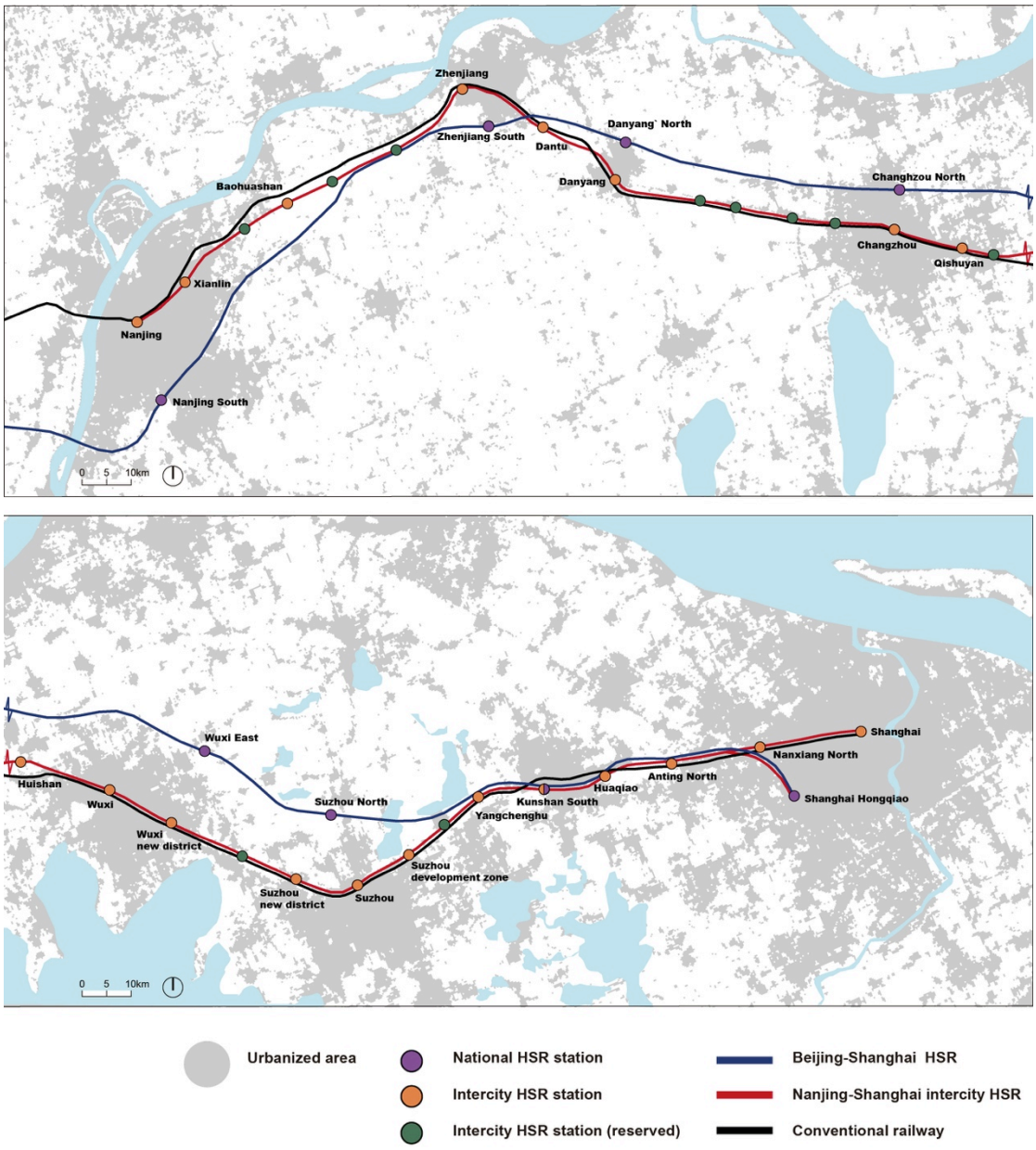
Fig. 4 illustrates the spatial distribution of the HSR line, station, city centre and the urban territory where the line passes through. From the urban-rural point of view, stations in type 1 and type 3 are all located in the urbanized areas, while stations in type 2 is located in the fringe of the city. In other words, stations in type 2 are located in either urban fringes or rural areas. If we take a look from the central-periphery point of view, the station in type 1 has the central position in the city, while the ones in type 2 and 3 are located a certain distance away from main city centre.



Stations			
Beijing-Shanghai NHSR (23 in total)	2	21	0
Nanjing-Shanghai IHSR (21 in total)	9	0	12

[fig.4]Location of the HSR station versus the city along Beijing-Shanghai NHSR and Nanjing-Shanghai IHSR. Source: elaborated by the author.

By scrutinizing all the HSR stations along the two HSR lines, we can find that there are huge differences between the locations of two lines versus the cities. For the NHSR line, 21 out of 23 stations, or 91% of the stations are located in the city periphery, while the left 2 stations are located in the city centre, and none of the stations are located in the new district or new towns of the city. On the contrary, nearly half of the stations along the IHSR line are located in the city centre, while the other half are located in the new district or new towns of the city, and none of the stations are located in the city periphery.



[fig.5] Location of the HSR station versus the city along the two HSR lines between Nanjing and Shanghai. Source: elaborated by the author based on the Google map.

Fig. 5 illustrates that together there are three railway lines pass through the territory between Nanjing and Shanghai. Among them, the conventional railway line and the intercity HSR line are built side by side with each other, both of which pass through the urban territories. In contrast, the national HSR line is located a certain distance away from the conventional railways and the intercity HSR lines, and the majority part of the line pass through the rural territories. In terms of the location of the station, most of the stations along the IHSR line are within or close to the major city centres or district centres, while all the stations along the NHSR line, except the Kunshan South, are located in the edge of the city. The underling logic behind different location choice of the NHSR and IHSR station as well as the different urban development strategies induced by the HSR will be discussed in details in the next sections.

3.2 Urban planning strategies around HSR station areas

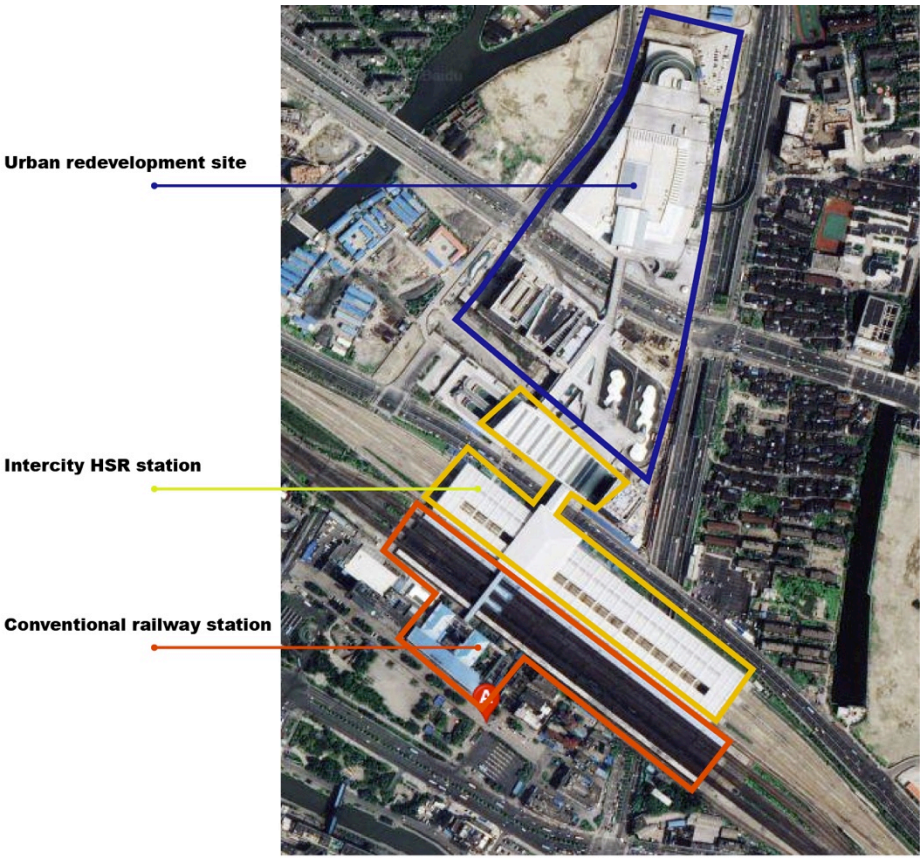
Urban planning strategies around HSR station areas vary greatly between the NHSR and IHSR line. For the Beijing-Shanghai NHSR line, the common practice is to plan a completely new district or new town around it, contributing to expansion and spatial reconfiguration of cities. Among 23 cities along the line, 17 of them plan the new urban development zones around the NHSR station. Table 3 summaries the different scales, planning goals and major functions of these HSR new towns/districts. Firstly, the size of planning area varies a lot among different stations. There are 5 cities with the planned size of development zone above 30 km^2; 4 cities between 20 and 30 km^2; 2 cities between 10 and 20 km^2; 12 cities between 5 to 10 km^2 and 4 cities below 5 km^2. The average planned size is 24 km^2. In terms of the development goal setting, generally speaking, the basic role of these areas is to serve the comprehensive HSR transportation hubs in the region. However, most of the cities also consider these areas as the new economic growth area of the city. In the realm of function, the main types are concentrated at business, financial services, commercial and leisure recreation and real estate development (see table 3).

City	Development goal setting	Planning Size	Main Function and Facilities
Beijing	Prominent business function, plan economic circle of Beijing South railway station	1.8km^2	Transportation hub、business and commercial
Tianjin	Urban vice centre with the public transportation hub and urban business district	first period 3.5km^2, second period 10km^2	Transportation hub、business and commercial、leisure recreation、science education and creative industry
Jinan	To build the vice city centre led by the business, exhibition, cultural functions, and to shape the new "city gate" as the provincial capital	first period 26km^2, second period 55km^2	Commercial、leisure、recreation、logistics、business、residence、public serving facilities
Nanjing	First class transport station, vice urban commercial centre	6km^2	Business and commercial、office and recreation、3 residential district
Shanghai	Traffic node for the Yangtze River Delta and regional service center	26km^2	Residence、commercial、culture and recreation、business、external transportation、green road and plaza
Xuzhou	Modernization of important integrated transport hub, the regional development of growth poles, vice city centre	26km^2, core area 5km^2	Transportation comprehensive hub, public comprehensive serving district of administrative office, commercial and finance and culture recreation
	One of the three core areas of urban clusters in the future of Xuzhou	12km^2	Enterprises headquarters, administrative business, stars hotel, top grade residence, modern logistics
Bengbu	Fully - functional new modern city	Core area 8km^2, total area 23km^2	Finance、science education、business、residence
Langfang	—	10000m^2 (build up area)	Square and business district
Cangzhou	Serving the upscale leisure, tourism, entertainment, restaurants, hotels, service - oriented business district	28km^2	Large public buildings, top grade residential district
Dezhou	New ecological high speed railway district, transportation business, urban residence, comprehensive serving area and industry area	50km^2, core area 12.5km^2	Theme park、leisure recreation facilities, ecological community along the river、residential district
Taian	Urban comprehensive quarter of public building and residence	3.7km^2	150000m2 new station square, 400000m2 residential building
Qufu	Mainly for residential, commercial, leisure, transport characteristics of urban comprehensive development area	Core area 2.5km^2	Square、residence、commercial
Zaozhuang	Urban lobby	10km^2	Administrative office, culture recreation, financial business, gym and gardening residential quarter

City	Development goal setting	Planning Size	Main Function and Facilities
Chuzhou	Urban new district with transport, commercial, culture recreation and residence function	8km^2	Transportation hub centre with transport, commercial, business and hotel, 3 residential district
Changzhou	—	59hm^2	Hub core district、residential district、modern commercial and business district、ecological functional district
Wuxi	modern production services of one of the main space vector，modern transportation hub	45km^2	Business、residence、leisure、education、serving facilities、green ecology
Suzhou	traffic - guiding development area；new economic vitality Center，modern production services of space vector	1.8km^2	Commercial and business、culture recreation
Kunshan	transportation hub	—	Gate of city、transportation hub、business center and comprehensive district

Table 3. Development goal setting, planning size and function of station areas along Beijing-Shanghai HSR line. Source: Wang Lan, 2011.

In contrast of the peripheral location and huge volume of planning program, the urban planning strategies around the intercity HSR station are less ambitious. Because the intercity HSR and conventional railway line are planned side by side, the common practice is firstly to construct the intercity HSR station at the backside of the existing railway station, and then to plan some small-scale or piecemeal redevelopment of the station surrounding areas. Taking the Wuxi intercity HSR as an example. From fig. 6 we can see that the newly built intercity HSR station is located exactly side by side of the existing railway station. The two stations are connected by the newly built underground tunnels and elevated corridors. By doing this, the former urban territories cut apart by the tracks are reunited together and the accessibility of the region has been enhanced. The urban redevelopment projects only take a small part of the surrounding area (less than 1 km^2), converting the former freight yards into essential public transport transformation facilities and small-scale commercial complex.



[fig.6] Location of the Wuxi intercity HSR station, conventional station and urban redevelopment site. Source: elaborated by the author based on the Google map.

4. Actors involved in the urban development around HSR stations

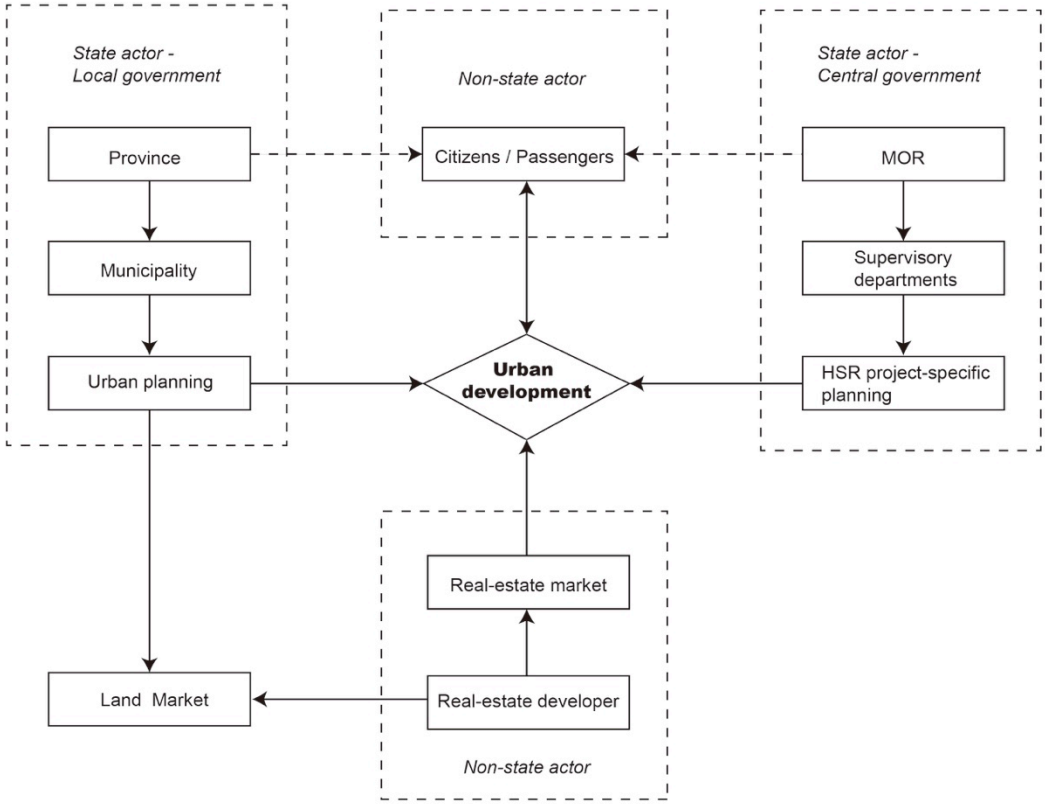
4.1 The role of the Chinese Ministry of Railways

In China's HSR system, the major agent representing the central government was the former Chinese Ministry of Railway (MOR), which holds the political power of decision-making in developing and implementing HSR transport system. Moreover, as a monolithic state enterprise, the MOR was also responsible for providing the HSR service and managing all the operations of HSR trains. The dual role of the MOR guarantees itself the absolute power in deciding the HSR network planning process. In the current transport paradigm, travel time is generally considered to be wasted time and a disutility (Lyons et al., 2007). This means that travel time needs to be minimized and consequently speeds need to be increased, and this argument has argument has been central to the HSR transport planning (Moshe et al., 2012). For one HSR journey, the total travel time for passengers actually is the "door to door" travel time, which contains two parts: the station-to-station travel time and the additional travel time. Here

the station-to-station travel time refers to the time consuming on the HSR train, and the additional travel time refers to the time consuming on accessing to and egressing from the station to the passenger's final destination. For the HSR system, because the operation speed and the trajectory of the line are fixed, it's difficult to reduce the station-to-station travel time. However, the additional travel time can be reduced by different means, and thus how to minimize passenger's additional travel time is a central concept in HSR transport planning. Zheng and others (2009) elaborate that if the additional travel time of the HSR reduces from 2 hours to 1 hour, the superior travel distance compared to the aviation will increase from 600 km to 1200 km. Due to its great significance, the MOR pays much attention to minimize it when comes to the planning of HSR, especially for the intercity HSR lines. If the speed is fixed, the distance and time is in the positive correlation. Therefore, when the travel distance is shorter, the station-to-station travel time is shorter, too. Accordingly, if we assume the additional travel time is the same, the proportion of additional travel time in the total travel time of intercity HSR is much higher than of national HSR. Taking the Beijing-Shanghai NHSR and Nanjing-Shanghai IHSR as an example, under the same operational speed, the station-to-station travel time of the NHSR and IHSR is 5.6h and 2h, respectively. Assuming both of the additional travel time is 1h, and then the proportion of additional travel time in the total travel time is 15% and 33%, respectively. In other words, the shorter the travel distance, the more sensitive of passengers about the additional travel time. Therefore, for the short-distance travelling by the intercity HSR, in order to minimize the additional travel time, the MOR planned the intercity HSR as close to the city center as possible, which finally lead to build it side by side of the existing railway line. Besides, due to the less sensitive of the additional travel time, the national HSR line could be planned a certain distance from the city center. From this point of view, the trajectory planning of the two lines are initiated from reducing total travel time and providing better HSR service to the passengers, and thus it's passenger-oriented.

4.2 The role of the municipal government

Although the MOR formulated the HSR transport planning via its independent hierarchal structure, it is largely the local municipalities that form the urban development strategies around HSR station area. From fig. 7 we can see that the municipalities directly confront the MOR, developers and other actors, making urban planning dedicatedly to meet the HSR transport planning system, regulating and establishing land market to cooperate with real-estate enterprises, as well as providing public facilities to the citizens. Therefore, the municipal government probably is the most important actor forming the urban development path.



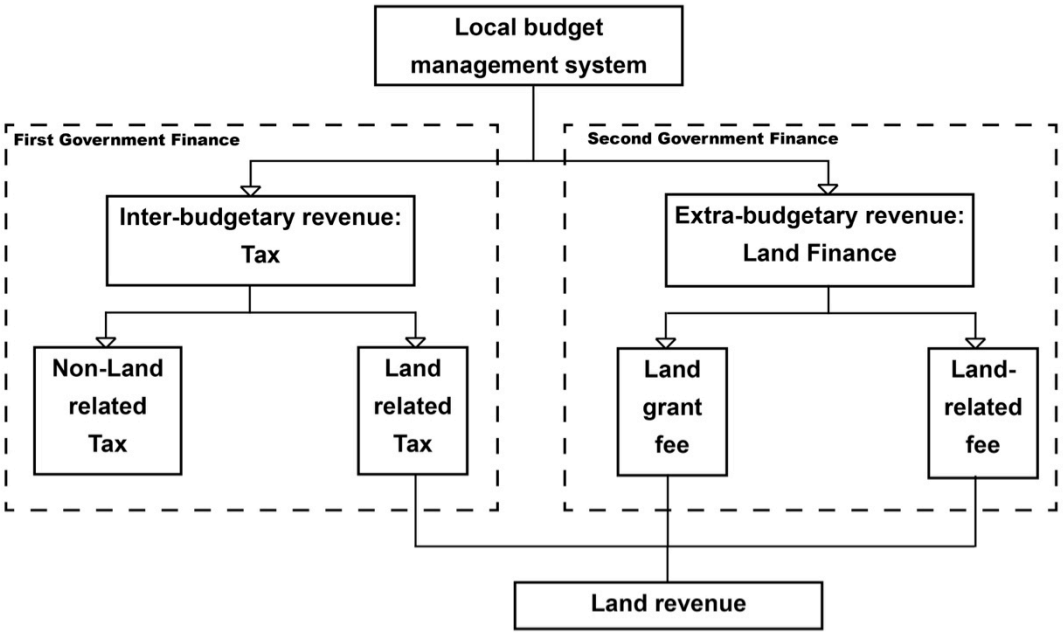
[fig.7] Actors involved in the urban development around HSR stations. Source: elaborated by the author.

In China, economic decentralization has enhanced the control of the local government over urban development. Local governments have increasingly seen large development zones and property-led development as being an essential mechanism for restructuring urban areas (Wu et al, 2007). During this process, the local state, as a major agent of urban transformation, has become more

entrepreneurial than before (Qian, 2011). Wu (2003) argues that the political economy of Chinese municipal entrepreneurialism has been altogether more complete in terms of the state's control of the land-development process, and strategic in terms of promotion, the supporting infrastructure, and, as a consequence, the location of that growth. In order to detach the role local municipalities playing behind the change of urban structures, several institutional parameters of the local governance will be firstly examined.

4.2.1 Dual fiscal system of the local government

The original purpose of reducing the fiscal pressure on the central state is achieved by giving local government the permission to retain certain revenue, which is known as “extra-budgetary revenue”. As its name suggests, extra-budgetary revenue refers to certain local revenue acquired legally yet outside of national / local budget management system. As illustrated in figure 8, the extra-budgetary revenue of local government is mainly consisted of land grant fees and land-related fees.



[fig.8] Relationship between local budget management and land revenue. Source: elaborated by the author.

Land revenue refers to the government revenue acquired by taxation, charging and operating on land (Zhou, 2009). It consists three major parts, which are land grant fee, land related tax and land related

fee[3]. Ho and Lin (2003), reveal that land finance contribute 30–70% of municipal revenue in many cities. According to recent statistics, in 2009 the land revenue accounted more than 50% of local government revenue[4]. Besides, according to Zhou (2009), nearly 60% of total land revenue belongs to the extra-budgetary revenue, which means the expenditure of this part is totally decided by local government and lack of transparence. As can be seen from figure 8, the second government finance is in fact the completely land finance created by localities.

4.2.2 Establishing the land market by the local government

The land ownership in China can be divided into two parts: urban land is owned by the state while rural land is primarily owned by the collectives, and the state has been endowed with an innate right to acquire collectively owned land in the name of the public interest (Wu et al, 2007). It was not until the First Session of the Seventh People's Congress in 1988 that paid transfer of land use rights was made official (Jiang et al. 2009). This reform aims to separate land use rights from the ownership. In other words, the land use rights have been commercialized and users should pay for the land use rights within limited time span. The enactment of the City Planning Act in 1989 gives municipalities the right to issue land-use and building permits. Even projects that are under the central government must apply for land-use permission from the local government before the project can be funded (Wang, 2012). After the power of land management transferred into local government, land has become very meaningful resource to allow local government entrepreneurially increasing financial income.

[3] Land grant fee refers to compensation of granting of use rights in state-owned land. In March 2002, the Ministry of Land and Resources (MLR) issued Decree No. 11 (Regulation governing the Granting of Use Rights in State-Owned Land by Tender, Auction and Quotation), which requires all lands for business purposes (commerce, tourism, entertainment and commodity housing) to be transferred publicly after 1 July 2002, either through tender, auction or quotation. Land related tax includes direct land tax (Land use tax, Land added-value tax, Farmland conversion tax, etc.) and indirect land tax (Business tax, real estate tax, etc.). Land related fee refers to the charge of administration fee by land departments such as land reclaiming fee and all the fees occurred during land leasing process.

[4] Source: website of Chinese agriculture economy, http://www.caein.com/index.asp?xAction=xReadNews&NewsID=58963

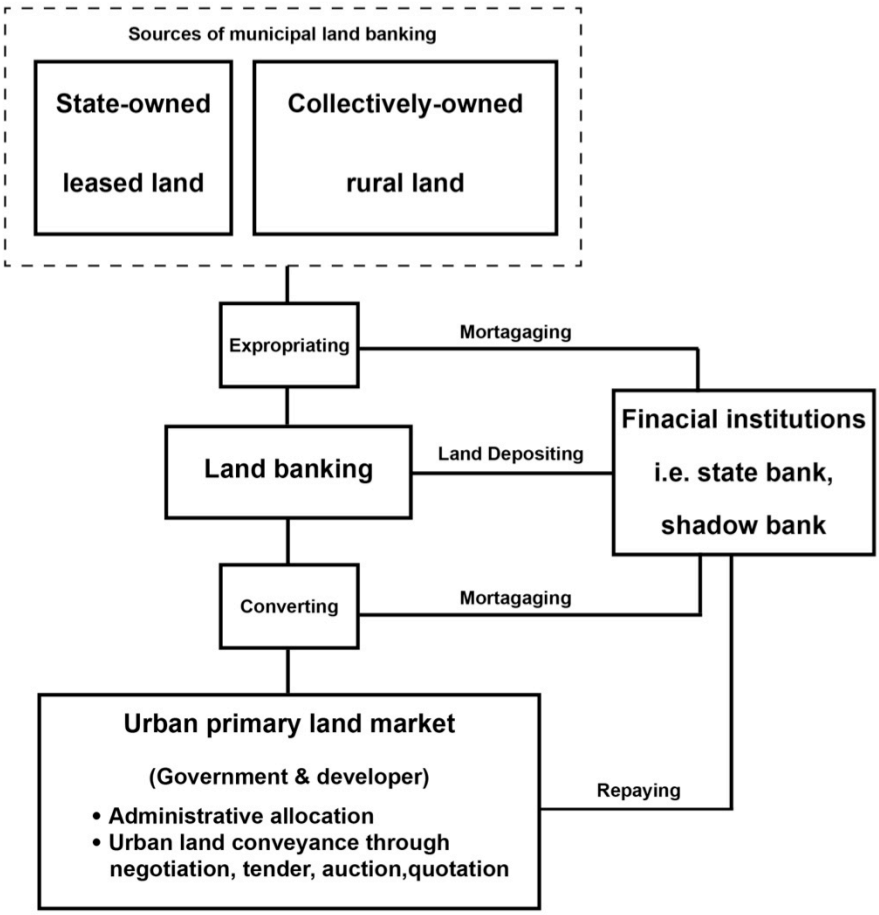


Fig. 9. Established land market by the local municipality. Source: compiled by author.

In order to obtain land income, a specific land market has been gradually established (see fig. 9). Firstly, local government has to manage land expropriation process, which has been intensified through the "land banking" system (Xu et al. 2009). Land banking is mainly achieved by municipalities through purchasing and expropriating rural land or state-owned land, exchanging land, and taking back sites when leases expire. Among those methods, the transaction of rural land has become the main resources to increase the land reservation volume. After obtaining the land, it is government's responsibility to convert it into relative good condition. Land converting usually consists of supplying traffic, electricity, water, drainage, telecommunications and flatting the ground (Wang et al. 2012). After that, converted land will be divided into smaller plots and leased by local land bureau to the developers in the primary land market. Through the land-leasing process, land achieves its exchange value and local government obtains the revenue. According to statistics, in 2009, the average net profit is around 30% of total land revenue, and about 80% of them has been spend on the construction of new urban infrastructures

(Wang et al. 2012). Using land income to improve urban infrastructure, which in turn increases accessibility and opens up new venues for capital accumulation in urban investment, is commonly referred to as 'using land to breed land development' (Yeh, 2005). Nowadays, as the financial institutions getting involved, the process has slightly changed. First, local government purchases and holds lands through land banking. Then, they get mortgage from financial market by depositing the most valuable land in land banking to financial institutions. After that, they use the mortgage to convert land, sub-divide it and transfer it to developers. After land releasing, they use the land revenue to repay the mortgage. Then another round of the same land-leasing process begins. Using the financial arm to raise funds has greatly accelerated the process of land converting and land leasing, and thus it becomes a widespread strategies of local governments across the country.

4.2.3 Related urban planning strategies around HSR stations

The established land market and the fact that the local municipalities heavily rely on the land finance have significantly influenced the forming of urban development strategies around HSR stations. For the national HSR stations located in the city periphery, planning the large scale of HSR development zones can greatly benefit the local government. On the one hand, HSR new town planning provides local government great opportunity to gain land revenue. Nowadays, due to the shape decrease of the cultivated land in China, the central government has implemented the strictest land-use policy. In June 2004 the Ministry of Land and Resources, together with the State Development and Reform Commission, promulgated regulations for land-use control, which specify that except for 'urgent projects', the approval of land conversion from agricultural to non-agricultural uses by local governments should be suspended (Wu et al, 2007). Local governments are required to prepare a list of 'urgent projects', including projects for energy production, major transport projects such as airport and railways, education uses for middle and primary schools, military projects, etc., and the central government will approve this list of 'urgent projects'. Under this circumstance, the HSR projects give the local governments perhaps the last chance of avoiding the restrictions imposed by the central state. On the other hand, because the construction of the HSR and related transport facilities will increase the accessibility of the region, the market price of the leased land will no doubly skyrocket in the future.

Therefore, considerable profit could be made by the municipality because of the price scissors between land-acquisition and land-lease.

The land market could also explain the piecemeal urban redevelopment strategies around intercity HSR stations. Because of its central location, the territories around the intercity HSR stations have already been well developed, and thus to demolish the densely populated surroundings of the station will involve huge amounts of compensation. The great potential cost of land acquisition and less land revenue makes the local municipality hesitate to take the same aggressive state-led development strategies implemented around the NHSR station. Therefore, it is also the economic parameters overwhelmingly dominant in the urban redevelopment around intercity HSR stations.

5. Conclusion

As one of the most complex transport system, the HSR mega-projects involve multiple actors who represent different interests. From this perspective, the urban development strategies around HSR stations are the production of compromise balancing varied interests. Among various actors, because the central state (the MOR) have the absolute decision-making power of HSR transport planning, while the local government (the municipality) holds two critical resources – land and capital, the whole HSR projects including HSR transport planning and urban planning induced by it are most likely to be dominated and formed by the state. For the trajectory planning of HSR line, the transport parameters account a lot. Because the passengers are more sensitive about the additional time of intercity HSR than national HSR lines, the MOR intends to plan the IHSR more closely to the city center. Accordingly, the local municipalities shift and adjust their urban planning strategies to better match such HSR transport planning. However, as *de facto* owners and managers of state land resource, the role of the local government has gone beyond solely coordinator of central government to a major market players seeking for its own benefits. Characterized by its peripheral location in the city and the huge volume of the planning size and reserved land, the urban planning of HSR new town is sometimes beyond the practical needs of urban developments, only because such a strategy can fulfill the shortsighted needs of local government to obtain land revenue. Through the alliance of the local government and the MOR,

the state once again strengthens its power at different levels of territory. During this process, the non-state actors' benefits might be neglected, which requires more research in the future.

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