

# Institutional changes and the Shifting Power Network: Planning Wusong Port from 1898 to 1999

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In this paper, the authors introduce the issue of institution as a factor of considerable significance. Based on field investigation and historical geography analysis, inquiring port plans, policy documents, laws and regulations as the basic historical data, the authors try to review the process of developing Wusong Port in the twentieth century and analyse the dynamic mechanism of its evolution from the perspective of institutional changes. The first section of this paper provides an overview of the development trajectory of Wusong Port, which focuses on its functions and locations changes. The second section briefly discusses the shifting power network that had historically governed the port and analyses relationship between the port and the city. The impact of administrative zoning adjustment is particularly mentioned, since the changes of the function of Wusong port were always accompanied by it. The third section explores the planning of the Wusong port in different historical periods. This article provides evidence that government-led port exploitation plays a great role in the fundamental change of Wusong Port — from a naval port, to a commercial port, to an industrial port, and finally an international cruise port.

Keywords: Wusong Port, historical evolution, Port city, Management institution, Power networks

#### Introduction

As centres of exchange where different cultures and different environments meet, at the boundary between land and sea, port cities have long fascinated geographers, economists, sociologists and historians. (Tan, 2007)With the development of world ports, the research hotspots experienced the port city spatial relationship (Bird, 1963), the evolution of the port cities of the colonies (Taaffe E J, Morrill R L, Gould P R, 1963; Hoyle, 1968), the evolution of the hub ports and their systems (Hayuth, 1987), the port city interface (Hayuth, 1982; Hoyle, 1989), in the academic field. Since 1980s, the research on institutions of ports has become a hot topic (Amin and Thrift, 1994; Brooks 2004; Notteboom 2005; Pallis and Syriopoulos, 2007; J Wang A. Ng 2004), some scholars had begun to attribute the power of port and urban development to institutions (Jacobs and Hall Gonz les and, 2007; Healey, 2005) in recent years.

These institutions consist both of formal rules (e.g. constitutions, laws, and property rights) and informal rules (e.g. customs, traditions, or codes of conduct) that shape the actions of individuals, organizations, groups or other actors. (Daamen T A and Vries I, 2013) It is difficult to adopt a general method for institutional analysis of port cities, for China's unique national conditions and historical progress. Therefore, the authors mainly study the different policies and means adopted by the governments in the management and planning of Wusong port in different historical periods, as well as the role changes of the Port Authority in these activities.

Wusong, named after the Wusong Estuary located at the intersection of Yangtze River and the Huangpu River, has always been regarded as a treasure land for development due to its excellent traffic conditions. Early in the Guangxu period of the Qing Dynasty, it had been a port town for the transshipments of goods, with customs, railways, wharfs and post offices being built<sup>1</sup>. Wusong had a high reputation abroad in the early twentieth century, while some foreigners had not heard about the location of Shaanxi, Gansu and other provinces, but everyone knew Wusong<sup>2</sup>. However, the development of Wusong port had been very slow during a long historical period. The reasons are complex, but one reason that cannot be ignored is that its development is related to institutional changes and the shifting power network. So it is necessary to interpret its special and complex situation in a perspective of institutional changes. The Qing Government made Wusong as the first trade port self-determinately in order to maintain the sovereignty in 1898, and formulated a plan to construct a commercial port. This marks the end of its unrestrained development stage, that's why we choose this time point as the beginning of this research.



## From a fishing port to an international cruise port: function transformations of Wusong Port

In this paper, Wusong Port refers to a series of wharves, berths, harbour operational zones etc established in Wusong area in history. Historically, its main functions and locations of have undergone many vicissitudes(fig.1). Its function transformations can be divided into five stages, from the fishing port, naval port, commercial port, industrial port and then to the international cruise port, almost the epitome of various types of port functions in China. (Lin Tuo and Zhang Xiugui, 2008) Its trajectory of space migration is different from the classical Any-port model, and its change process could be characterized by jumping. (Shen Li, 2013)

Before Wusong became a town, it had already been a fishing village market described as *three hotels in the ten stores and twice seafood listed on a day*. The fishing wharves were mainly distributed on both sides of the Yunzao Creek, while Wusong town expanded behind the wharves. After the Opium War, the military function of Wusong port gradually became prominent. It's closed to the urban area of Shanghai, if we lose, the safety of the city will be directly threatened. In 1870, the Qing government set the Wusong Navy Camp and built a wharf. Since then, Wusong port began to extend along the Huangpu River and the Yangtze River estuary.

In late nineteenth century, the Qing government independently opened port in Wusong to avoid Western Powers advancing into the Wusong area. Viceroy of Liangjiang Liu Kunyi take

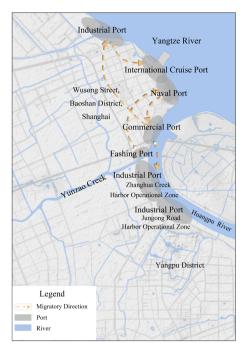


Figure 1: Changes of functions and locations of Wusong Port

Supervisor of the Self-strengthening Army Service Department Shen Dunhe's proposal to dynamite Wusong Fort Barbette in order to facilitate business activities<sup>3</sup>. This marks a shift from a naval port to a commercial port. Wusong Port became a centre of land-and-water coordinated transport.

After the founding of the PRC, Wusong Port began the transition to an industrial port as Wusong area is regarded as an important industrial area of Shanghai. In November 1959, Shanghai Port 9th Harbour Operation Zone was established on the west side of the Huangpu River in Zhanghuabang. Shanghai Port 10th Harbour Operation Zone began to establish in 1973, and then the two harbour operation zones became the international container port of Shanghai. Starting from 1980s, Wusong International Cruise Port located in the Paotaiwan water of the Yangtze River began to be planned. It is the busiest international cruise home port for the Asia Pacific region after the completion of the construction.

## Several repetitions of the establishment and revocation of Wusong administrative area

As a governing and policy tool, the status of administrative division in China is more critical than other countries. To analyse the development of Wusong port, we should pay close mention to the influence of the administrative division adjustment, which makes it be taken into consideration in the overall pattern of Shanghai, from an outport.

In the late Qing Dynasty, Wusong Port was located in Wusong Town, while Wusong town was subordinate to Baoshan County of Taicang state, Jiangsu Province. At the beginning of Shanghai's opening port, Wusong was eyed by Western powers<sup>4</sup>. Wusong's administrative jurisdiction didn't belong to Shanghai, so foreign businessmen could not carry out commercial activities in Wusong area. From the 1870s, Western Powers one after another to request to open the Wusong as a commercial port and expand the scope of their concession, but the Qing government did not agree. Qing government regarded the development of Wusong port as a mean against the Shanghai concessions controlled by Western powers.

In 1927, Shanghai Special Administrative City was established. In subsequent year, Wusong was divided into a part of Shanghai city by the government of the Republic of China, which was promoted to Wusong district. Wusong Port was delimed into the overall framework of the urban development of Shanghai. Because of the existence of Wusong outport, the connection between Wusong and Shanghai County was strengthened. In order to meet the economic need, the government of the Republic of China made a positive response to an administrative division adjustment and promoted the original administrative unit of Wusong Town, which belonged to Baoshan County, to become an administrative unit of Shanghai. (Wang Liehui, 2013) More importantly, as the first mayor



of Shanghai Huang Fu proposed, to build a port at Wusong, and open up a new city between Wusong and Concession, to weaken the importance of concessions<sup>5</sup>.

After the founding of the PRC, Wusong District experienced establishments and revocations for three times. Three different Wusong District had three different functions, in three different areas, reflected the trend of Wusong Port's functions in the process of urbanization. The first establishment of Wusong District was helpful for the Shanghai municipal government to organize and manage the development of port and port industry. In January 1960, because of the need to build an iron and steel industrial base, the Wusong District dominated by iron and steel industry was rebuilt across the Huangpu River. In the first half of 1964, the industry under the leadership and management of Wusong district was put under the administration of the relevant industrial bureaus and companies of Shanghai, the establishment of the district system was revoked. In order to enhance the regional service for the construction of Baogang in 1978, the Shanghai Baogang Regional Office was established. Wusong District of the urban area was set up again in 1980 on the basis of the Baogang Regional Office. This laid the institutional foundation for Wusong to develop an industrial port. Wusong District was merged with Baoshan County in 1988, Wusong Port highlighted service function under the framework of coordinating the relationship between urban and rural areas, a water and land transport hub and urban comprehensive service centre.

#### **Shifting Power Network**

Wusong Port has experienced more than 100 years of developments since the first independent opening, across the three periods, the late Qing Dynasty and the Republic of China, People's Republic of China, with its management institutions changes continuously. In different historical periods, the institutions involved in port management and their management rights are different.

In the late Qing Dynasty and the early Republic of China, there was no specialized institution to manage Wusong port. The land and water area, foreign mooring area and Chinese ship mooring area of Wusong port were managed by separate institutions. Lack of specialized port management institution resulted in low administrative efficiency, and the development and construction of port were basically in a spontaneous state. According to statistics, half of Wusong wharves were donated by local businessmen. At that time, Shanghai Port was actually in the hands of the foreign port manager under the Commissioner of Customs.

After 1920s, the government of the Republic of China realized the fact that there was no specialized port management institution, which was not conducive to the planned development of Shanghai Port. In 1927, the Special Municipal Government of Shanghai decided to set up Shanghai Port Authority to conduct unified management of the port. In the next year, Wusong was divided into Shanghai. Wusong Port was placed under the management of Shanghai Port Authority. However, due to the obstruction of Shanghai customs, Shanghai Port Authority did not actually control the management of all the wharves. In fact, the Shanghai government could only manage Chinese vessels, wharves and warehouses in Nanshi Area. By the end of 1930, Shanghai Port Authority had no choice but to revoke. The dispute of port management right ended with the failure of the Chinese government. In 1937, Shanghai Customs, Police Office, Pilotage Office, Junpu Bureau, etc. were under the control of Japane after the Japanese occupation of Shanghai.

Before liberation, Wusong port had been under the control of the imperialist and bureaucratic bourgeoisie, and more than 10 units, such as Shanghai Customs, Junpu Bureau and the Political Bureau, scramble for the port and compete for each other. The semi-colonial feature was most prominent in the port management system, which was dominated by foreigners. Wharves and warehouses were decentralized, controlled by several enterprises from different countries. This had resulted in the development of Wusong stay in the ideal.

In May 1949, Shanghai was liberated. The People Government retracted all kinds of sovereignty of imperialism and illegal occupation of our country, including the ship diversion, navigation administration and channel dredging, which ended the chaos in the management of Wusong Port, which was caused by the imperialism for decades. In 1954, the jurisdiction of the port authority under the Ministry of Transport was clearly stipulated in the form of a decree after the promulgation of the Provisional Regulations of the People's Republic of China on Port Management. According to this law, it has gradually established and formed a combination of government and enterprise, and a management system of production, aviation and service units. It has played an important positive role in developing port production and strengthening port management. In order to make the port management institution to adapt to the need of development and change, the central government has made eleven changes to the administrative institution of the port authority from 1950s to 1980s. The main change is the affiliation of port, which changes periodically between the Ministry of Communications (the central government) and the local government. In 1980s, the state's port management institution has undergone major changes. In 1986, Shanghai Port has been put under the control of the local government, and the management institution of "central and local government dual leadership and local government management" was carried out.



#### Planning Wusong Port in the context of confrontation between China and Western Powers

The planned construction of the Wusong Port began in the late Qing Dynasty, the Qing government once open the commercial port autonomously, promoting Wusong city development. But it failed for a variety of reasons. Dr Sun Yat-sen also showed the idea of transferring the Shanghai port to the lower Huangpu River in his famous work *The International Development of China*, unfortunately, it failed again. Since then, the government of the Republic of China has also attached great importance to transfer the port to the lower Huangpu River and Wusong in the planning of the Chinese community. The government had made a lot of plans for the construction of the port, but most of them had been shelved and forgotten. It failed to carry out owing to the backward technological conditions and chaotic political situation at that time. Even if some of the schemes were executed, there was little effect.

Liu Kunyi asked the Qing government to open Wusong as a commercial port autonomously in 1898. Wusong became a trading city different from Shanghai concession and allowed foreign businessmen to conduct business there and began to plan for constructions. This made the Chinese people very optimistic about Wusong Port to be a large seaport, but it was not as expected. The purpose of the Qing government to open Wusong Port was to develop it into a port competing with Shanghai Port, but the existing Western Powers with a vested interest Shanghai was obviously unwilling to see such a situation. The opening of Wusong Port stimulated Western Powers to be more concerned about dredging the Huangpu River to improve the shipping conditions of Shanghai port, and wrote relevant clauses into 1901 Treaty ending the Boxer War. (Wu Qiang, 2016) The dredging of Huangpu River made Wusong lost the chance to compete with Shanghai concession.

After entering the Republic of China, industrial development in Wusong area provided an opportunity for Wusong to open its port second time. Early 1920s, Zhang Jian put forward the *Outline of the Wusong Opening Plan*, pointed out that the displacement of the ocean-going vessels had increased greatly, and cannot enter the Huangpu River. Wharves should be built at Wusong. Otherwise it will be detrimental to international transportation<sup>6</sup>. In 1927, special municipal government of Shanghai was founded. The central government believes that China's military, economic and transportation issues should focus on Shanghai<sup>7</sup>. But at that time, Shanghai municipal government

could not complete the development of all the city of Shanghai due to the existence of the concessions, it could only focus on the development of the Chinese region, and began to formally put forward the urban planning, this is the Greater Shanghai Plan. The urban planning and construction of Shanghai had a clear political intention of starting from the founding of its municipal government. (Hou Li and Wang Yibing, 2015) The plan determined that the new commercial port is open in the south of Wusong town along the Huangpu River, a place with deep water. Pudong coastline of the Huangpu River was planned as an expansion zone of the commercial port area to completely avoid the influence of the concessions. The central government believes that once the Wusong built, wharves around the concession will be wasted8.

In 1937, the Japanese occupation of Shanghai attempted to turn Shanghai into a large port that plundered China's large quantity of raw materials and output commodities. In 1938, the fake revival Bureau was planning to establish a large port in Wusong to make the 10000 ton cargo ship to shore directly in the Shanghai Urban Construction Plan (later renamed the Shanghai new Urban Construction Plan). After the establishment of the Shanghai Port Consolidation Committee in September 1946, it began to discuss the formulation of the great Shanghai port construction plan. In September Committee's work group wrote Outline of the Construction Plan for the Port of Five Years. At the same time, the Great Shanghai Urban Plan Committee began to attach great importance to the

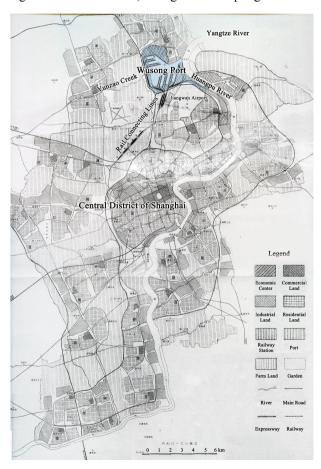


Figure 2: Port planning in the Greater Shanghai Plans: the third draft



importance of port planning, and put forward the *Preliminary Research Report on the Shanghai Port* and the *Wusong Port Plan Research Report*.

In addition to thinking that Huangpu River needs to dredge regularly to navigate, they considered that only Wusong, deep river and wide river, is the ideal position of the inner river port<sup>9</sup>, build a port at Wusong can avoid all the shortcomings at that time<sup>10</sup>, so the Shanghai port will gradually transfer to Wusong. In addition, Wusong port covers an area of nineteen square kilometers, with a throughput of one hundred million tons per year, some of which can be classified as free port when needed<sup>11</sup>. More importantly, planners believed that the wharves of different sizes along the Huangpu River represent countless private interests, the establishment of a dig-in basin(fig.2) in Wusong was conducive to improve management efficiency. Although these plans are based on the detailed investigation of the Shanghai port maladies, and in the process of planning, it had learned from Europe's Dutch Port Region and North German Port Region and La Plata Port Region in South America, it could only be shelved at that time.

#### Planning Wusong Port promoted by the central and local governments

In the early days of the founding of new China, Shanghai was listed as an industrial city by the central government. In order to cooperate with the development of the city, port development of Shanghai also had strong industrial port orientation. The Wusong still serves as a port of Shanghai, in management, planning and construction<sup>12</sup>.

In 1951, Shanghai Municipal Construction Committee compiled the "Shanghai Development Direction Map" (Draft), planned an excavated port reserve at the intersection of the Huangpu River and Yunzao Creek proposed the long-term interests. But in 1953, the Soviet expert Mukhin came to Shanghai to guide the planning of the general map of Shanghai city, he proposed to made full use of the existing facilities and the reservation of deep

water shoreline and construct an ocean water and land combined port in the area of Zhanghuabang<sup>13</sup>. This idea was eventually implemented. In 1950s, development of Wusong Industrial Area promoted the construction of Wusong port. In Shanghai Master Plan(1959), we can clearly see the intention of Wusong port serving the Wusong Industrial Area.(fig. 3)

In order to coordinate with the policy to develop the city, reorganize and adjust the old urban industry and gradually build the satellite town in the periphery, so as to create conditions for some quay shoreline in the urban area, Shanghai Port Authority has compiled a brief report (Draft) of the Shanghai port planning (1962)<sup>14</sup>, and then the Shanghai Municipal People's Committee put forward a report on the design task book on the construction of Zhanghuabang wharf<sup>15</sup>. It planned to lay out 20 berths of 10000 tons and set up a special railway line in the port area. In 1959, the construction of Zhanghuabang wharf began. After that, Shanghai Port Authority put forward a three years' construction plan that 8 berths were built at Zhanghuabang in 1960-1962<sup>16</sup>. In 1973, the Jungong Road Harbour Operational Zone of Wusong Port was built, Wusong Port became an international container port.

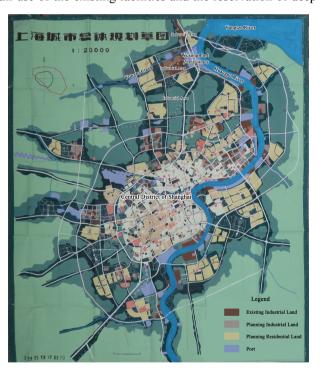


Figure 3: Draft of Shanghai Master Plan, 1959

In 1973, Premier Zhou Enlai issued the call of "three years' change of the port's appearance". The first wave of port construction in China appeared. In the same year, the State Council port construction conference proposed the requirements for the preparation of the fifth five-year plan and vision of port construction. Shanghai had set up a leading group for the construction of port with a branch named the Office of the Port Construction (also known as the Planning Office) which is affiliated with Shanghai Port Authority. In July 1974, Office of the Port Construction made a report on the ten year development plan of the port. The draft proposed the sixth five-year during the construction of the new port near Wusong Estuary. The wharf in the latest port can be operated jointly with the Zhanghuabang and Jungong Road wharves which are conducive to production scheduling<sup>17</sup>.

In 1982, Shanghai Municipal People's Government approved the location of international cruise port in Wusong area, and the length of the coastline was 330 meters. In 1987, the Ministry of Communications approved the



approval of a new international passenger and cargo berths in Wusong District. In 1986, the State Council approved the Shanghai Master Plan in which the local government proposed to actively improve the passenger transport facilities and the establishment of Wusong International Cruise Port is one of the principal measures. What's more, it pointed out the final direction of development of Shanghai port is to build new port out of the Huangpu River. Since then, Wusong ceased to be the focus of port planning.

#### Conclusion

In the development process of Wusong Port institution played a key role. Before liberation, Wusong had not been fully developed, with a good location conditions. The biggest reason says there was no institutional support. Although the government of the Qing Dynasty and the Republic of China have realized the importance of port construction, the driving factors of Wusong construction were more like market power without taking a tough measure to intervene.

Before liberation, Wusong Port was always in the whirlpool of various complicated political power struggles, and went up in the struggle between the old institution and the Western power. Wusong Port had always been in a weak position in competition with the traditional Shanghai port, just like the weakness in the struggle between the local government and Western Powers. The prosperity of Shanghai port is mainly based on the transportation trading system at the core of foreign enterprises. Western Powers did not want to see an uncontrolled Wusong Port and Wusong City, so they took numerous measures to crack down on the development of Wusong. The local government failed to develop Wusong Port due to various factors, but Western Powers occupy Shanghai was a major reason why Wusong Port is difficult to develop at that time.

During 1950s-1980s, the planned economy and the closed political and economic institution in China had restricted the development of Wusong Port to a certain extent. However, China's central government had constantly introduced new policies, and Shanghai's local governments had also adopted various adaptations to meet the need of development. This institution was constantly debugged, which many countries had never been tried or dare not try (Wang, 2010). Dynamic policy environment was a major factor to Wusong planning formulation and implementation.

Some scholars believe that the port management institution and the incomplete decentralization of port management right in China restrict the full utilization of port advantages. (Shi Youfu, 2003) Although the management and development of Wusong Port had been controversial between the central and local government, but when scrutinizing the planning since the founding of the People's Republic of China, it could be seen that the central and local governments had a common role in promoting the development of Wusong port without too much institutional resistance. Although the central government had issued various policy documents, the port law was promulgated until 2003, which created the system conditions for the development of Wusong port to a certain extent.

It is obvious that Wusong port has been not planned by the central government. It is formulated by Shanghai Port Authority and the relevant departments of the Shanghai local government through discussion, and then central government approved it. This is primarily due to the port development trend to market-oriented, and affected by more and more local factors, which are further reflected in the construction of Shanghai Yangshan port.

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## **Disclosure Statement**

No potential conflict of interest was reported by the author.

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Hao Jiang is a postgraduate student in College of Architecture and Urban Planning, Tongji University. His research interests involve history of modern urban planning and design, port city planning. His master thesis focuses on the construction of Wusong port and spatial evolution of Shanghai, supervised by Prof. Li Hou.

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#### **Endnotes**

## **Bibliography**

Amin, A., & Thrift, N. (1994). *Globalization. Institutions and regional development in Europe*. Oxford: University of Oxford Press.

Brooks M R. The Governance Structure of Ports. Review of Network Economics, 2004, 3(2):168-183.

Chen Yun. The Research on Shanghai Wusong area in modern China (1898 -1937), Shanghai Normal University, 2007.

Daamen T A, Vries I. Governing the European port—city interface: institutional impacts on spatial projects between city and port. *Journal of Transport Geography*, 2013, 27(33):4-13.

Hou Li, Wang Yibing. Greater Shanghai Plans (1946-1949): Planning Visions and Practice of a Modern Chinese Metropolis. *Urban Planning*,2015,39(10):16-23.

Hoyle B S. The port-city interface: Trends, problems and examples. *Geoforum*, 1989, 20(4): 429-435.

Hayuth Y. The Port-Urban Interface: an Area in Transition. Area, 1982, 14(3): 219-224.

Lin Tuo, Zhang Xiugui. The Cultural Evolution of the "First Portal of the Yangtze River": History, Phase and Ma Xueqiang, Focus on institution: A perspective of study the history of Shanghai, *Memories and Archives*, 2001 (6): 30-31.

Office of Shanghai Chronicles. Chronicles of Shanghai Famous Town, Shanghai Academy of Social Sciences Press, 2003.

Taaffe E J, Morrill R L, Gould P R. Transport Expansion in Underdeveloped Countries: A Comparative Analysis. *Geographical Review*, 1963, 53(4):503-529.

Shen Li. Port Function Transformation and the Spatial Organization Optimization of Port-City Interface: a Case Study of Wusong, the First Portal of the Yangtze River. *Economic Geography*, 2013, 33(11):63-69.

<sup>&</sup>lt;sup>1</sup> Sha Sipeng. Chronicles of Shanghai Famous Town. shanghai academy of social science press,2003.

<sup>&</sup>lt;sup>2</sup> Outline of the Wusong Opening Plan, "Shenbao" January 1,1923, sixth edition.

<sup>&</sup>lt;sup>3</sup> Wusong Fort Barbette File, Shanghai archives, archival code: Y6-1-117.

<sup>&</sup>lt;sup>4</sup> The British Consul in Shanghai, George Balfour, has delimited the Huangpu water front from Shanghai county to Wusong Estuary, about 13 miles long, as part of the port area of Shanghai port.

<sup>&</sup>lt;sup>5</sup> Shen Yi. An Account in Shen Yi's own words. Biography Literature Press, The 74 year edition of the Republic of Chin.108

<sup>&</sup>lt;sup>6</sup> Outline of the Wusong Opening Plan, "Shenbao" January 1,1923, sixth edition.

<sup>&</sup>lt;sup>7</sup> A grand ceremony of the Shanghai municipal government establishment yesterday, the admonition from national government representative Jiang Commander, Shenbao, July 8, 1927, thirteenth edition.

<sup>&</sup>lt;sup>8</sup> The central area of great Shanghai, Shenbao, November 12, 1929, thirteenth edition.

<sup>&</sup>lt;sup>9</sup> Shanghai Urban Planning and Design Research Institute, *The Great Shanghai Plans*, the next volume (photocopied Edition), 505-506, Shanghai: Tongji University press, 2014.

<sup>&</sup>lt;sup>10</sup> Shanghai Urban Planning and Design Research Institute, *The Great Shanghai Plans*, the next volume (photocopied Edition), 88-95, Shanghai: Tongji University press, 2014.

<sup>&</sup>lt;sup>11</sup> Shanghai Urban Planning and Design Research Institute, *The Great Shanghai Plans*, the next volume (photocopied Edition), 505-506, Shanghai: Tongji University press, 2014.

<sup>&</sup>lt;sup>12</sup> The documents of Shanghai Port Authority, Municipal Finance and Economics Committee, East China Military and Political Committee on the division of the Shanghai Port area, Shanghai archives, archival code: B1-1-1234.

<sup>&</sup>lt;sup>13</sup> Sun Ping, Chronicles of Shanghai urban planning, Shanghai Academy of Social Sciences Press, 1999.

<sup>&</sup>lt;sup>14</sup> Shanghai Port Bureau's draft report on Shanghai Port planning and the opinions of the Central Transportation Department. Shanghai archives, archival code: B7-2-255.

<sup>&</sup>lt;sup>15</sup> The People's Committee of Shanghai's report on the task book of construction design of Zhanghuabang port, Shanghai archives, archival code: B1-1-1466-26.

<sup>&</sup>lt;sup>16</sup> The draft of Shanghai Port Administration Bureau's opinions on Submitting Shanghai Port's main port construction from 1960 to 1962, please examining and checking the draft, Shanghai archives, archival code: A54-2-749-6.

<sup>&</sup>lt;sup>17</sup> The Revolutionary Committee of Shanghai Port bureau's planning of the development of Shanghai Port for ten years (1976-1985). Shanghai archives, archival code: B246-2-1127-3.



Shi Youfu, The relationship of the port and the city and port mechanism reform, China Ports, 2003 (1): 14-16.

Sun Ping, Chronicles of Shanghai Urban Planning, Shanghai Academy of Social Sciences Press, 1999.

Tan, T. Y. Port cities and hinterlands: A comparative study of Singapore and Calcutta. *Political Geography*, 26(7), 851–865.

Wang J J, The interaction and development of Chinese port and city, Southeast University Press, 2010.

Wang J J, Ng K Y, Olivier D. Port governance in China: a review of policies in an era of internationalizing port management practices. *Transport Policy*, 2004, 11(3):237-250.

Wang Liehui. Outport and Urban Development: Centered on Shanghai and Tianjin. Areal Research and Development, 2013,(6):24-28.

Wang Liehui, Summary on Spatial Structure of Overseas Port-City, City Planning Review, 2010, 34 (11):58 – 60.

Wu Qiang. A study of the relationship between Shanghai city and its port in modern times. (1843~1937), Science Press, 2016.

Zhang Yan. Shanghai Port Encyclopedia (1990 edition), Shanghai: Shanghai Scientific and Technological Literature Press, 1991.

Zhang Mengtian, Wang Chengjin, Wang Chenglong, Regional evolution, function evolvement and driving mechanism in the development of Shanghai Port, *Geographical Research*, 2016,35 (09): 1767-1782.

#### Image sources

Figure 1: The author changes drawing according to Shen Li's map: Shen Li. Port Function Transformation and the Spatial Organization Optimization of Port-City Interface: a Case Study of Wusong, the First Portal of the Yangtze River. *Economic Geography*, 2013, 33(11):63-69.

Figure 2: Sun Ping, Chronicles of Shanghai Urban Planning, Shanghai Academy of Social Sciences Press, 1999:84.

Figure 3: A archive of Shanghai Urban Planning and Design Research, the Greater Shanghai Plans.