

URBANIZATION MECHANISM STUDY UNDER THE DYNAMIC OF STATE CAPITAL

A Case Study about Northeast China with the Construction of the
Chinese Eastern Railway in the Early of 20th Century

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Abstract

Since the industrial revolution of the 18th century, the modern economic system gradually matured and rapidly expanded in the world, especially the state capital investment relying on the railway, which drastically changed the urbanization process and city agglomeration pattern around the world. At the end of the 19th century, due to the important strategic value of the Far East, Russia raised state capital, built the Siberian Railway directly to Vladivostok, especially the C.E.R. across Northeast China, induced capital competition among China, Japan and Russia around the port and railway construction right and management right, formed the SMR system centered on Dalian, the C.E.R. system centered on Vladivostok, and the Chinese railway system centered on Huludao, laid the city structure of the "hub-railway network-hinterland" model centered on the port city in Northeast China, which promoted the development of commercial cities, hub cities and industrial and mining cities. Under the special tariff system, China, Japan and Russia relied on port-railway capital competition, forming the city development dynamic mechanism oriented by the export-oriented economy, that has the important theory value for how to effectively use the state capital advantage to promote the development of the macro-regional city system in the context of economic globalization.

Keywords

State Capital, Urbanization Mechanism, the Chinese Eastern Railway, Hub-Network-Hinterland Structure, Northeast China

Foreword

After the industrial revolution of the 18th century, the modern economic system gradually matured and rapidly expanded worldwide. In the 19th century, in the context of the Russian Far East Policy and the Japanese Mainland Policy, the Far East, Especially Northeast China, gradually became the focus of international competition due to its special geographical location and abundant natural resources. Under the joint participation of China, Japan, Russia and other countries, with the national military strength as the backing, the state capital penetration as the means, and the harbor and railway construction as the carrier, a fierce competition of rights and interests had been launched, which promoted the rapid modernization and urbanization of Northeast China, which gradually became the region with relatively developed social economy in the Asian, and even in the world in the early 20th century, that has important value and significance in the history of modern human social development and urban development. Based on this, the paper, taking the expansion of the Russian and Japan colonialism in the Far East in the early 20th century as the background, and taking the port and railway construction under the support of state capital as clue, with literature research methods and field investigation methods, systematically sorts out the urbanization process of modern Northeast China, explores the dynamic mechanism of national capital on regional urbanization, to enrich the history study of urban development in the modern Far East.

1. Natural and Historical Background of Modern Northeast China

In the early Qing Dynasty, according to the Sino-Russian Treaty of Nibuchu, the Northeast China, east to the Sea of Japan, southeast to the Tumen River, northeast to Okhotsk Sea and the Sakhalin Island, north to Waixinganling mountain, northeast to the Gelbiqui River, is extremely large. (Ping Bu etc., 1987) After the Second Opium War, China and Russia signed the Aihui Treaty and Beijing Treaty in 1958 and 1860, Russia occupied the vast land which north of Heilongjiang River and east of the Wusuli River. (Ping Bu etc., 1987) Northeast China of this paper, including today's Liaoning, Jilin, Heilongjiang provinces, and Chifeng, Tongliao, Xingan league in eastern Inner Mongolia and northeastern parts of Hebei Province. At the end of Qing Dynasty, where was the jurisdiction of the Shengjing general, Jilin general, Heilongjiang general, in addition, included the Inner Mongolia's Zhelimmu League, Zhaowuda league and Zhuosuotu league. During the Republic of China, where was Fengtian, Jilin, Heilongjiang Province and northeastern part of Rehe Province.

1.1. Natural Geographical Environment of Modern Northeast China

The development of modern cities in Northeast China is restricted and supported by natural geographical environment. In the Northeast China, the west part is the Daxinganling Mountains, the north is the Xiaoxinganling Mountains, and the east part is the Long White Mountains, which are the watersheds of the Liaohe, Sungari, and Inner Mongolia Plateau rivers, the Heilongjiang main stream, the Suifen River, the Tumen River and the Yalu River, (Fig.1) "the mountains are not very high, all have a large forest, one of the rich sources of Manchuria and Mongolia." (Fujioka, 1929) The central part of the three major mountains is the Songliao Plain, with the Changchun-Tongyu Line, the southern part is the Liaohe Plain, the northern part is the Songnen Plain, accounting for about one-third of the Northeast

1.2. Urban Development in the Early and Middle Qing Dynasty

1.2.1. City Development Status in the Southern Liaoning Region

The middle and lower reaches of the Liao River in the southern Region of the Northeast China are located in warm temperate zones, with superior agricultural resources. In the first year of Shunzhi, a large number of Manchus moved to China proper, led to the land ridiculous. In the 10th year of Shunzhi (1653), due to financial difficulties, Liaodong Reclamation Recruitment Order was issued, Liaoyang Fu was set up to lead Liaoyang Xian and Haicheng Xian, and manage the local Han nationality. In the 7th year of Kangxi (1668), the recruitment was stopped and the ban was imposed, but it did not prevent the Han people from moving to the Northeast China. In the 10th of Xianfeng (1860), when Yingkou

was opened, Shengjing General governed Fengtain, Jinzhou 2 Fu; Liaoyang, Fuzhou, Yizhou, Ningyuan 4 Zhou; Xingjing, Xiuyan, Phoenix, Cahngtu, Xinmin and Jinzhou 6 Ting; Chengde Haicheng, Gaiping, Tieling, Kaiyuan, Jinxian, Guangning 7 Xian. All of these Fu, Ting, Zhou, Xian, the Han area were mainly distributed on the banks of the Liao River and the coastal Plain, where were the main agricultural area in the Northeast China.



Figure 2 Schematic Diagram of the Distribution of the Willow Wall (Qijun Zhang, 1966)

1.2.2. City Development Status in the Eastern Jilin Region

The eastern region of the Northeast China included the Long White mountain area, the vast plains of the middle and lower reaches of the Sungari River and the Heilongjiang River, where as the home of the Manchu ancestors, regarded as the holy land of Qing Dynasty, full of paddocks and forests. Except the Manchus, the residents were mainly Daur, Ewenkis, Oroqen and Hezhe, who lived in tribal forms, mainly fishing and hunting, the social economy was very underdevelopment. Since the early of Qing Dynasty, the southern margin of Jilin and Heilongjiang had agricultural development, relying on prisoners, traders, illegally entered Han people, and the people who stole gold mines. (Tingyi Guo, 1987) During the Sino-Russian Yaksa War, in order to resist the invasion of Russia, built the Post-road and a large number of sailors and craftsmen were introduced. With the increase of immigrants, in the 4th year of Yongzheng (1726), the Qing government set up Yongji Zhou, and set up Changning Xian in Bodune and Taining Xian in Ningguta, this was the first administrative setting in Jilin since the founding of Qing Dynasty. In the 13th year of Qianlong (1748), set up Jilinn Ting. In the 5th year of Jiaqing (1800), set up Chuangchun Ting. In the 15th year of Jiaqing (1810), set up Bodune Ting. In addition, the eastern region of Northeast China was rich in ginseng, suede, antler, medicinal materials and other valuable specialty products, there were active commodity transactions with China proper. Before the 6th year of Yongzheng (1728), Ningguta was the center of specialty trades such as the fur of the

northeastern ethnic groups, every spring, the ethnic groups in the lower reaches of Heilongjiang River came one by one, paying tributes such as suede, and selling all kinds of skins in exchange for production and daily necessities. In the 7th year of Yongzheng (1729), the Qing government decided that the tributes of the ethnic groups in the lower reaches of the Heilongjiang River and the Wusuli River were managed by the Sanxing, and then Sanxing replaced Ningguta and became the largest fur trade center. The valuable products in the eastern region were sold to China proper, and exchanged for the items needed for production and life, the business travels along the Post-road flourished and promoted the cities development. (Zhaokui Xu, 1959)

1.2.3. City Development Status in the Western Heilongjiang Region

The northern part of northeast China included most of the Songliao Plain, the Daxinganling Inter-span, and Keerqin sand land in the upper reaches of the West Liao River, where had long been the cradle of the northern nomads. In the vast middle and upper reaches of the Heilongjiang River, in order to defend against the invasion of Russia, the Qing government set up Heilongjiang General in the 22nd year of Kangxi, originally stationed in Heilongjiang City (Now Aihui), in the 29th year of Kangxi move to Mergen (Now Nenjiang). In the 38th year of Kangxi (1699), as the land of Mergen could not accommodate the more people, Heilongjiang General moved to Qiqihar, in 10th year of Xianfeng (1860), who commanded Heilongjiang, Mergen, Qiqihar 3 deputy generals, Hulunbeier deputy head general manager, Butehasuolun and Dahu 2 Zongguan. In this region, except for the Heilongjiang, Mergen, Qiqihar and the Post-way station, as well as the Hulan River basin and Jieya River Basin and the farmland of the prisoner, there were a few agricultural tribes, the vast region were nomadic areas and safari areas. Inner Mongolia was adjacent to Heilongjiang Province, mainly Zhelimu League, Zhaowuda League and Zhuosuotu League. The residents were mainly Mongolian, and nomadism was the main economic mode. In the early of Qing Dynasty, in order to obtain the necessary living and production materials, the Mongolians organized the merchants went to Guihua and sold the livestock and livestock products. Later, the merchants gradually went deep into the Mongolian grassland society, "loading groceries with big wheel carriage, travelling around Mongolia." Most of the merchants also traded in the places where the population was concentrated such as the palaces, temples, and the Post-way stations, and some also used the larger temples to hold temple trade. The increase of merchants and the prosperity of trade had promoted the rapid development of commercial cities in Mongolia. Especially from Shengjing, the Bahu Road, going north, passing the Fakumen, Zhengjiatun to Qiqihar, where mostly was grassland, the traffic conveniently, had become the important trade path. The Mongolians on the Hulunbeier Grassland often traveled thousands of miles to Qiqihar for trading, afterwards, due to difficulties in travel, they selected the land on the bank of Yimin River, where was fertile, traffic conveniently, constructed several earthen houses, to attract Shanxi merchants, and gradually developed into the Mongolian trade centre, now Hailar.

2. Modern City Development Based on State Capital Competition

The Northeast China is bordered by Japan in the south and Russia in the north. They were all ambitious countries in modern times. Japan was trying to realize the Mainland Policy since the Meiji Restoration. Russia intended to realized Peter the Great's Eastern Estuary Plan. So

Northeast China became the battlefield for Japan and Russia hegemony in the Far East. Japan and Russia had invaded the Northeast China with Military means and then carried out large-scale capital invasions to ensure the realization of their military and political goals. Modern Japan and Russia's economic aggression was based on the intake of port and railway construction rights, focusing on railway operation and resource development, controlling trade circulation, and conducting colonial investment, especially the competition for the construction and operation rights of the port and railway, rapidly promoted the modern urbanization of the Northeast China.

2.1. Russia's Far East Policy and Capital Expansion

2.1.1. The Far East Policy of Modern Russia

In history, Russia was a continental empire, during the period of Peter the Great, who made the development strategy to find the seaport on east and west sides. In the 10th year of Xianfeng (1860), according to Sino-Russian Beijing Treaty, Russia invaded the vast area east of the Ussuri River and built Vladivostok into the military port for the Russian Far East Fleet. Since the 1980s, due to the continuous setbacks in the expansion of Europe and Central Asia, Russia actively operated the Far East. The main objectives of the Far East Policy: First, invaded Korea and Northeast and Northwest China, and took where as the basis for further encroachment on China; Second, with UK, USA and Japan to compete for hegemony in the Pacific, dominating the Far East.

2.1.2. The Chinese Eastern Railway Company and the Construction of the C.E.R. and Dalian

After Russia invaded Haishenwai, renamed to Vladivostok, meaning "controlling the East." The west and southwest of Vladivostok is close to China and Korea, east facing Japan across the sea, and the south is adjacent to Peter the Great Bay, which has the important strategic position, but it has a freezing period of up to five months, this largely limits the actions of Russian warships. Furthermore, Russia planned to build the Siberian Railway, if it could pass Northeast China directly to Vladivostok and had an excellent non-freezing port, that would be ideal for Russia to implement the Far East Policy. After the Sino-Japanese War, Russia had made meritorious efforts to "force Japan to return the Liaodong Peninsula", in the 22nd year of Guangxu (1896), signed the "Sino-Russian Secret Treaty" with China, and obtained the right to construct the C.E.R. in Northeast China. (Ping Bu etc., 1987) In the same year, China and Russia signed the "Contract of Cooperation of the C.E.R. Company", "Chinese will invest 5 million Kuping silver, establish the partnership with the Russo-Chinese Bank, the profits and losses will be recognized as shares." "the Russo-Chinese Bank is responsible for the construction and management of the railway, and form the C.E.R. Company." (Ping Bu etc., 1987) In the 24th year of Guangxu (1898), Germany occupied Jiaozhou Bay, Russia took the opportunity to dispatch the fleet occupy Lushun. In the same year, China and Russia signed the "Lushun and Dalian Land Rent Treaty", the first paragraph stated: "in order to preserve the Russian Navy's sufficient land use on the northern coast of China, China leases Lushunkou, Dalian Bay and Nearby waters to Russia." The eighth paragraph stated: "from the date of signing, China allow build a branch Railway form a station of trunk railway to Dalian Bay." (Ping Bu etc., 1987) Since then, Russia realized the dream of seeking an excellent non-freezing port in the Far East and the right to build the southern branch. In August 1899, the Tsar issued the decree on the construction of Dalian Freeport, and took it as the basis for operating the Northeast China. In the 27th year of Guangxu (1901), the C.E.R.

trunk line from Manzhouli to Suifeihe and then to Vladivostok was completed and opened to traffic. In the 29th year of Guangxi (1903), the southern branch from Harbin to Dalian and Lushun was completed and opened to traffic, and the situation of the Northeast China was greatly changed. (Fig.3) At this time, Russia was in the heyday of the Northeast China, who connected the C.E.R. to Europe via the Siberian Railway and attracted the world's goods to Dalian to import and export.



Figure 3 Northeast China Railway Network in 1907 (Author Self-painting)

2.1.3. Russia Controlling the Northern Region based on Port and Railway Facilities

After the Russo-Japanese war, Russia lost all the rights in the southern region, in order to ensure the rights and interests in the northern region, who shifted the focus from Dalian to Vladivostok, and used the C.E.R. to control the northern region of Northeast China. From the perspective of specific economic behavior, the C.E.R. took Harbin as the midpoint and was divided into three parts: the west line (Harbin to Manzhouli), the south line (Harbin to Changchun), and the east line (Harbin to Suifenhe). The west line across Lubin, Hulun, Buxi, Longjiang, Anda, Zhaozhou, Hulan seven Xian, shipping goods account for two-thirds of the Heilongjiang province. (the C.E.R. Economic Investigation Bureau, 1927) The east line, crossing the eastern mountains, was dominated by forestry output. The south line, the area is densely populated, the goods transported were mainly produced along the line. In addition, the land in the lower reaches of the Sungari River was gradually developed in the late Qing Dynasty. The C.E.R. and Sungari River shipping had established the intermodal transport. The grain produced along the Sungari River were transported by inland water to Harbin and the transported to Vladivostok via the C.E.R. (Lengjiu Yun, 1935) In order to strengthen the central position of Vladivostok and to confront the Japanese-controlled Dalian, The C.E.R. Administration had established the double freight rate standard for the south line. In order to obtain goods from Changchun to Harbin and east to Vladivostok, the freight fare of the south line was extremely low. At the same time, in order to prevent the goods in the southern part from entering the northern part via the South Manchuria Railway (SMR), which freight fare of the south line was extremely high. In 1917, the Russian October

Revolution, Vladivostok was occupied by the Allies, the port facilities were greatly damaged, and the Ussuri Railway and the C.E.R. were almost completely out of service. In 1921, the domestic situation of the Soviet Union resumed stability, the Ussuri Railway and the C.E.R. returned to business, and Vladivostok's trade also gradually recovered. In 1931, the Jilin-Huining Railway was opened to traffic, all the cargo was transported southward. In 1935, the Soviet Union had to sell the C.E.R. to Japan.

2.2. Japan's Mainland Policy and Capital Expansion

2.2.1. the Mainland Policy of Modern Japan

In 1868, Japan's Meiji Restoration, under the guiding principle of "expand the territory and establish the national prestige in the world," formulated the Mainland Policy, that is, using force to invade the neighboring continent. In 1895, the Sino-Japanese War broke out, Japan invaded the Liaodong Peninsula, and was interfered as conflict with the Russian Far East Policy. In 1905, after the Russo-Japanese War, Japan inherited all the rights of Russia in the southern region of Northeast China. In 1927, Japan clearly stated the aggression policy: "want to conquer the China Proper, must first conquer the Manchuria and Mongolia." After the Manchurian incident in 1931, Japan fully encroached on the Northeast China, in the course of its aggression and expansion, "Japan want to invade Manchuria and Mongolia, whether the politic, economy or military, all need rely on railway, therefore, the railway actually ranks first in Manchuria and Mongolia issue." (Qi Zhu, 1930)

2.2.2. South Manchuria Railway Company and the Construction of "Three Ports and Three Lines"

In 1905, after the signing of the Portsmouth Treaty between Japan and Russia, Japan decided to follow the British East India Company, backed by the strength of the state, and carried out railway management in the form of private company. (Chijun Hu, 2011) On June 7, 1906, the Japanese government established the South Manchuria Railway Company (SMR Co. Ltd), and passed the "SMR Co. Ltd Regulations" on August 14. According to the regulations, SMR Co. Ltd would operate the railways and affiliated businesses in northern region of Northeast China, the company's capital was 200 million yen, among which, the government invested 100 million yen (50% of the shares). Although Japan recognized that SMR was the joint property of China and Japan, but its vice presidents and directors were all appointed and removed by the Japanese government, the business policies were also decided by the Japanese government, and half of the company capital was state capital, all of these determined that it was entirely a national policy institution. As the first president of SMR Co. Ltd, Goto Shinpei said; "originally established SMR Co. Ltd and recommended me as the president, probably not to regard the SMR Co. Ltd as a profitable cause, its essence was the vanguard of the implementation of the imperial colonial policy or the empire development." (Fuquan Zhang, 1989)

In 1910, in order to compete with Russia, after occupied Korea, Japan established "Three ports and Three Lines" program for the most convenient contact with Japan. First, the south port and south line, namely Dalian port, SMR and Andong port, Andong-Fengtian railway. After 1906, Japan took Dalian port and SMR as the basis for capital expansion, in order to control the cargo transportation of south of Changchun and compete with the C.E.R., a special freight policy of 'Dalian Centralism' was adopted. During the Russo-Japanese War, Japan built the light railway from Andong to Fengtian and forcibly rented it after the war. In

1911, the Yalu River Railway Bridge was completed, by 1913, the three-line transport of "Japan, Manchuria and Korea" was realized, the goods could be transferred from the Japan Tieshanyang railway to Busan, then to Xinyizhou railway of Korea, and then connected Andong-Fengtian railway, directly to Fengtian of Northeast China. Second, the west port and west line. In 1913, the Yuan Shikai government and Japan signed "the Summary of Railway Loan Appointment Scheme," Japan proposed the "Manchuria and Mongolia Five-Railways" plan, which included the Taonan-Chengde Railway. (Ping Bu, 1987) In 1918, the Duan Qirui government and Japan signed the "Manchuria and Mongolia Four-Railways Loan Preparation contract," Japan proposed the construction of Taonan-Rehe, and the branch to someone port. (Yuou Lan, 1932) After the establishment of the Manchukuo, the Huludao Port was expanded, and the Jinzhou-Chengde railway was built, so far, the western region of Northeast China had a complete railway network and the nearest port. Third, the east port and east line. East port took Korea Qingjin port as main port, and took Luojin port and Xiongji Port as auxiliary ports. East line planned to use the Changchun-Huining railway as the main line, with the Changchun-Dalai railway, Yanji-Hailin railway, Jilin-Wuchang railway as the nutrition line. (Tongwen Wang, 1933) Japan's construction of the Jilin-Huining railway had experienced a long history, in 1923, they built the Tianbaoshan-Tumen light railway in the name of mining. (Yuou Lan, 1932) By 1933, the Dunhua-Tumen railway was completed, in 1935, luojin port was put into use, the mileage from the Japan via the Jilin-huining railway to center of Northeast China was greatly shortened.

2.2.3. Japan Controlling the Southern Region Based on Port and Railway Facilities

On the basis of monopoly on ports and railway, Japan actively promoted the export of bean goods to the world, and replaced national products with Japanese goods. In 1913, SMR Co. Ltd carried out mixed storage and transportation of soybeans, soybean cakes, soybean oil and wheat, to strengthen the control of the transportation and marketing of agricultural products in Northeast China. With the cooperation of large Japanese commercial companies and many small and medium-sized commercial enterprises, SMR Co. Ltd had monopolized and controlled the commodity circulation network from ports, railways and hinterland villages.

At the beginning of the establishment of SMR Co. Ltd, the investment was mainly focused on railways, ports and other infrastructures, after the First World War, began to strengthen investment in the industry and mining use the profits of transportation. Before 1931, Japan's industrial investment in Northeast China mainly carried out by SMR Co. Ltd, accounted for 60%. (C. F. Remer, 1953) SMR Co. Ltd invested 37.96 million yen in Anshan Iron Plant in the two years of 1918 1919, accounting for 80% of the total profit. SMR Co. Ltd adopted the comprehensive operation principle, in addition to railway, port and mine, also including machinery, electricity, gas, coke and iron. At the same time, SMR Co. Ltd also invested Japan's private industry, especially the defense industry and emerging industries, for example, which directly participated in the South Manchuria Sugar Company, Manchuria and Mongolia Wool Company, Manchuria and Mongolia Fiber Company, they were known as Fengtian three major companies. By 1931, SMR Co. Ltd had actually formed a huge trust, including large and small enterprises, almost monopolized all the heavy industry in Northeast China.

2.3. China's Un-Treaty Port Policy and Capital Competition

2.3.1. Un-Treaty Port Policy in the late Qing Dynasty

Since the Sino-Japanese War, Japan and Russia had successively invaded Northeast China. In the 26th year of Guangxu (1900), the Boxer Movement broke out, Russia occupied the entire Northeast China. The important minister of the late Qing Dynasty, Zhang Zhidong, governor of Hunan and Hubei province, proposed the Qing Government: "if the Northeast China open to the world and trade with all the countries, all the interests of industry, commerce and mine will be enjoyed by all countries, we collect the tax, that is what Westerners called the opening for trade, also is the mutual containment strategy I proposed." (Modern History Data Editing Group, 1980) The Qing Government adopted Zhang Zhidong's proposal, rewarded the interests of the railway, mining, industry and commerce, and actively contacted the UK, USA, Japan to restrict Russia, at the same time, these countries had also prompted the process of opening up the Northeast China. In 1903, China and USA signed the "Continuation of the Treaty on Trade and Transportation," China opened two Un-Treaty Ports, Fengtian and Andong. After the Russo-Japanese War, in order to coordinate the contradiction among Japan, Russia and other countries in Northeast China, Zhang Zhidong once again proposed the response of "opening up everywhere". The Qing Government quickly established the principle of opening up Northeast China. In December of the same year, China and Japan signed the "Convention Treaty of the Northeast China" and "attachment". The first paragraph of the "attachment" stated: "Chinese government promised, after the retreat of Japanese and Russian Troops, that will open the following Un-Treaty ports: Phoenix City, Liaoyang, Xinmintun, Tieling, Tongjiangzi, Fakumen of Fengtian province; Changchun, Jilin, Harbin, Ningguta, Hunchun, Sanxing of Jilin province; Qiqihar, Hailar, Aihui, Manzhouli of Heilongjiang province." (Ping Bu, 1987) Since then, the competition between the various countries including Japan and Russia in Northeast China had gradually turned into capital invasion from military invasion. In 1909, China and Japan signed the "China-Korea Tumen River Border Treaty," and open Longjingcun, Juzijie, Toudaogou and Baicaogou. (Ping Bu, 1987) In 1914 and 1916, Jinxian, Huludao, Taonan, Liaoyuan, Kaiyuan, Xian of Fengtian province and Chifeng of Rehe opened as Un-Treaty ports, the international trade network had been formed throughout the Fengtian province and Jilin province and parts of Heilongjiang province and Rehe province.

2.3.2. Construction of Huludao Port and the East, West and South Three Trunk Lines

After the Russo-Japanese War, in the situation of the southern region and northern region being controlled by Japan and Russia respectively, the Qing government clearly recognized the importance of port, railway construction and management rights, hoped to use the "open door" proposal put forward by UAS to counter Japan and Russia. In terms of competition in capital, the Harriman Railway Acquisition Plan, Xinmin-Fakumen Railway Plan, Jinzhou-Aihui Railway Plan, and the Knox Railway Neutralization had been proposed, due to the change of international relations, the resolute opposition of Japan and the compromise of the Qing Government, these plans all soon died or halfway. (Chijun Hu, 2011) In the late Qing Dynasty and the early Republic of China, in order to resist the economic monopoly of Japan and Russia, China planned and implemented the Huludao port and the East, West and South three trunk line construction plan. First, Huludao port construction plan. Huludao, about 12 kilometers from Lianshan station of Beijing-Fengtian railway, is a rare non-freezing port in the Bohai Bay. In 1908, when Xu Shichang was the governor of the Northeast China, he believed that a good seaport and a complete railway network were the key to maintaining the rights of the nation, therefore, the British engineer Xiusi was hired to survey the Bohai Bay and chose Huludao as the port. Construction began in August 1910, and

stopped due to the Revolution of 1911. In 1920, Zhang Zuolin and the Beijing government negotiated that the central government and the local government each invest 5 million yuan to build the port, later as the civil war, stopped again. In January 1930, the Northeast China Transportation Committee decided to continue construction and contracted with the Dutch construction company, which was scheduled to be completed in five and a half years and built into a large port with an annual throughput of 5 million tons. Second, the east, west, south three trunk lines plan. In May 1924, in order to counter the SMR and the C.E.R., the Northeast Fengxi Regime established the Northeast Transportation Committee, which planned to build 35 railways up to 10,000 kilometers in 15 years, to form the Chinese independent railway network, including: the east trunk line, from Huludao via Jinzhou, Shenyang, Hailong, Jilin, Wuchang, Yilan to Tongjiang in the lower reaches of Hilongjiang River; the west trunk line, from Huludao via Jinzhou, Dahushan, Tongliao, Taonan, Angangxi, Qiqihar, Nengjiang to Heihe; the south trunk line, from Huludao, via Chaoyang, Chifeng to Duolun of Inner Mongolia. In 1921-1931, the northeast Fengxi government, using national capital and technology, completed 10 railways including Dahushan-Tongliao railway, Fengtian-hailong railway, Jilin-hailong railway, Hulan-Hailong railway, Qiqihar-Keshan railway, Taonan-Suolun railway etc., the total length up to 1,521.7 kilometers, accounting for 25% of mileage of Northeast China. (Naikun Yang, Yanxiong Cao, 2005) (Fig.4)

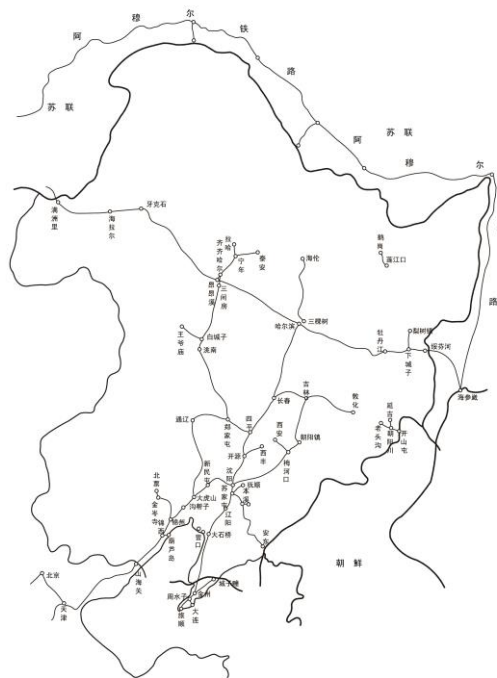


Figure 4 Northeast China Railway Network in 1931 (Author Self-painting)

2.3.3. China's Economic Confrontation Rely on Port and Railway

At the end Qing Dynasty and the beginning of the Republic of China, the Northeast China local government built Chinese own railway, breaking the situation that foreign capital monopolized the railway network, forming the SMR network under the jurisdiction of Japan, The C.E.R. network jointly managed by China and Russia, and China own self-built railway network, China had supervision and management right over two railway networks. In December 1929, in order to recover the railway controlled by the Japan, the Fengxi authority

formulated the cargo transport plan of the west four lines (Beijing-Fengtian railway, Siping-Taonan railway, Taonan-Angangxi railway and Qiqihar-Keshan railway). In January 1931, the east four lines (Beijing-Fengtian railway, Fengtian-Hailong railway, Jilin-Hailong railway and Jilin-Dunhua railway) cargo transport plan was formulated, in this way, carried out fierce competition about freight rate and cargo with SMR. China railways used the silver standard to calculate the price, at that time, the price of silver was low, so the freight rate of China railway was lower than that of SMR, which based on gold standard. In addition, Fengxi authority also encircled the SMR through various administrative means, for example, set tax gate around the SMR subsidiary, all goods were taxed, as a result, the operation of the SMR became bleak, other industries, such as coal and iron, also been severely affected. For example, in 1930, the total revenue of passenger and cargo transportation of SMR was 91.307 million yen, decreasing 30.796 million yen from the previous year, SMR Co. Ltd had to adopt austerity policy and cut staff. (Shixuan Jin, 1932) In the four years before the Manchurian incident, is "the golden age of Beijing-fengtian railway, the annual profit reached more than 50 million yuan." (Yusi Wang, 1932) As the monopoly of Dalian port and the SMR was challenged, Japan finally launched the Manchurian Incident and resorted to force to implement the Manchuria and Mongolia policy.

3. Urbanization Mechanism and Dynamic of Modern Northeast China

In early and middle Qing Dynasty, the society in Northeast China was in the stage of natural development, city is still in its infancy, the political and military functions were the fundamental driving force for the cities. During this period, in the southern region of Northeast China, some towns gradually developed into political centers due to historical foundations and immigrants, such as Fengtian, Liaoyang, Haicheng, Jinxian, Guangning and Kaiyuan etc. In order to consolidate the frontiers, the Qing government carried out military immigration and agricultural cultivation, and established military towns, which were the basis of the cities formation in northern region of Northeast China, such as Ningguta, Jilin, Bodune, Aihui, Qiqihar, Mergen and Hulunbeier, etc. In modern times, with the invasion of foreign political, military and economic forces, opening port for trade, constructing port and railway infrastructure, stopping ban, a large number of immigrants, and reclaiming the land were the driving forces of the city development in Northeast China.

3.1. Urbanization Mechanism of Modern Northeast China

3.1.1. the Intensive Birth of Modern Commercial Cities

In the early and middle Qing Dynasty, the cities in Northeast were distributed along the Post-roads, rivers and frontiers, and urban functions were dominated by politics and military. In the 8th year of Xianfeng (1858), according to the Sino-British Tianjin Treaty, Yingkou became the international trade port in the Northeast China. Under the circumstance that the western countries's commodities dumping in and Northeast China products exporting to the world, the economic functions of Yingkou was increasing day by day, which meant that the modern cities were completely different from the traditional era in terms of the driving force. In the 24th of Guangxu (1898), Russia rented Dalian and announced open to world as free port. Later, in order to prevent Russia and Japan from occupying the Northeast China, the Qing government adopted the policy of "All-round open, countries contain", opened up

about 30 Treaty ports and Un-Treaty ports. (Fig.5) Except for a few cities such as Phoenix, Ningguta, Sanxing, and Aihui, which still maintained their original scale and even decline due to geographical location and improper site selection, under the promotion of the external economy, most of the cities had accelerated the development, and expanded the scale. The city form has been spatially displaced due to the planning of commercial districts, forming a new core that was strongly contrasted with the old city. The city functions were mainly from traditional politic and military to economy and politic.

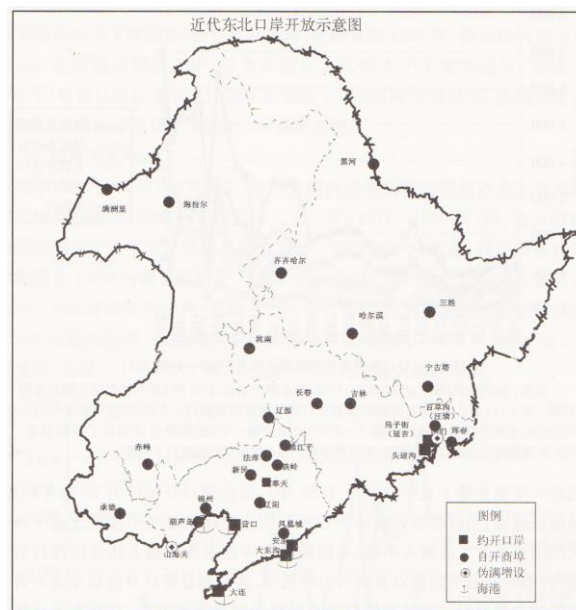


Figure 5 Schematic Diagram of Modern Northeast Opening Port (Yufu Jin, 1944)

3.1.2. the Rapid Rise of Hub Cities along the Railway

At the beginning of the construction of the C.E.R., according to the sixth paragraph of “the Contract of Cooperation of the C.E.R. Company”, “where the company builds, manages and protects the railway, and the land need to mine sand, stones, lime, etc. near the railway, if it is official land, it will be given by government, regardless of the price; if it is peoples land, it will be paid by the company at the current price, once in a lump sum or in a yearly basis.” (Ping Bu, 1987) So that Russia can form the specific railway subsidiary through various means as free occupation, purchase, and long-term lease. In fact, regardless of the C.E.R. or the SMR, their railway land was expanding through various legal or illegal means, far beyond the area required for railway construction and operation, included the land used for the city, for farm, for forest and for mine. The railway subsidiary was similar with the concession and leasehold established by western countries in China, which had had an important impact on the rise, transformation and economic development of modern city of Northeast China. (Weirong Cheng, 2008) The Russian railway subsidiary area had reached more than 1,300 square kilometers. On the eve of the Russo-Japanese War, the C.E.R. trunk line and the southern branch line had formed a series of railway hub cities, such as Suifenhe, Yimianpo, Hedahezi, Ashihe, Manzhouli, Hailaer, Boketu, Angangxi, Anda, Yaomen, Sanchahe, Gongzhuling, Dashiqiao etc. (Xiaofan Qu, 2001) The SMR subsidiary area increased to 482.8 square kilometers in 1931, and there were 30 cities covering more than 1 square kilometer. Since 1907, the SMR Co. Ltd successively formulated and implemented the city plan for the key railway subsidiary of the SMR, such as Wafangdian, Gaiping, Xiongyuecheng, Dashiqiao,

Haichheng, Yingkou, Anshan, Liaoyang, Benxi, Fushun, Andong, Fengtian, Tieling, Kaiyuan, Sipingjie, Gongzhuling, Chuangchun, etc. (Xiaosong Wu, 1999)

In addition, the railways built by the foreign capital, Sino-foreign capital and national capital in the eastern region and southwestern region in the early 20th century also had a significant impact on the development of modern Northeast China cities. The foreign capital and Sino-foreign capital railways mainly included the Andong-Fengtian railway, Jilin-Changchun Railway, Jilin-Dunhua railway, Siping-Zhengjiatun railway, Zhengjiatun-Taonan railway and Tannan-angangxi railway. The national capital railways were mainly the east and west lines, as well as short line such as Hulan-Hailun railway in Heilongjiang province. The east line included the Fengtian-Hailong railway and Jilin-Hailong railway; the west line from Dahushan to the west via Zhangwu to Tongliao, at Tongliao connected the Sino-Japanese Capital Zhengjiatun-Taonan railway and Taonan-Angangxi railway, and then north to Qiqihar-Keshan Railway. The Hulan-Hailun railway, from Harbin Majiakou through Hula, Suihua to Hailun. The railway drove the rapid growth of passenger and cargo transportation, promoted economic development and population growth, and made some stations develop into modern cities.

3.1.3. the Rapid Form of Modern Industrial Cities

In the early and middle Qing Dynasty, the industries in Northeast China were mainly traditional handicrafts and small coal industries. By the end Qing Dynasty, along with the large capital investment of Japan and Russia, the modern industrial and mining industry in Northeast China developed rapidly. Modern industrial enterprises used machinery to carry out large-scale social production, absorbed a large amount of labors, and promoted the development of population and cities. Fushun, Anshan, Benxi in the southern region and Zhalainuoer and Hegang in northern region were the typical representatives. Anshan is a typical city formed by Japanese capital for mining industry in the southern region of Northeast China. In August 1909, Anshan Discovered iron ore. In 1917, the Anshan Iron Institute was established by the SMR Co. Ltd, there were huge smelting furnaces, hot blast stoves, power station, and mechanical fields. In modern East Asia, it gradually became the second largest iron center after Japan's gossip, and it was known as the "Iron Capital". (Zhenfu Li, 1926) By the eve of Manchurian incident in 1931, the population had reached more than 20,000, and the prototype of Anshan city had formed. Zhalainuoer, in the eastern of Manchouli, discovered coal in 1901. According to the fourth paragraph of the Sino-Russian "Renewal Contract of the C.E.R. Company", "allow to mine the coal needed for railway, where the railway passing by." In the 28th of Guangxu (1902), started to construct the well. In 1905, the annual output reached 460,000 tons. Zhalainuoer was the center of the mining area, and the important station on the west line, it had rapidly developed into a coal mine city in modern times. Hegang was located on the left bank of the lower reaches of the Sungari River. Coal fields were discovered in 1914. In 1918, Chinses merchants raised funds to build mines. "the coal produced by Hegang is good, 140 Kilometers away from Harbin and only 17.5 Kilometers away from Sungari River." (China Second Historical Archives, 2001) In 1926, the railway reached the Lianjiang port on Sungari River, the traffic conditions were greatly improved, the number of workers and residents was increasing, and the business developed. In 1929, Hegang Coal Mine Company planned 5 streets as a commercial site. Under the interaction of the expansion of coal mines and commercial development, Hegang has become an emerging mining city.

3.2. Urbanization Dynamic of Modern Northeast China

3.2.1. the Special Tariff Exemptions and Concessions Policy

After the opening up of Treaty ports and Un-Treaty ports, the Northeast China formulated a series of tariff exemption and concession policies under the further requirements of Russia and Japan based on the extremely low tariffs of other ports in China, that promoted the rapid development of the society and the city in Northeast China. First, the land tariff system. In 1862, the Sino-Russian Land Trade Regulations stipulated that the border trade between the two countries would not be taxed within 50 kilometers. In 1907, China and Russia signed the "North Manchuria Taxation Regulations," stipulated that all goods transported by railway to the station within 50 kilometers of the junction will not be taxed, the tariffs payable in other regions shall be implemented on the principle of less than one-third. In the northern region of Northeast China, 17 cities including Harbin, Manzhouli, Hailar and Qiqihar had been implemented. (Ping Bu, 1987) Second, Exemption of the second tariff. The so-called exemption of the second tariff referred to goods that had already paid customs duties in a port in China proper, when they re-entered the other ports, that would not pay again. Under the recommendation of the Chief Tax Officer Hurd, in 1907, the Qing government promulgated the "Northeast China Ports cancel the second tariff License method", stipulated that all foreign goods in Tianjing, Niuzhuang, Andong, Dalian, etc. have already completed importing formal taxes, and that Chinese goods have already completed re-imported half-taxes, if they are transported to port of Northeast China, no matter how they are carried, all license should be issued and no tariffs would be re-applied. (The SMR Economic Survey Association, 1987) In the subsequent Sino-foreign trade, all the ports in Northeast China were implemented according to this method. Under the above-mentioned tariff exemption and concession policies, the Lushun and Dalian area in the southern region, the C.E.R. subsidiary and Sino-Russian border area, Andong and China-Korea border area, and the Un-Treaty port all had developed rapidly.

3.2.2. Capital Competition among China, Japan and Russia

Capital is the blood of social and economic development. After the open of modern Northeast China, fierce capital competition had been launched around port, railway construction and foreign international trade, forming the Chinese Yingkou Silver Financial System, the Japanese Gold Yen Financial System and the Russian Ruble Financial System, the competition of capital had rapidly promoted the social and economic development of the Northeast China.

First, Yingkou Furnace Silver financial system. In the 11th of Xianfeng (1861), Yingkou opened up and the business flourished, various domestic and foreign silver currencies poured in and there was an urgent need to establish a suitable monetary system. In the same year, the first silver furnace appeared in Yingkou. In the 3rd year of Tongzhi (1864), Yingkou's standard currency Yingbao was produced, and other currencies were exchanged into Yingbao for trading. In the early years of Guangxu, the Yingkou Furnace Silver was issued, a check credit currency. In the 9th year of Guangxu (1883), Yingkou Furnace Silver financial system was mature, that is, merchants accessing Yingbao to the silver furnace, all need be registered and can be transferred to other silver furnace accounts, the account is settled on the first day of the third, sixth, ninth, and twelfth month of the calendar, and interest is paid for the deposit at the expiration date.

Second, the Russian ruble financial system. After the Sino-Japanese War, in order to repay the compensation for Japan, in the 21st year of Guangxu (1895), China and Russia signed the "Four Percent Loan Contract" and form the Russo-Chinese Bank. The bank regulations promulgated by Russia stipulate that the bank is not only responsible for the general banking business of Russia in China, but also responsible for collecting various taxes in China, operating enterprises related to local and national treasury; casting the currency permitted by the Chinese government, returning the interest of the Chinese government's public debt; laying railways and wires in China. Any draft contract signed between the bank and the Chinese government needs to be submitted to the Russian Minister of Finance for approval in advance, in fact, it is the agent of the Russian Ministry of Finance in China. (Ping Bu, 1987) In the 22nd year of Guangxu (1896), China and Russia signed the "Contract of Cooperation of the C.E.R. Company", stipulated "Russo-Chinese Bank will be responsible for constructing the railway. And then Russia took the C.E.R. as basis to issue the ruble. (Bank of China General Administration, 1987) At the beginning of the establishment of the Russo-Chinese Bank, the registered capital was 6 million rubles, after several times direct government investments, in the 3rd year of Xuantong (1911), the circulation reached 100 million rubles in Northeast China. (Shutong Hou, 1931) Since the ruble entered the Northeast China to 1917, the Russo-Chinese Bank had the greatest influence in the financial industry, and has become the hub and medium of capital flow among Europe, the province of China proper and northern region of Northeast China.

Third, the Japanese gold yen financial system. After Russo-Japanese War, the SMR Co. Ltd took over the railways and various undertakings in the southern region of Northeast China, in order to cooperate with the expansion of the Japanese forces represented by the SMR Co. Ltd, Japanese financial institutions entered Dalian on a large scale, and gradually expanded along the SMR with Dalian as the base. After the Sino-Japanese War, the trade between Japan and Northeast China became increasingly prosperous. In the 26th year of Guangxu (1900), Yokohama Specie Bank first set up branch in Yingkou to operate trade exchanges between Japan and Northeast China. In the 20th year of Guangxu (1902), a silver check of "pay once see" was issued. After the Russo-Japanese War, in 1906, the Japanese government granted it the right to issue silver vouchers, and stipulated that the silver vouchers were the legal currency of the Japanese in Northeast China, and were forcibly circulated in Dalian and the SMR subsidiary. With the expansion of business, Yokohama Specie Bank had successively established branches in Lushun, Liaoyang, Tieling, Anton, Changchun, Harbin etc. business scope had expanded greatly. Then the Japanese government granted it the responsibility of acting as the national treasury, therefore, at that time, Yokohama Specie Bank was actually the central bank of Japan in Northeast China. In the 2nd year of Xuantong (1910) the Japanese government granted it concurrently operated long-term real estate loans on the grounds that there no similar financial institutions. In 1917, Terauchi Masatake cabinet reorganized Japan's finances in Northeast China, Yokohama Specie Bank was responsible for issuing silver vouchers, specializing in trade exchanges. Korea Bank was in the position of the central bank, acting as treasury, issuing gold vouchers, which is the central institution of commercial finance. The Toyo Colonial Society operated real estate investment and handled long-term industrial loans. Three banks had a division of labor and cooperation, each with a focus on field, under the unified guidance of the Japanese government, they work together to expand.

3.2.3. Export-Oriented Port-Railway Network-Hinterland City Structure

In the early and middle Qing Dynasty, most of the cities in Northeast China were distributed along the waterway traffic line or the land Post-road traffic line, and mainly military and political towns, although there were also close economic activities at that time, mainly followed the main political and military route, from Beijing via Shanhaiguan, Jinzhou, Shengjing to Jilin, and then from Jilin to Qiqihar, Sanxing and Ninggua respectively, was an inward-oriented defensive cities structure centered on Beijing. With Treaty port and Un-Treaty port opening and the construction of the C.E.R., Northeast China, as the water-land transport region of the Siberian Railway in the Far East, had undergone the qualitative transformation of the internal mechanism of the cities system development. Especially since the construction of the C.E.R., the railway transportation line centered on the coastal, riverside or borderside Treaty port or Un-Treaty port had been gradually extended, the medium cities and small cities along the railway were generated and rapidly developed due to the transit and distribution of the goods. First, Dalian-SMR city system. After the Russo-Japanese War, Dalian, as a port gateway city, strung up town nodes of different levels along the railway, and formed the outward-oriented "hub-network" city structure. According to the SMR Co. Ltd investigation, the cargo of Dalian port in the 1920s swallowed the area around the SMR between Dalian and Chuangchun, as well as the surrounding areas of the branch railways such as Sipingjie-Taonan railway, Taonan-Aangangxi railway, Jilin-Chuangchun railway, Jilin-Dunhua railway, etc. (The Investigation Division of the SMR Ministry of Civil Affairs, 1923) Especially the Shenyang and Chuangchun along the railway, they were not only the core of the region, but also the important nodes affecting the secondary cities such as Siping, Jilin, Tongliao, Taonan etc. Second, Vladivostok-the C.E.R. city system. Harbin, Manzhouli and Suifenhe in the northern region of the Northeast China were the port cities, their radiation space is the hinterland of the south line, west line and east line of the C.E.R. with Harbin as the center. At the same time, the C.E.R. and the Zhuhe and Yilan etc. along the lower reaches of the Sungari river had frequent cargo transportation. (The C.E.R. Economic Investigation Bureau, 1927) In addition, the port city of the eastern region, southeastern region and southwestern region of Northeast China was also connected to the hinterland by railway, formed the "port-network" city system. For example, during this period, Andong became the hub city in the southeastern region, and was closely connected with the cities along the Yalu River, meanwhile, the hinterland cities of the Andong-Fengtian railway also developed rapidly, such as Huanren, Tonghua and Linjiang etc. (The Industrial and Commercial Division of the SMR, 1927)

Conclusion

In the early and middle period of Qing Dynasty, Northeast China, as the birthplace of Qing government, implemented the ban policy for a long time, the city development mainly relied on the Post-road system construction centered on Beijing-Shengjing-Jilin, the driving force for city development was mainly political and military. At the end of the 19th century, with Europe as the center, international capital actively expanded in the world, Russia formulated the Far East policy and built the Siberian railway to the Far East, Japan formulated the mainland policy and expanded to Korea and China, Northeast China gradually became the focus of the international geopolitics. Japan and Russia have resorted to force to invade Northeast China, after the construction of the C.E.R., that gradually evolved into the economic invasion based on state capital investment and competition for port and railway

construction rights and management rights. In order to maintain the political rights in Northeast China, the Chinese government implemented the "Open Door" policy, successively opened up about 30 Treaty Ports and Un-Treaty Ports, and raised national capital to build China's own port and railway network. In the fierce competition among China, Japan, Russia and other countries, Formed the SMR system centered on Dalian, the C.E.R. system centered on Vladivostok, the Chinese railway system centered on Huludao, also laid the city structure of the "hub-railway network-hinterland" model centered on the imported cities of the Northeast China, which promoted the development of commercial cities, hub cities and industrial and mining cities. Under the special tariff system, China, Japan and Russia relied on port-railway capital competition, forming the city development mechanism oriented by the export-oriented economy, that has the important theory value for the development of contemporary macro-regional urban systems in the context of economic globalization.

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