On the historical context and the inheritance strategy of the water transport city in Guigang

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Abstract. As the most extensive port in Guangxi's inland economic hinterland, waterway transportation is an important driving force for the development of Guigang's cities. On the basis of tracing the development history of Guigang water transport city, this paper summarizes and analyzes the historical characteristics of water transport development and the spatial evolution of Guigang city, and proposes the planning strategy of Guigang's water transport city historical context, in order to improve the competitiveness of Guigang city and promote the development of Guigang city.

1 Introduction

Guigang is located in the geometric center of Nanning, Beihai, Liuzhou, Wuzhou and other central cities in Guangxi Autonomous Region. As the first inland port in Southwest and South China, Guigang port has maintained a rapid development trend in the past ten years, even under the background of global financial crisis, the general depression of shipping industry and the decline of many ports' throughput. The port throughput of Guigang port has been increasing rapidly, and it has become an important hub port of inland water, railway and public transport in South China, and an important pillar of economic development of Guigang city.

Throughout the history of more than 2,000 years, the city of Guigang has its reasons and the Particularity for development and changes, and the historical context of Guigang water transportation city has been continuously renewed and developed in different historical periods. It is an important symbol of the city of Guigang and the soul of Guigang. Therefore, it is of great significance to study the development of the port city of Guigang and to summarize the historical context of analysis on the development course of Guigang water transportation city [1].

2 Analysis of the development history of Guigang water transport city

2.1 Originated in the early Han Dynasty [2]

Guigang is conveniently located. As early as the Qin and Han dynasties, Guigang was an important commercial hub from Guangxi province to Guangdong province.

Historically, shipping traffic was the main means of transportation in Guangxi. At that time, the primitive commercial port of Guigang was formed. The South China Sea and Gaoyao District of Guangdong Province are the main places for business. The starting stations are all in Foshan city of Guangdong province, and they might come along the west of the river to Guigang.

There is no evidence as to who first attacked it in Yu River or how the ancient Chinese used it. However, since the beginning of the Han Dynasty (206 BC), Guigang county (today's Guigang city) that is, the situation by the river and collect the benefits from the boats has been a history of more than 2,000 years. Tang zhenguan eight years (AD 634), the Central Group of the Tang Dynasty set up Guizhou Province in Yu River (today Guigang city), that is, the Nanyin State was changed to Guizhou (because of the Northern Hill of Guigang City, the ancient name Yi Gui Shan). Since then, Guigang worked as the Political, economic and Cultural Center status of the southern parts of Guangdong province and Guangxi province has been greater promotion. During the period of the Tang Dynasty and the Yuan Dynasty (AD 806 ~ 820), the city of Guizhou moved from Nanjiang village to the Old City of present-day Guigang on the North Bank. The population of the city began to increase rapidly. Small Handicraft Industries developed rapidly and Commodity prospered day by day. On the Yu River, boats passed by and thousands of sails gathered.

During this period, Guigang became one of the political, economic and cultural centers in Lingnan area (including Guangdong province and Guangxi province), relying on the shipping advantage of Xi River waterway and the farming economy of Xunyu plain. The prosperous society of prosperous people and merchants contributed to the construction of the Da nan men shi ji Wharf and the Xiao nan men Wharf in the Old City of Guigang, and the

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embryonic form of the port city began to appear in Guigang.

2.2 Expanded in the Qing Dynasty

Since the Qing Dynasty, the scale of water shipping in Guigang has gradually expanded. According to "Guixian county annals" revised in the year of twenty-three of the Republic of China (1934.), the records of the Qing Dynasty showed that Guixian county government has been the merchants convergence. In the 13th year of Shunzhi (1656) of Qing Dynasty, the county government set up a street fair, and the trade gradually passed through the country. Office of the Guigang local chronicles compilation committee. In the 10th year of the Reign of Emperor Xianfeng in the Qing Dynasty (1860), large wooden sailboats began to transport goods in the city. In the 24th year of the Reign of Emperor Guangxu in the Oing Dynasty (1898), there was a steamship in Yu River, running from Guigang to Wuzhou, Yongning District to Guiping's Dahuang estuary, both passenger and cargo transport, is Guigang within the start of steamship exchanges. According to the above mentioned records of Guigang, the steamboat service was first opened in In the 24th year of the Reign of Emperor Guangxu in the Qing Dynasty, and the river shipping industry in Guigang was pushed forward by the replacement of the steamboats. Later, Guangdong merchants, Hong Kong (British) foreign merchants and Guigang shareholders were invited to buy large wooden boats, small and medium-sized motor steamboats, trailers, cargo and passenger transportation From Guangzhou and Wuzhou, they transported 30 to 50 people and 10 million to 20 million Jin (kerosene, yarn, cloth, ceramics, etc.) to Xiao Jiang, Da nan men, Taito Corporation (Taoyuan) and stone-grade wharves along the river, or do business in Guigang, or transfer to Litang, Guangxi, Laibin, Wuxuan County, Shinan, Yulin and other places to promote; at the same time, the businessman gathered around the grain and oil, poultry, pigs and other agricultural and sideline products to Wuzhou, Guangzhou and Hong Kong and Macao Distribution, for Guigang's economic development has played a certain role in promoting. In the 34th year of the Reign of Emperor Guangxu in the Qing Dynasty (1908), the local National Capital Airlines began to operate Guigang to Wuzhou Shipping Industry. In 1910, some merchants in Guigang raised funds to set up the united profit shipping company, and bought three small steamboats by goods and customers run together.

During the reign of Emperor Guangxu in the Qing Dynasty, Guigang's water transport became more and more developed, and Hong Kong's foreign trade became more and more intensive. Chinese businessmen set up trade companies. They then opened up various routes in Nanning, Liuzhou and Guigang, and the commercial ports became increasingly prosperous, connecting Guangdong, Hong Kong, Macao and overseas. Since then the business has become increasingly prosperous, and Guigang has become a domestic and international trade center [3].



Fig. 1. Guigang sailing boat in the 1930s



Fig. 2. The passenger liners between Guigang and Wuzhou in the 1930s

2.3 Decline in the Republic of China era

In the Early Period of the Republic of China, the shipping industry of Guigang has been developed to a certain extent. In 1922, there were four electric ships of British Nanhe Foreign Firm in Wuzhou, which operated both passengers and goods on the Guiwu Line. In 1927, merchants in Guigang set up an "Hang An" Company and bought a tugboat with 50 seats and 50 tons of cargo. It is named "Hang An". It can travel on Guigang and Wuzhou line and carry both passengers and cargo as well 1. On pure passenger transport, six steamboats and ferries operated by Lianyi Industrial Co. continue to serve Guigang to Wuzhou Line. The year 10th of the Republic of China (1921), Guangdong and Guangxi warlords fighting, Guangdong troops entered Guangxi, Lianyi trade company's steamboats were taken by Chen Jiongming (Guangdong provincial governor and commander-in-chief of Guangdong Army), then as a trophy transferred to Guangdong and under the hammer; Lianyi Trade Company was forced to suspend its business. From 1938 to 1943, the Japanese invaded and occupied Guangzhou and Wuzhou, and the ships in Guigang were forced to be evacuated to the upper parts of Yu River. In 1945, the victory of the Counter-Japanese War, Guigang shipping association resumed and so thus all routes restarted.

During the period of the Republic of China, although the development of shipping industry in Guigang was in a state of stagnation, the development of Binsheng highway made Guigang become a water and land transfer port for materials from central and Northern Guangxi to Guangdong, Hong Kong and Macao in the East, and for industrial products from Guangdong, Hong Kong and Macao to land in the West and to enter the central, northwest and Yunnan, Guizhou and Sichuan provinces.



Fig. 3. The backwardness of water transport along the Xijiang River in 1940-50's

2.4 Rectification in the early days of the founding

In the winter of 1949, Guigang was liberated. In the early days of liberation, through democratic reform and on the basis of rectification, the government was involved in state operations, dispatching tows and ferries, and carrying passengers and goods on the Guiwu line on a regular basis. In 1955, the Zhujiang River Shipping Administration Bureau of the Central Communications Department was established as a unified management organization of the Zhujiang River System. Guigang became the first port management office in Guangxi province, while the establishment of Guigang Shipping Management Office under the Wuzhou Branch. May 1st,1955, Litang-Zhanjiang Railway was completed. Goods from Yunnan, Guizhou, Sichuan, Guangdong, Hong Kong and Macao go through the Zhujiang River. Guigang city began to become a railway and waterway transport hub. Thanks to Guigang's advantageous position, the economy has developed healthily and rapidly. It has the functions of a three-way Ferry Terminal and a port, and has the courage to substitute business with the port. In 1956, the first water transport enterprises was set up, which stood for the four provinces of Yunnan, Guizhou, Sichuan, Guangdong to transfer goods; for a time, the cargo and passengers came like waters. In November of the same year, goods were diverted from the branch of Litang-Zhanjiang Railway line extended to Luobo bay, where a working area was built from the left side of the city's grain depot down to the Nandou railway terminal.

After the liberation, Guigang city became the main economic communication channel between East and West, and a large number of logistics passed through Guigang, making Guigang the most important water and land transport hub for a long time after the liberation. During this period, the Guigang's economic construction and port cargo throughput showed a rapid increase in the trend.

2.5 Flourished after establishing a prefecture-level city

After the Third Plenary Session of the Eleventh Central Committee of the Communist Party of China, the reconstruction of Luobo Bay operation area has been listed as the Sixth Five-Year Plan of the state. After careful survey and design, construction began in 1980 and completed in 1985. The design capacity of port cargo throughput was 2.7 million tons, with a total investment of 1158.56 million yuan. At this point, Guigang port has become the largest inland water and land transport transit port in Guangxi. In 1984, Guigang port was approved as a foreign trade port, becoming the most convenient channel for economic exchanges between the developed economic zone of South China and the greater southwest economic zone.

Since then, there has been a new boom in port construction in Guigang city. During the ninth five-year Plan period, the Xijiang River Shipping Construction Project was listed as one of the state's key engineering projects, which adopted engineering measures combining canalization with dredging. The 854 km waterway from Nanning to Guangzhou in the West and east will be built into a national third-class waterway, capable of navigation year-round by the thousand-ton-class barge fleet; as a result, Guigang city has become an important waterway transport hub in Guangxi province and the largest transshipment port of inland railway, waterway and highway in Southern China. In 1994, with the approval of the former state port office and the General Administration of Customs, Guigang was officially opened to the public as a first-class state port.

After the establishment of the prefecture-level city in 1996, Guigang implemented the port-led project and the port-strong city strategy, optimizing the port transport environment. In 2005, the throughput of Guigang port exceeded 20 million tons, and became a well-known port of opening to the outside world and a main hub port of inland river. With the development of economy, the production of Guigang port and navigation keeps rising, and the total economic volume increases. In 2018, the cargo throughput of Guigang reached 70.03 million tons, which is the first big inland river port in Guangxi with a throughput of more than 70 million tons. Meanwhile, the container throughput and waterway cargo throughput are the three production indicators of Guangxi's inland river. Today, Guigang port has become an important link connecting China to the ASEAN Free Trade Area, Guangdong, Hong Kong and Macao Bay area and the southwest China Sea.

During this period, the rapid development of water transport has been connected with the railway and highway in all directions. Guigang, as the regional transportation hub of the southwest, Pearl River Delta and Beibu Gulf economic circle, has initially taken shape. The competitiveness of Guigang has been greatly enhanced. The water route from Guigang to Guangdong, Hong Kong and Macao has become a veritable "golden waterway".

3 The evolution characteristics of the urban space of the waterway transportation in Guigang

From the view of the spatial expansion of the Center of Guigang City, the city of Guigang has experienced an evolution course from riverfront to river crossing and railway crossing from south to north, from taking the old town as the core to spreading outwards to leaping development [4].

3.1 Construction period: Beginning in south of the Xijiang River and moving to north of the River

The construction of Guigang City began in Yuanhe in the Tang Dynasty, and has a history of more than 1.100 years. According to the Republic of "Guigang Records", the early three kingdoms such as Yu Lin County prefecture Lu JI of Wu dynasty built the village in the south of the Xijiang river. During the period of Yuanhe of Tang dynasties (806-820), the governor of Guizhou moved to the city of north District (now the Old City of the north District) and built a soil town because of the low-lying terrain of south part of the river. Ancient city for the successive state capital, the offices, residential housing mixed between for three dynasties such as Song, Yuan, Ming, Qing. By the end of the Qing Dynasty, houses were built along the east-west river outside the Old City. From the Dadong wharf to Shihui Lane, the area naturally developed into a folk trade zone.

3.2 The late Qing Dynasty and the early Republic of China: Primitive centripetal agglomeration

In 1907, Guangxu 33rd year of the Qing dynasty, the Nanning Customs Office was officially opened, with the branch of Nanning Dongguan, Tiandong, Baise, Hengxian and Guigang customs as the first official ports open to outside provinces. The opening of the modern sea route in Yongjiang River, Yujiang River, Xijiang River promoted the economic growth of the coastal towns, promoted the trade out of the city, and made its towns and villages gradually open up. The trade of the inland river port in Guigang enlivens the trade economy, brings the prosperity of Guigang city and formed the density of buildings and population. At the same time, the contradiction in the use of land is highlighted, the transformation of the Old City is imminent.

In the early years of the Republic of China, Guigang began a boom in municipal construction, tearing down the city walls and breaking through the Old City. Before and after the 10th year of the Republic of China (1921), the local people proposed to demolish the city to build the streets. In the 25th year of the Republic of China (1936), the City Wall and the street wall were demolished in Guigang .Eleven new Great roads and streets were built: Shui yuan Street, Blacksmith Street, Cotton Street, Macao Street, Dong Menwai street, Hui cheng Road, Tian Ping Road, Shui Liugou Road, Bei Fu Street, Sheng Ping Street, Xing xing Street; In 1946, new roads were built around commercial blocks. While the streets were being built, the streets of the palatial buildings emerged; these shops were lined up in a row, facing the street, becoming unique buildings in the transitional zone between the inner city and the outer city. The market, stadium, Park, Health Center, hospital, Middle School, Memorial Hall, Library and other public facilities were also built in those years. All these made Guigang a modern new type of city [5].

At this stage, Guigang urban area is a combination of spontaneous development and government guidance, mainly with trade and handicraft: The layout of the ancient city is messy, mainly to spontaneous development; outside the ancient city, streets as a unit, forming the street and Arcade Street. The motive force of development in this stage is the spontaneous growth, the city scale is small, the layout is disorderly, it does not have the benefit [6].

The spatial evolution of urban construction in Guigang city in this period is characterized by the change from the small block and small road model in the era of horse-drawn carriage to the large block with street as framework and the development model of Great road.



Fig. 4. Da Nan men of Guigang in the late Qing Dynasty and the early Republic of China



Fig. 5. The old town arcade street in the late Qing Dynasty and the early Republic of China

3.3 1950~1990: The characteristics of single center agglomeration in the period of urban preliminary development

In 1949, the urban area of Guigang was 2.10 k m² with 42,000 inhabitants. In 1955, Litang–Zhanjiang Railway was opened to traffic, Zhanjiang city became an important port to the southwest of the country. The advantages of water and land combined transport have made Guigang one of the most convenient water and land combined transport hubs in South China and east-to-sea passage in Southwest China.

In 1981, the Yu River bridge was completed and opened to traffic. The city enlarged to the south acrossing the river. In 1989, the completed area of the city expanded to 10.5 k m², the urban area: East to Railway Bridge, West to Xijiang Farm headquarter, South to Nanshan Park, North to Guigang High School; the city has developed into the sugar industry, paper, building materials, food

processing, chemical, textile, machinery manufacturing and all kinds of handicraft production of inland port city. In 1990, the population of the urban area of the city grew to 130,000. During this period, the urban construction of the city was dominated by the Old City reconstruction and the filling of the vacancy in the urban area. The land for being built was increased but the layout structure did not change.

At this stage, the spatial pattern of the urban area of the city was basically established, and the successive opening of the Litang–Zhanjiang Railway and Yu River bridges promoted the development and construction of the south of the river region. However, due to the obstruction of the railway, the development of Guigang city was limited to the north, and it was in the form of a single-center agglomeration hence it made less efficient use of land.

3.4 After the 1990s: rapid urban development

3.4.1 1995-2007: With the old town as the core, the axis of the city develops northward

In 1990s, the city is mainly concentrated in the north of Yu River and the narrow area south of Litang–Zhanjiang Railway, but the south of Yu River has also gradually developed and formed the city sugar industrial zone, the industrial park of the south of the river and Luobo Bay industrial zone. After 2000, with the rapid growth of economy and population, the central city of Guigang expanded rapidly to the periphery, and the city took on the trend of taking the old parts of the city as the core, crossing the railway and the axis to the north. Although there is a tendency to expand along the trunk road in the Southeast Direction of the central urban area, the city space of Guigang has not been expanded effectively because of the contradiction with the management authority of the Bureau of Agriculture and Land Reclamation, and the city layout is concentrated in the ring road. In general, the city shows the typical pattern of urban sprawl.

3.4.2 After 2007: From the spread of old town to the leaping development

Before 2007, the downtown area of Guigang has been expanding to the periphery with the old town as the center, and the city scale has been increasing. After 2007, the city construction of Guigang has entered a period of rapid development, and the city is faced with new development opportunities and development demands. In order to cope with the actual development needs, the Guigang City General Regulations in 2012 revised the legality of the construction land of the Shika Bonded Port Area, the Education Park and the Beishan Park supporting project. With the gradual landing of major industrial projects in Shika Park and the gradual development of industry in Qintang urban area, Guigang urban space gradually shows a trend of leaping out of the central urban ring road for development.

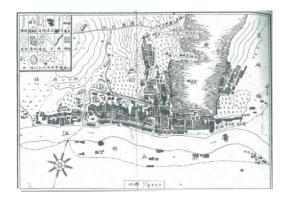


Fig. 6. Guigang in the 23rd year of the Republic of China era

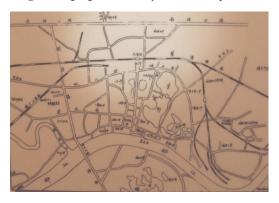


Fig. 7. Guigang in the 1960s



Fig. 8. Guigang in the 1990s



Fig. 9. Guigang in 2017

4 Countermeasures and suggestions for the inheritance of the historical context of Guigang water transport city

4.1 Strengthen protection and inheritance, and establish a sound protection and inheritance framework

The biggest problem of Guigang City's historical context protection and inheritance is the lack of awareness of protection and inheritance. Facing the status quo of historical cultural relics, we must establish a sound protection and inheritance framework as soon as possible, classify and protect the existing historical cultural resources of Guigang City, strengthen publicity, and strengthen the construction of professional teams, aiming at the historical evolution of Guigang City. Resources, material cultural heritage and intangible cultural heritage are systematically sorted out and reviewed, and the status of protection and inheritance is understood to form a complete database of basic materials. At the same time, its records and daily management work should also be put in place.

4.2 Combination of protection and rehabilitation, protection and inheritance, protection and development

In the process of urbanization in Guigang, the destruction of historical context resources should be avoided. It is necessary to seek a development model that combines preservation with inheritance, and adopt the strategy of inheriting history, accumulating culture, cooperating, and culture-driven planning, so as to stimulate regional vitality and realize cultural renaissance. To strengthen the integration of natural and cultural landscape context environmental protection, to construct the technology and culture of dual-wheel-driven dynamic revival model, establish the concept of industrial development to drive the context protection and inheritance.

4.3 Improve the management mechanism and legal guarantee

At present, Guigang city has formulated and implemented the protection and inheritance plan for the arcade streets, which not only improves the quality of the residential environment in the old town, but also protects the style and features of the traditional blocks. Because of lack of the perfect regulations, it leads to the weak binding force of the protection and inheritance of historical context, the imperfect management system, the confusion of the responsibilities of urban management departments, and the lack of enough attention to the protection of historical context. Therefore, it is necessary to establish and perfect the management responsibility as soon as possible, promulgate the relevant laws and regulations, not only the historical protection of the point-type context protection, but also for the protection of the block with protection value and make a specific delineation and control [7].

4.4 Establishment of a system for the protection and transmission of residents' right to know

When promulgating regulations or policies concerning the protection and management of residents' interests, the relevant administrative departments in Guigang should hold hearings and widely solicit the opinions of residents. Residents can either recommend buildings of certain value as cultural relic protection units or historical buildings, or report acts of destruction in historic city or historic cultural district. At the same time, local residents should be encouraged to engage in cultural tourism-related industries.

5 Conclusion

As the largest port of the Inland River in south China, and an important node of the Xijiang River-Zhujiang River Economic Belt, the city of Guigang has its own outstanding local characteristics in the evolution of its urban spatial form and architectural style. Moreover, Guigang is at a time of rapid urban development and a rapidly changing urban landscape. However, in the process of urbanization, the historical context of the water transport city of Guigang is facing the situation of being rejected and encroached, and if the construction and management are poor, the historic context of the port of more than 2000 years will be threatened by annihilation. On the basis of reviewing the development process of Guigang water transport city, the author explores and interprets the historical context characteristics of the spatial evolution of Guigang water transport city, and puts forward the planning strategies for the protection and inheritance of the historical context of water transport city in the construction of Guigang City, which will be conducive to the heritage of Guigang City's historical and cultural heritage, the integration of cultural fragments and the continuation of the overall pattern. At the same time, it provides the way and method for Guigang City to continue the historical context of water transport and realize the goal of combining modernization with tradition

References

- Teng Shanshan, Wu Xiao, Wang Chenghui. Historical Evolution of Ancient Canal Town under the Cultural Space Vision -- A Case Study of Menghe Town of Changzhou [J]. Research of Modern Cities, (2012,27(10):27-38+81).
- Hou Quanliang. Study on the Rise and Fall of Zhengzhou-Kaifeng Ancient Water Transport[J]. Journal of Yellow River University of Science and Technology, (2008(04):25-27)
- 3. Wang Lingjin. The past and present life of the ancient town of the canal: the historical evolution and realistic picture analysis of Huai'an wharf town [A]. China Urban Planning Society, Dongguan Municipal People's Government. Sustainable Development Rational Planning 2017 China Urban Planning Annual Conference Proceedings (09 City Cultural

- Heritage Protection) [C]. China Urban Planning Society, Dongguan Municipal People's Government: China Urban Planning Association, (2017: 14).
- 4. Liu Xiaofang. Research on the evolution of urban form in Fuzhou in modern times [D]. Southwest Jiaotong University, (2006).
- 5. Yang Xule. *Talk about Huaicheng*. Guilin: Lijiang Publishing House, (2017.12)
- 6. Li Ji. Research on the History of Modern Urban Planning in Guangxi [D]. Wuhan University of Technology, (2009).
- 7. Wang Lei. Order and spontaneous apposition [D]. Wuhan Huazhong University of Science and Technology, (2013).
- 8. Wang Hui, Wu Xiao, Wang Chenghui. Preliminary Diagram Exploration of Traditional Spatial Pattern of Ancient Canal Town:The Cases of Mengcheng and Wansui in Changzhou city[J].New Achitecture,(2013(04):140-146).
- 9. Editor-in-Chief of the Cultural History Learning Committee of the Guigang Municipal Committee. *Guigang Culture and history (13th Series)*. Guigang: Guigang People's Printing Factory, (2015.11)
- 10. Editor-in-Chief of the Cultural History Learning Committee of the Guigang Municipal Committee. *Guigang Culture and history (10th Series)*. Guigang: Guigang People's Printing Factory, (2012.10)
- 11. Office of the Local History Compilation Committee of Guigang City. *Guixian Zhi*. Nanning: Guangxi Printing Factory, (2014.10)