Potential for Revitalization and Utilization of Industrial Heritage on Fuxing Island in Shanghai Based on Urban Construction Archives

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ABSTRACT

The industrial relics of Fuxing Island are extremely rich, solidifying the modern industrial civilization style of Shanghai, but their revitalization and utilization value has long been greatly underestimated. Therefore, based on first-hand historical materials such as urban construction archives related to Fuxing Island, this article systematically reviews the updating process of industrial space on Fuxing Island, reflecting its historical achievements in the evolution of industries such as modern garden construction, shipbuilding, fisheries, and warehousing in Shanghai. Furthermore, this article analyzes the value characteristics and current challenges of the industrial heritage of Fuxing Island, and re-evaluates its potential for activation and utilization, in order to provide decision-making references for future waterfront space renewal.

Keywords: Urban construction archives, Fuxing Island, Industrial heritage, Potential activation, Urban renewal.

1. INTRODUCTION

The industrial heritage along the Huangpu River in Shanghai, China is extremely rich, and Fuxing Island, located downstream, is the only closed inland island along the river. In 2011, the entire island was listed as an "immovable cultural relic registered in Yangpu District", witnessing the ups and downs of industrial development in eastern Shanghai and solidifying the modern industrial civilization of Shanghai.

However, for a long time, the revitalization value of Fuxing Island's industrial heritage has been often overlooked. Since the completion of Hai'an Road and Bridge, the spatial structure of Fuxing Island has basically taken shape and has not undergone significant changes to this day. At the same time, with the vigorous development, the open space on Fuxing Island is becoming less and less, and the use of space is gradually moving from open to closed. By 2018, the industrial land area accounted for approximately 62.5% of the entire island. However, the open space was almost only limited to the Fuxing Island Park in the central part, passing by the Huangpu River public space.¹ The government attaches great importance to the development of Fuxing Island and maintains a cautious attitude, emphasizing that "large clothing materials cannot be used as vests" and that "it should be understood before development". Therefore, it is currently in a vacant state in the development process of the Huangpu River and Suzhou River (hereinafter referred to as "Huangpu and Suzhou") in Shanghai.

Therefore, this article aims to rely on urban construction archives and other first-hand historical materials, combined with field surveys, to systematically sort out the updating process of industrial space on Fuxing Island, objectively analyze the value characteristics and current difficulties of industrial relics on Fuxing Island, hoping to help tap the potential for the revitalization and utilization of industrial heritage on the island, and provide decision-making references for future waterfront space updates,

^{1.} Zhu Xiaoming, Xia Qin, Heritage Island: Study on the History and Characteristics of Shanghai Fuxing Island [J]. Housing Science, 2018, 38(11): 28-35. DOI:10.13626/j.cnki.hs.2018.11.005.

especially for similar "heritage island" space updates.

2. OVERVIEW OF URBAN CONSTRUCTION ARCHIVES ON FUXING ISLAND

Fuxing Island is located in the southeast of Yangpu District, Shanghai, about 6 kilometers away from Wusongkou. It looks like a narrow curved bow, starting from Dinghai Road Bridge in the south and approaching Qiujiang Estuary in the north. The bow faces the Huangpu River on the east side and faces Pudong across the river. The bow string is adjacent to the Fuxing Island Canal to the west, connecting the central urban area. It is 3390 meters long from north to south, with an average width of only 427 meters, and the widest in the middle, reaching up to 570 meters. The entire island covers an area of 116 hectares, with a construction land area of approximately 100 hectares. This island is the only artificially enclosed inland island in Shanghai. Initially, it was a shallow bank by the river, but gradually formed through mud accumulation and artificial reclamation. Throughout its history, its main function has been storage and industrial production. Therefore, among the trees hidden on the island, warehouses are everywhere, and factories stand tall. Based on this, the Fuxing Island Canal next to it is only used for loading and unloading goods from coastal factories and warehouses, or for small boats to dock.

The drawings and archives related to Fuxing Island are mainly completed archives collected by the Shanghai Urban Construction Archives. The completed projects it encompasses are mostly concentrated in the 1990s, involving shipbuilding industries such as China Shipyard and Fuxing Island Shipyard, fisheries such as Shanghai Marine Fisheries Company, warehousing industries such as Shanghai Waterway Bureau Material Supply Company, Shanghai Port Bureau Storage and Transportation Service Department, Shanghai Timber Company Fuxing Island Warehouse, Friendship Group Storage and Transportation Company, as well as naval force buildings such as guesthouses, oil and chemical rooms, mine maintenance stations, and infrastructure such as Dinghai Bridge Wharf and Ferry Station.

These urban construction archives, when reviewing the historical evolution of Fuxing Island in the following text, can complement other historical materials and witness the changes of the historical architectural complex on Fuxing Island. They are extremely valuable first-hand historical resources.

3. THE HISTORICAL EVOLUTION OF INDUSTRIAL SPACE IN FUXING ISLAND BASED ON URBAN CONSTRUCTION ARCHIVES

Through a systematic review of urban construction archives and other first-hand historical materials related to Fuxing Island, combined with on-site investigations, it is known that industrial land on Fuxing Island accounts for approximately 62.5%. Among them, important historical buildings such as Fuxing Island Park, Zhonghua Shipyard, and Shanghai Fish Market represent the historical achievements of the island in modern garden construction, shipbuilding, fisheries, and other industries.

3.1 Open Space in Fuxing Island Park

Fuxing Island Park ("Figure 1") was built in 1930 and is currently located at No. 386 Gongqing Road, Dinghai Road Street, Yangpu District. It is situated in the middle of the island, facing east and west, covering an area of 4.19 hectares in a pocket shape, adjacent to Shanghai Fishing Wheel Factory. Originally the Shanghai Junpu Bureau Sports Club, it was originally only used as a staff club for foreign employees to relax, making it difficult for outsiders to see its appearance. After the January 28 Incident, it was occupied by the Japanese army and was reconfigured and transformed into a Japanese style garden style park. After the victory of the Anti-Japanese War, it was taken over by the Junpu Bureau. After the liberation of Shanghai, it was taken over by the Port Authority and transferred to the Shanghai Port Authority in February 1951. After minor repairs to the garden, it was opened to the public on May 28 and became a public place for residents in eastern Shanghai to play.



Figure 1 The floor plan of Fuxing Island Park when it was originally a garden for the Junpu Bureau staff club.

Image source: author self-shoot.

The park has a distinct Japanese garden style. This is not only due to the historical architecture itself, but also the result of the strengthening of acquired elements.

On the one hand, during the Japanese occupation period, cherry blossoms were planted everywhere, a heart shaped lake was built, and a Japanese style single story small western-style building was located at the northwest end of the park, setting the tone for the style determination. At the entrance of the courtyard of the small westernstyle building, there is the word "Bai Lu" written on it, which may be a reference for later generations to follow Chiang Kai shek's habit of naming their palace "Lu", and adding that the building color is white(bai).² As a garden in the garden, the Bai Lu is small and exquisite, facing south. It is a single-layer brick and wood structure, with white walls and red tiles, a gentle slope roof, and large lattice windows. The layout of the house is relatively free. The Japanese style courtyard combines mountains and rivers, and is connected with a connected octagonal pavilion with a sharp roof. It is now the Fuxing Island Party and Mass Service Station, open to the public. (As shown in "Figure 2")

2. Xi Zhen, Farewell in the Depth of Chinese Parasol (Tree) — Parks and Classical Gardens in Shanghai [M]. Orient Publishing Center, 2010, p174.

On the other hand, in June 2009, the municipal district governments carried and out а comprehensive renovation, restoring and strengthening the Japanese style elements. With the passage of time, the park gradually aged and the Japanese style declined. The "Fuxing Island Recovery Monument" established during the victory of the Anti-Japanese War in 1949 was destroyed during a decade of turmoil. In the 1970s, the cherry blossoms in the entire garden also died due to the influence of factory pollution gases. In 2009, the designer integrated the traditional philosophical ideas of "action" and "inaction" into the landscape design, retaining the main skeleton of the park, the wild plant community in the southwest corner, and the moss and fern plants naturally growing under camphor trees. The vegetation style continued the Japanese style, and the heart shaped lake, cherry blossom forest, and drainage ditch were restored. The focus was on restoring Japanese style landscapes and architectural sketches with historical and cultural heritage. At the same time, Japanese style pavilions, gates, and "Fuxing Stone" were added to record the park's history.³ (As shown in "Figure 3")

^{3.} Chen Zhixian, The Application of Philosophical Ideas of "Action" and "Non-action" in Landscape Design: A Case Study of Shanghai Old Park Renovation [J]. Chinese Horticulture Abstracts, 2010, 26(11): 90+112.



Figure 2 Bai Lu (now also serving as Yangpu Binjiang Party and Mass Service Station, Yangshupu Post Station, Fuxing Island Park Station).

Image source: author self-shoot.



Figure 3 Landscape of Fuxing Island Park, including Xinzi Lake, Japanese style pavilions, Fuxing Stone, etc.

Image source: author self-shoot.

Fuxing Island Park embodies the design concept of public openness. From its initial construction to multiple renovations, the park has gradually formed two major scenic spots in the north and south, with evergreen trees providing shade. In addition to cherry blossoms, there are also camphor trees, pine and cypress trees, holly trees, palm trees, large wisteria stands, and evergreen spherical shrubs. This makes the park both a garden and the only large green space on Fuxing Island. Among many factories, it is an invaluable green lung for purifying the air. At first, Junpu Bureau was able to leave this area in the turbulent wave of renting land to build factories, and carry out refined development, making Fuxing Island Park a rare open space in Shanghai's modern garden history that can be closely connected with industrial sites. Now, it seems that the idea is ahead of time. Equally important, the opening of the park by the Shanghai Port Authority in 1951 fundamentally transformed its nature from a closed garden serving the upper class to an open park with a public nature.

3.2 The National Shipbuilding Industry Behind Zhonghua Shipyard

The predecessor of Hudong Zhonghua Shipyard was Greater Zhonghua Shipbuilding Machinery Factory (referred to as Greater Zhonghua Shipyard), founded in 1926 and now located at 130 Gongqing Road. It was founded solely by national capitalist Yang Junsheng. The factory is the earliest industrial enterprise to settle in Fuxing Island and also the largest industrial entity in scale. The coastline along the factory is about 700 meters long, with a construction area of 12 hectares. In addition, in recent years, it has built employee dormitories and the Puxi campus of the senior technical school, accounting for nearly one-fifth of the total area of the island.⁴

rise The of Zhonghua Shipyard has representative significance in the national shipbuilding industry of Shanghai. Founder Yang Junsheng studied abroad in Japan in his early years. After graduating from the Department of Shipbuilding at Imperial University of Japan in 1919, he worked as an engineer and teacher at Mitsubishi Institute of Technology in Nagasaki, Japan.⁵ Subsequently, due to dissatisfaction with China's shipbuilding industry being monopolized by foreign investment, he returned to Shanghai and wanted to leverage his expertise to develop the national shipbuilding industry and save the country through industry. At that time, apart from the Shipyard, official Jiangnan the domestic shipbuilding industry was mainly dominated by foreign shipyards such as British, Japanese, and French. British merchants, especially Shanghai Port, have a monopolistic shipbuilding force, with firstclass equipment, strong funds, and a large scale,

and also enjoy privileges.⁶ Ethnic industries can only survive in this environment with difficulties. Yang Junsheng borrowed 5000 yuan from Zhejiang Industrial Bank in order to purchase equipment and temporarily lease land. Finally, on October 10, 1926, the Greater Zhonghua Shipbuilding Machinery Factory was established, symbolizing the glory of the Chinese nation and demonstrating patriotism. Yang Junsheng served as both the factory director and design director, mainly engaged in ship repair and construction business. At first, the factory was not located on Fuxing Island, but on 10 acres of land at 66A Yangshupu Road. The turning point occurred in 1930 when the British Concession authorities forcibly designated the Yangshupu Road and Jiangpu Bureau along the river as a British port cargo yard. The shipyard was forced to relocate to Fuxing Island in 1931 and a new 16,000 m2 factory was built. But the geographical location is awkward, "only 19 acres of land, with three roads and one facing the river, there is no room for expansion."⁷

Although the factory area is limited, the production scale continues to expand. Over the past decade, Zhonghua Shipyard has gradually won a place for the national shipbuilding industry. During this period, the factory built more than 130 ships of all sizes. At that time, the largest passenger and cargo ship on the Shanghai-Chong route, the largest and best equipped passenger and cargo ship on the Shenyang route, and the first Chinese icebreaker to demonstrate excellent performance in the rescue of the Dagukou ice disaster, the Tianxing, were all built by the factory. In addition, in 1935, the shipyard built a gas holder for Nanjing Yongli Argon Plant, which was the first large gas holder independently designed and built by Chinese people and received high praise. At its peak, it could reach a scale of over a thousand people and its business scope continued to expand, ranking first among Shanghai National Capital Shipyard.8

^{4.} Zhu Xiaoming, Xia Qin, Heritage Island: Study on the History and Characteristics of Shanghai Fuxing Island [J]. Housing Science, 2018, 38(11): 28-35. DOI:10.13626/j.cnki.hs.2018.11.005.

^{5.} Compiled by the United Front Work Department of the Shanghai Municipal Committee of the Communist Party of China, the Party History Research Office of the Shanghai Municipal Committee of the Communist Party of China, and the Shanghai Archives, The Socialist Transformation of Chinese Capitalist Industry and Commerce in Shanghai Volume 2 [M]. Beijing: Communist Party History Publishing House, 1993.03.

^{6.} Mao Boke, chiefly ed., History of Shanghai Port: Ancient and Modern Parts [M]. China Communications Publishing & Media Management Col, Ltd., 1990, p336.

^{7.} Compiled by the United Front Work Department of the Shanghai Municipal Committee of the Communist Party of China, the Party History Research Office of the Shanghai Municipal Committee of the Communist Party of China, and the Shanghai Archives, The Socialist Transformation of Chinese Capitalist Industry and Commerce in Shanghai Volume 2 [M]. Beijing: Communist Party History Publishing House, 1993.03.

^{8.} Mao Boke, chiefly ed., History of Shanghai Port: Ancient and Modern Parts [M]. China Communications Publishing & Media Management Col, Ltd., 1990, p336.



Figure 4 Zhonghua Shipyard under construction.

After experiencing Japanese occupation, forced takeover by the Kuomintang, and suffering from the ravages of Japanese imperialism and bureaucratic capitalism, it struggled in turmoil for more than ten years before finally ushering in the dawn after the liberation of Shanghai. From April 1953 to June 1956, it was successively merged into 14 private enterprises, and in 1960, it was merged into 2 more to carry out socialist transformation.⁹ After the expansion of funds and equipment, the factory was expanded. According to Yang Junsheng, "After the joint venture began in the spring of 1952, the roads on both sides of our factory were also opened up, and a new factory was expanded on the open space opposite the road at the factory entrance."¹⁰ This coincided with the evolution of the interrupted road network on Fuxing Island, such as Junpu East Road and Heping Road. By 1958, the factory had only one shipyard, covering an area of $39,340m^2$, and its scale was expanding day by day.

Image source: author self-shoot.

Since the reform and opening up, Zhonghua Shipyard has undergone several restructuring and has already undergone a complete transformation. Now it has become a backbone core enterprise under China Shipbuilding Industry Group, with production areas spanning across Pudong, Puxi, Changxing Island, and Chongming Island, forming a complete shipbuilding supporting industry chain. The former shipyard site on Fuxing Island is also listed as an immovable cultural relic in Yangpu District, with a century old historical heritage. However, as of the time of the author's on-site inspection in 2023, it is still in a state of construction relocation. Due to confidentiality issues, the walls are closed and not open to the public. Only the towering industrial equipment relics can give a glimpse of the old charm. (As shown in "Figure 4")

^{9.} Compiled by Liu Chuanbiao, Chronology and Selected Materials of Major Events in Modern Chinese Shipbuilding Administration, Volume 3 [M]. Jiuizhou Press, 2011, p.853.

^{10.} Compiled by the United Front Work Department of the Shanghai Municipal Committee of the Communist Party of China, the Party History Research Office of the Shanghai Municipal Committee of the Communist Party of China, and the Shanghai Archives, The Socialist Transformation of Chinese Capitalist Industry and Commerce in Shanghai Volume 2 [M]. Beijing: Communist Party History Publishing House, 1993.03.

3.3 Modern Fishery Bases Represented by the Fish Market

The former site of Shanghai Fish Market is located at the northern end of Fuxing Island, and is the earliest modern fish market in modern history built independently by China. In 1933, the Ministry of Industry of the Nationalist Government put the construction of a large-scale fish market on the agenda, with the intention of "adjusting production and sales, stabilizing market prices, developing fisheries, and controlling the fishery economy". Previously, only one fish market was established in Dalian and Qingdao, either by Chinese or private individuals. The following year, the proposal to establish the Shanghai Fish Market was approved, and the Shanghai Fish Market Preparatory Committee of the Ministry of Industry (referred to as the Preparatory Committee) officially opened, with its office located at 33 Sichuan Road, Shanghai. After consultation, both officials and businessmen will contribute half of the capital to jointly establish Shanghai Fish Market Co., Ltd. (referred to as Shanghai Fish Market), with Shanghai Tan tycoon Du Yuesheng serving as the organizing committee chairman. The also conducted on-site inspections of the location of the fish market and ultimately selected Fuxing Island. Due to its proximity to Wusongkou, fishing boat transportation is extremely convenient, and the location is remote. Not only is the land price much lower than the urban area, but there is also no need to consider the city's appearance.

The construction of the Shanghai fish market has been highly valued, taking nearly a year to lay a solid foundation for undertaking the entire fish trading in Shanghai after its opening. According to records, the fish market laid its foundation on New Year's Day in 1935 and was completed on November 15. A total of 4.54 hectares of land were leased on Fuxing Island, occupying 335 meters of the coastline. ¹² The project was constructed by Xinchangtai Construction Factory, and the designer was Xu Jingzhi from Xingye Architectural Firm, who was the first generation of Chinese architects. In the same year, Xu Jingzhi's career reached his peak. In a design competition, his proposed architectural drawings for the National Central Museum (now the Nanjing Museum) stood out from 13 competing design proposals. Later, he worked with architects Liang Sicheng, Liu Dunzhen, and others to revise them, and finally finalized and completed them. He himself was also appointed as an architect for the Preparatory Office of the National Central Museum.¹³ It can be said that his design philosophy balances "nationality" and "modernization". The completed Shanghai Fish Market is his work, covering an area of 67 acres, with a 7-story office building standing tall in the center; To the east is the dock, which can accommodate up to 30 fishing boats;¹⁴ The West is a brokerage office with an area of 1,429m² and a 2story building, totaling 52 rooms; To the north is a refrigerated warehouse, in addition to which there are several ice making rooms, freezing rooms, machine rooms, and processing rooms. The refrigeration facilities cover an area of 1,788m²; To the south is an auction house covering an area of $1,517m^{2}.^{15}$

After its opening, the Shanghai fish market lived up to expectations and became the most wellequipped and traded fish market in China at that time, with milestone significance in the development of China's fisheries. On May 11, 1936, the fish market held its opening ceremony and officially opened at 3am on the 12th. According to statistical data, during the 234 days from its opening to the end of that year, the Shanghai Fish Market traded over 60,000 tons of fish goods, with a total revenue of 8.2551 million yuan. Its business was extremely prosperous, and it even almost monopolized the entire fish trading in the East China Sea and Yellow Sea.¹⁶ However, during the Anti-Japanese War, it was brutally disbanded and partially destroyed by Japanese artillery fire. Although it resumed operations in 1946, it is no longer on Fuxing Island and has been transferred to

^{11.} Gu Huiting chiefly, ed., Xue Yaoshun, Zheng Liang, associated ed., Compiled by the Compilation Committee of Shanghai Fisheries Chronicle, Shanghai Fisheries Journal [M]. Shanghai: Shanghai Academy of Social Sciences Press, 1998, 11.

^{12.} Gu Huiting chiefly, ed., Xue Yaoshun, Zheng Liang, associated ed., Compiled by the Compilation Committee of Shanghai Fisheries Chronicle, Shanghai Fisheries Journal [M]. Shanghai: Shanghai Academy of Social Sciences Press, 1998, 11. 224

^{13.} In 1935, Xu Jingzhi was appointed as the architect of the preparatory office [EB/OL]. https://www.njmuseum.com/en/articleDetails?id=36923

^{14.} Xipo, wrote., Shanghai's Bottom Card [M]. Shanghai: Shanghai Academy of Social Sciences Press, 2017, 08, p47.

^{15.} Gu Huiting chiefly, ed., Xue Yaoshun, Zheng Liang, associated ed., Compiled by the Compilation Committee of Shanghai Fisheries Chronicle, Shanghai Fisheries Journal [M]. Shanghai: Shanghai Academy of Social Sciences Press, 1998, 11. 224

^{16.} Gu Huiting chiefly, ed., Xue Yaoshun, Zheng Liang, associated ed., Compiled by the Compilation Committee of Shanghai Fisheries Chronicle, Shanghai Fisheries Journal [M]. Shanghai: Shanghai Academy of Social Sciences Press, 1998, 11. 224

Qiwupu Road (now Jiangpu Road), covering only 30 acres, which is less than half the original scale. The former site of the fish market on Dinghai Island and its surrounding areas were used for other purposes, with the construction of a fish liver oil factory and a refrigerated ice factory.

Overall, the fishing industry chain represented by the Shanghai fish market has made Fuxing Island a modern fishing base. In addition to the fish market, Shanghai Fishing Wheel Factory, Shanghai Fish Products Factory (now Donghai Pharmaceutical Factory), and Ocean Fisheries Company also jointly form a fishing production line. (As shown in "Figure 5") They have made indelible contributions to the development of China's deepsea fisheries, from the construction and fishing of fishing vessels, to the refrigeration and transportation of fish products, and then to the processing and sales of aquatic products. The series of technological achievements it has formed demonstrate the independent innovation capability of China's fishery industry.



Figure 5 Former site of Shanghai Marine Fisheries Factory.

4. THE CURRENT SITUATION AND VALUE CHARACTERISTICS OF INDUSTRIAL RELICS IN FUXING ISLAND

There is a group of uniquely styled industrial architectural relics preserved on the Fuxing Island. Not only the Fuxing Island Park, Zhonghua Shipyard, Shanghai Fish Market Site, and Shanghai Marine Fisheries Factory Site mentioned earlier, but also some buildings have witnessed the development of Shanghai's warehousing, military, and other aspects. The United Warehouse at 210 Gongqing Road, once a storage base for American aid supplies, is a typical industrial building of the Republic of China. The building and environment are well preserved. The warehouse is a single-layer brick and concrete structure with a total of 6 buildings, each measuring 42 meters in length and Image source: author self-shoot.

24 meters in width. The eaves are 6.5 meters high, and the exterior walls are made of empty red bricks. The windows are high and the exposed reinforced concrete ring beams are also very recognizable; For example, at No. 2 Gongqing Road (now the Logistics Department Courtyard of the Nanjing Military Region), in 1950, the Nationalist Party destroyed the infrastructure of Shanghai on a large scale. Mayor Chen Yi ordered the construction of a 0.6m thick reinforced concrete thick wall to wrap the oil depot, preventing it from being bombed by airplanes and causing fires. Now, the iron sheet oil tank has been demolished and a corridor has been built as residential and office land, faintly reflecting the shadow of the iron sheet oil tank in the past, documenting the turbulent years of continuous war.

Unfortunately, the protection of industrial building relics is not optimistic. On the one hand, industrial buildings are severely idle. Since the 1990s, many factories have been rented out, and warehouse rent has barely maintained at an average of 1 yuan/square meter per day. Their functions have seriously deteriorated, and even, for example, the machine repair garage of a fishing boat factory, which has been vacant for many years, may disappear over time; On the other hand, the spatial

5. POTENTIAL FOR REVITALIZATION AND UTILIZATION OF FUXING ISLAND'S INDUSTRIAL HERITAGE

Throughout history, Fuxing Island has a rare value attribute from the perspectives of natural environment, industrial development, or military event commemoration.

Firstly, in terms of ecological value, the island can still retain the modern garden of Fuxing Island Park in an industrial area, and the Gongqing Road is lined with green trees. There is also a primitive ecological beach on the riverside, which is very rare.

Secondly, in terms of industrial development, the entire island can be regarded as an industrial island, representing the advanced level of China's shipbuilding and fishing industry for a long time. The preserved industrial relics faithfully record the end of China's modern enterprise system and the process of public-private partnership under the planned economy system.

In addition, Fuxing Island has witnessed the ups and downs of the island's close connection with the fate of the country just from its name change. Looking at its industrial development history, it not only has the rise of national capital, but also is closely related to some major military events from the Anti-Japanese War to the early days of the founding of the country. Without a doubt, it can serve as a patriotic education base.

Although Fuxing Island has not undergone significant changes in the rapidly changing urban landscape of Shanghai for decades, it seems somewhat out of place. However, this does not mean that it is not being taken seriously. On the contrary, as early as 2004, extensive solicitation of construction and development plans had already begun. At that time, Fuxing Island was positioned as an "ecological island, forum island, and leisure island". If successfully implemented according to this plan, the green area on the island will reach 42.7%, retaining the original wetlands on the east side of the island, and building Fuxing Island into

structure is too closed, with almost only Fuxing Island Park remaining in the open space and the rest mostly enclosed. The remaining main road, Gongqing Road, has a significant impact on this structure. Its fishbone style corridor structure seriously exacerbates the closure of street space and further leads to the waste of shoreline resources.

an international island that integrates an international conference center, international sports center, leisure and entertainment center, yacht club, water bus dock, and landscape avenue.¹⁷

However, currently, compared to the waterfront space on the west bank of Fuxing Island on Hai'an Road, the island is still under infrastructure construction such as rail transit. On the one hand, this is because the municipal and district governments are optimistic about the island, so their development attitude is extremely cautious and they do not want to easily waste the rare "good material" of Fuxing Island. They must think carefully and understand before starting, so the development plan is repeatedly optimized; On the other hand, due to difficulties in land collection and storage, there are many central and municipal enterprises on the island, making relocation difficult. According to the progress arrangement of "Key Work Tasks for Public Space the Construction on both sides of the Huangpu River" by the Pujiang Office of the Shanghai Municipal Commission of Housing and Urban Rural Development, land collection and storage will continue to be the main focus in recent years. By 2025, the land collection and storage in the central and northern sections of Fuxing Island will be basically completed, and construction will be launched according to the approved detailed control plan for the central and northern sections.¹⁸

6. CONCLUSION

In summary, based on urban construction archives, the evolution process of important industrial historical buildings on Fuxing Island fully reflects Shanghai's historical achievements in modern garden construction, shipbuilding, fishing, and warehousing industries. To this day, the island still retains a group of unique industrial architectural relics, which have great potential for

^{17.} He Liandi, Fuxing Island: Developing after Thinking Clearly [N]. Wen Hui Bao, 2010-09-20 (001).

^{18.} Refer to Appendix 1 of the "Key Tasks for the Construction of Public Spaces on Both Sides of the Huangpu River" in the 2021 Key Work of the "Huangpu and Suzhou" Area of Shanghai issued by the "Huangpu and Suzhou" Office.

activation and utilization. On the other hand, it can be seen that these industrial building relics are severely idle and enclosed, causing great waste of shoreline resources. Their scarce value characteristics in terms of ecology, industry, and historical and cultural landscape urgently need to be excavated and developed. It is hoped that in the upcoming urban renewal, the revitalization and utilization value of Fuxing Island's industrial heritage will be re-evaluated, and the value activation will be steadily achieved in the development of the waterfront area in Shanghai.

In addition, the development plan of Fuxing Island is also worth learning from for the overall revitalization and utilization of industrial heritage in Shanghai's "Huangpu and Suzhou" system. For example, the development and construction work along the banks of "Huangpu and Suzhou" has a long cycle and high investment. In reality, it is necessary to plan and then move like on Fuxing Island, with thick accumulation but thin development. Specifically, in addition to taking the "Huangpu River Coastal Area Construction Plan (2018-2035)" and "Suzhou River Coastal Area Construction Plan (2018-2035)" as the core basis, it is also necessary to fully understand the historical, artistic, scientific, economic, and social values of coastal industrial heritage, draw on successful cases of urban waterfront redevelopment at home and abroad, solidly conduct preliminary argumentation and planning research, widely solicit design schemes, create new mechanisms and models for the reuse of riverside industrial heritage, so as to achieve overall planning, step-by-step implementation, and win-win cooperation, truly tap into the potential of heritage in protection and revitalization, reflect the humanistic scale in refined stock renewal, and move towards excellence in the global urban network of public space gathering points. In this way, the potential value of coastal industrial heritage can be fully explored, and steady progress can be made to build one river, one river into a world-class waterfront area with global influence.

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