PORT HERITAGE: URBAN MEMORY OF HARBOR CITIES (CASE STUDY OF SHANGHAI)

Shaoming Lu
Architecture Design and Its Theory, Department of Architecture,
Shanghai Jiao Tong University, Shanghai, China

Introduction

Modern Ports, which scatter along the Huangpu River in Shanghai, are normally ignored during the process of urban renewal. However, the remained port can be considered, to some degree, as signs of Shanghai’s urbanization and its cultural landscape, when transforming from the natural landscape of bund to the cultural landscape of modern cities. Owing to their geographic location, infrastructure function and historical information, these ports have being built up an inter-relation between city and waterways and connected them together, and should be viewed as a unique language of urban heritages recalling collective memory.

As Jeffery Stinson defined, port industrial landscape is one of special urban language in waterfront cities, which should be registered on the list of urban heritages\(^1\). Commonly, the ports, together with industrial heritage (site) and waterways heritage, refer to the cultural relics of post-industrialization age. Nizhny Tagil Charter for the Industrial Heritage\(^2\) takes industrial heritages as object of protection clearly and definitely. In the Chapter it mentions that the industrial heritages include industry cultural ruins with historic, technical, social, architectural or scientific value, such as building, plant, workshop, warehouse, port, machine, device, implement, mineral field, remaining of refining place, storehouse, place for manufacturing and transforming, place for transportation and infrastructures, place for religion and educational activities, place for social activities that are relevant to industry. The Document shows that port heritage is a part of industrial heritages. However, a few local and abroad scholars have discussed the value of industrial heritages with the view of history. In particular, only 16 essays with subject term “Port Heritage” can be found in the area of Architecture in the Web of Science. Some of these researches focus on vague districts of historical “port”, others focus on old lighthouse “heritages”. Few research views “port heritage” as an unity and defines it clearly. In practices, the concept of port heritage also has been misunderstood.

\(^2\) The formal document in the field of the protection of international industrial heritages, *Nizhny Tagil Charter for the Industrial Heritage*, is approved by TICCIH in 2003.
commonly. In some cases, the typical historical site has only been protected while these objects have been destroyed; some typical equipment and objects have been converted into new icon of local culture, but these intangible information, value and those context has lost. This kind phenomenon is increasingly serious during the rapid process of waterfronts renewal in developing countries. Therefore, this paper regards “port heritage” as a key words and explores the values of port heritage for reserving, recalling and developing the urban memory in order to make identity of the place with the method of Object-Place-Event.

In China, the 1st session of conference on industrial heritage protection of China was held in Wuxi 2006, and in the same year industrial heritages and little port heritages are listed as the object of investigation in the 3rd Nationwide General Survey of Cultural Heritages. With this regard, the Shanghai Committee of Cultural Relic Management conducted general survey on the industrial heritages in the city³, and promulgated the Directory of Industrial Heritages in Shanghai⁴, including 26 historical and cultural sites under government protection that are relevant to port heritages⁵. However, it is regretful that only one of the port heritages is listed in the Registered Cultural Heritages⁶. The other port heritages are not included in any protection list. The port heritages along Huangpu River should be studied as a cluster as their cluster value is more important than any single port. Unfortunately, they are still not included on the relics list in the city, and with the redevelopment of Huangpu River’s waterfront during the 12th five-year plan, those ports relics face the survival crisis.

Through literary review on historical ports from the 1st Opium War to 1949, this paper mainly focuses on the elements and value of modern ports along the Huangpu River from Baoshan, Yangpu, Hongkou, Huangpu, Xuhui to Minhang⁷. These ports are viewed as urban heritages in this paper to arouse people’s attention to this kind of heritage during the process of urban transformation.

**Testimony of urban development in a century**

Because of the unique location, modern port made a great contribution to the development of the city, and city also provided chances for them to develop. Therefore, modern ports can be viewed as the testimony of urban modernization.

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³ Author investigated and studied the industrial port sites around Yangshupu in the 1990s; and organized students to carry out classified survey on the current situation of ports alongside Huangpu River during 2008 to 2010.
⁵ 25 out of the 26 sites were presented before 1949, scattering along Huangpu River.
⁶ It is the 2nd shipyard in the former site of Jiangnan Machinery Manufacture Bureau.
Since Song and Yuan Dynasty, Shanghai has always played a key role in water transportation of grain and freight because of its geographical location. Before 1840’s, the ports in Shanghai were mainly located around Shiliupu and Dongjiadu, outside Shanghai county town. Ports distributed intensely at the waterfront and extended for 2 or 3 kilometers along the Huangpu River; meanwhile, these port districts promoted the development of the surrounding districts and their communities, such as Huayi Street (street of beautiful dress), Doushijie (street of soybean market), “Yan Matou” (port of salt), “Zhuhang Matou” (port of bamboo firm) and “Youche Matou” (port of oil tanker). These ports were not wider than a few meters while the widest port, Dongmen Matou (port of the east city gate), were about thirty meters. The ports were mainly built by stones. Heavy loaded ships were not able to approach in shoal, but anchor at a near place instead. The porters walked on the gang board with length of several zhangs to get abroad to unload. Though the port infrastructures were simple and crude, they held hundreds of ships mooring, including barges, cargo ships, fishing boats and grain vessels. In that time, Shanghai had an annual turn volume of 1.2 to 1.5 million tons and was honored as “Dong NanZhuang Xian” (Flourishing County in Southeastern China) (Fig. 1)\(^8\).

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Since the opening of Shanghai Harbor, Shanghai has gotten the further development as a port city. The external trade developed rapidly, and foreign merchants found out Shanghai’s geological advantage soon. However, Shanghai’s infrastructures, including piers, warehouses and trestle bridges, were far less competent to the requirement of berthing large-scale ships. In the preliminary stage after the beginning of harbor, large-scale ships were connected to the bund mostly by barges. Therefore, British built 2 barge berths on the Bund in 1845. They were the first berths that were built by foreigners. In the same year, the Ground Rules was launched, which allowed British emigrants to construct pave roads, build ports and organize labor union of roads and ports in the leased territory. In 1846, Roads and Jetties Committee was founded. Since then, China’s sovereign in managing ports was lost\(^9\). Foreign merchants began to build berths and warehouses on the Bund. Till the end of 1840s, there were more than 10 western berths on the Bund; the waterfront areas against the side of British, French and American leased territory became the busiest area for operation and anchoring.

In the 1850s, as water trade developed, western firms’ buildings and warehouses were mostly built on the Bund. Till the 1860s, with the evolution of ships and the stable position of foreign merchants, many of the merchants settled headquarters in Shanghai Harbor. A great amount of ship companies were founded. As a result, the port infrastructures were constructed on a large scale. Many ports, which were built by foreigners, as well as the shipyards and warehouses belonged to the ports, appeared on the waterfront of Huangpu River. The construction procedure lasted from the 1860s to the 20\(^{th}\) Century; it is appropriate to describe it as the first climax in the construction history of Shanghai Harbor. The first group of steamship ports was crowed on the Bund in British and French leased territory, i.e. on the east bank of Huangpu River. The city, then, expanded to the east and north areas along the river\(^{10}\).

When it came to the 1870s, there was no more space for new ports in Puxi (west bank of Huangpu River). On the other hand, due to the long shoreline and its lower stage of development, Pudong became the place where foreign merchants started to build ports. In 1896, the Suez Canal was opened for navigation. Consequently, foreign ship companies started severe competition in shipping. The deep water shorelines were divided up to build new berths and warehouses. Gonghexiang Port (公和祥码头), Lanyancong Port(蓝烟囱码头), Mitsubishi Company Port and Taixing Port(泰兴码头) were all early ports built by foreign firms\(^{11}\).

In the end of the 19\(^{th}\) century, with the further development of shipping trade and the entry of Japanese firms, Shanghai began a small scale of climax in building

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\(^{10}\) Zhang Yan (Chief Editor), *Completed Dictionary of Shanghai Port* [M]. Shanghai: Shanghai Academic of Science and Technology Publishing House, 1991; Also see, Rhodes Murphy. *Shanghai – the key to modern China* [M]. Shanghai People’s Publishing House, 1953, p. 2.

berths. In this period, some advanced constructional materials (such as modernized warehouse and armored concrete) were first introduced into Shanghai. Foreign firms always built their berths along Huangpu River, contributing to the congested distribution of ports and warehouses in downtown. The most congested area was the place between Yangpu and Nanshi. Temporal China government began the first rebuilding of public port in Nanshi; in the meanwhile, the ownership of the ports changed on a large scale. Under this way, the development of berths accelerated the modernization of Shanghai.

In 1905, Huangpu River began to be dredged on a large scale. The construction of ports had expanded to Wusongkou. The development of berths promoted Shanghai’s transformation to a large trade harbor. As the population and needs for water transportation grew, an increasing amount of freight and passengers transferred in Shanghai, thus the transportation demand was increasing accordingly. The 1st ferry crossing Huangpu River opened up by the Pacify Bureau of Pudong Pond Engineering in 1910, which began the 2nd climax in the development of berths in Shanghai.

Shanghai became a real international trade harbor with the development of ports till 1920s. In 1936, Shanghai ranked the 6th to 7th in terms of the quantity of port trade; Before World War II, Shanghai experienced a period of steady development, during which many Chinese merchants had got involved in the construction and issues of ownership of ports. The facts were that, in that period, ownership of ports changed rapidly.

The beginning of World War II opened a volatile history of ports in Shanghai. Since 1937’s Japanese militaristic power invasion, almost every port was took over or destroyed, and the whole Shanghai Harbor was locked in fact. After the war, many ports were taken over and got repaired by Committee of Shanghai Port Administrative Affairs, Department of Transportation. Nevertheless, Shanghai indeed shifted from a pivotal port of domestic trade to an important international port.

Shanghai was built as a port, the port and the city flourished as a whole; the development of port and the modernization of city relied on and promoted each other. Ports are one of the footstones of Shanghai’s development, as well as an epitome of Shanghai’s modernization. Ports witnessed may historical stories in Chinese modern history, the formation and development of city, as ports themselves recorded representative and historical information of the city, which deserved to be reserved effectively.

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Elements of Port Heritage to recall urban memory

Generally speaking, original object, related events and remained places are the carriers of urban memory. The objects and places exist as material form and the events exist as intangible form, all of them contain relevant information about the city. They are full of historic, technical, social and cultural stories and have great value.

Firstly, historical place of port heritage can be classified into mooring area, operation area, service area, including shipyard cistern, berth, freight yard, dry wharf, trading market, martial remaining and so on. This kind of place normally embeds massive feeling and ordinary memory. For instance, the Shipyard Theatre in the western area of Expo 2010 Shanghai China remains the space structure of former Shanghai Dockyard, and recalls successfully urban memory in the history (Fig. 2).

Secondly, relevant object and material include buildings, dockyard, vehicles, cargo vessel, crane facilities, freight and transfer, measurement tools, carriage, pound scale and so on, often have rich place memory. For example, XuhuiBinjiang Park keeps historical evidence like gantry crane and station house, which act as tangible carrier for history.
Thirdly, relevant events documented representative historical, technical and cultural event, typical life, and stories of sailor, immigrant, manager. For instance, the inspiring story about modern Chinese students who went over the ocean pursuing further study abroad happened in Shiliupu Port. These events, relevant objects and places really have become permanently marks in the collective memory.

**Relics**

Buildings affiliated to ports include warehouse, ticket office, waiting room, dormitory, custom, freezer, dockyard, dredging, club, rooms for production, living and management and immovable historical objects. Most of ferry ports were one-floor sloping-roof buildings with Chinese style, such as Wusong Port, Dinghailu Port, Chunjiang Port and Dongchang Port and so on. There were also 2-floor western modern buildings such as Beijinglu Port, whose ground floor was entrance and exit, ticket office, waiting room, commissioned office for bus ticket and upper floor was operating office, first-class-ticket room, waiting room and aquatic restaurant. Warehouses affiliated to ports were mostly 2-6 floors buildings with the armored concrete structure (partly mixed with brick). Besides, inside lighting, airiness and traffic facilities were all taken into consideration during the design process, like Hezhong Warehouse, Minsheng Warehouse (1930) and Sassoon’s Opium Warehouse (1900) on WaiMalu (Outer Road), warehouse of former Japanese merchant’s Huangpu Port (1900) on Qinhuangdao Lu, warehouse of former British merchant’s Madden Port (1930) and so on. The architectural styles differed but were mainly western and modern ones. Relevant office buildings were seldom survived except for the office building of Bureau of Dredging Huangpu River in Zhanghuabang work field, which was 2-floor building with sloping-roof built in the 1930s\(^\text{16}\). One of landmarks on Bund is preserved, which was designed by Marti and built in 1907. The building is rich in details. On the top of it there is dogvane and iron pillar hanging signal on the top to offer weather information to ships in early Shanghai. This signal tower exhibited technology and experience in engineering in the modernization of Shanghai. These immovable objects reflect the heritages’ capability of preserving and collecting memory by their structure, material, construction technique, architectural image, decoration, color, texture and styles.

Movable relics at ports include vehicles, cargo vessels, cruises, seagoing vessels, warships, ferryboats, machines, towing, craning facilities, tools infrastructures, beacons, fairway buoy, hydrological gauges, utensils and so on. In Shanghai, according to incomplete statistics, there were 156 merchant ships and 22 war-ships till 1947. Most of them have been lost. For example, the No. 17 and No. 18 ferryboat could not be found anymore. They were built in 1936 with unique shape and function, had streamlined roof, sailing room on the top floor for better sight line, more space for passengers and more convenient operation\(^\text{17}\).

\(^{16}\) Shanghai Library. *Record of Customs in Old Shanghai (1)*[M]. Shanghai Cultural Publisher, 1998.

\(^{17}\) Shanghai Library. *Record of Customs in Old Shanghai (2)*[M]. Shanghai Cultural Publisher, 1998.
Fortunately, a couple of cranes have not been destroyed, and more materials have been preserved, i.e. files, drawings, graphics, signboards, trademarks, bills, notes, manuscripts, contracts, rubbings of pictures, books, audiovisual products and videos\textsuperscript{18}. These materials described concrete information about the ports’ physical attribute, evolution history and supported events, which not only recall the urban memory, but also show historical, aesthetic, technique, social and cultural value.

**Historic Place**

The word “shoal” or “bund” represents the origin collective memory of ports in Shanghai. In nature, shoal is a spatial geographical concept, involving the capability of berthing different types of ships, loading and unloading freight, possibility of stacking cargo, problem of tides and water level, harmony between man-made place and natural place and so on\textsuperscript{19}. The essence of “Shoal” projected the logic to the free social and commercial activities. Due to the development of the trade and transportation, the space, volume, capital, loading facilities of the bund has been renewed again and again. So, till 1947, 70% of the bank of Huangpu River has been exploited along Huangpu River from Wusongkou to Zhangjiatang\textsuperscript{20}.

Today, some names of places have been preserved; some stacking fields, operation areas, berths, bank revetments have survived; some dockyards, cisterns, dry wharf, dock streets have survived. However, almost all original geographical and humanity scenes have been rebuilt. Fortunately, that spatial texture of Zhanghuabang work field of Bureau of Dredging Huangpu River (current 3945 Yixian Road, Baoshan District) which was built in 1931 and Huangpu Port which was built in 1911 and the street texture of the old port on East Fuxing Road are preserved in good condition. The Streets of Old Port locate at the south of Dongmen (East Gate), including all kinds of port streets between East Fuxing Road and WaiMalu, such as Yan Matou (port of salt), ZhuhangMatou (port of bamboo firm) and so on. This area was the only famous port streets area in modern Shanghai. In those days, this area was not only the transferring market for fruits, vegetables, fishes, ducks meats and other agricultural products, but also one of the distributing centers for bamboo or wooden products, clothes, salt, grains and all kinds of groceries, being filled with the tide of international daily life.

Let’s take Shanghai Fish Port as an example, it contained vivid scenes of urban life in Shanghai. Built in 1934, it provided both marine products for more than 200 food markets in Shanghai and modern shanghai residents held special feeling about it. In early 1930s, Shanghai had become the biggest transferring center for aquatic products in China, It also witnessed the busy scene: During fishing season, it was extremely busy with masts gathering, flags fluttering, hooters ringing and seagulls flying in the area; More than 4,000 fishmongers entered the Fish Market


\textsuperscript{20} Shanghai Archives. *WHARF GODOWNS. Information about Ports and Warehouses in Shanghai &Pudong* [R]. Publishing House and Date of Issue unknown.
and about 30 or 40 fishing boats anchored at the port per day averagely; Numerous Huangyuche\textsuperscript{21} with heavy weight moved around in fish market and shuttled in the street\textsuperscript{22} (Fig. 3).

![Fish Market, port and its daily activities of Ports of Shanghai 1949](image)

Source: from Shanghai Archives.

Therefore, the typical and representative collective memory or experience constituted an indispensable part of Shanghai’s urban life and memory. It is no doubt to say that the memory of Shanghai exists not only in the feasting and revelry on bund, but also in the corners in alleys. Shanghai is not only the paradise for adventurers, but also a dwelling place for every Shanghai resident. If the Bund recorded the events of important persons, the “small” places represented by ports recorded the stories of lower class residents. Both of them described a tridimensional and real Shanghai. Furthermore, the stories of vendors and citizens meant place identity to ordinary residents.

\textsuperscript{21} Yellow croaker tricycle, a typical transportation and trade tool.

Relevant Stories

Besides the physical character of historical objects, ports in modern Shanghai also held relevant historic and cultural stories, events and intangible information.

Ports in modern Shanghai were the typical social space where workers, capitalists, governor, private enterprises and foreign merchants worked together, as well as the political space where the conflicts between privatization and commonality, the rich and poor, the west and east happened at any time. There were also many important military events and workers’ revolution happened in the area during the modern period of Shanghai. For instance, in April 1915, the porters in Yangjiadu, Nissin, Mitsubishi, Laobaidu stroke for putting Japanese products under a boycott; in March 1927, picket of Shanghai porters attacked and occupied the 3rd Police Station and Tiantong’an Station, which triggered for the 3rd Shanghai workers’ armed uprising.

Modern Ports were not only the important carrier for domestic and international trading, main spatial place for social life, but also significant gateway for cultural communication and information dissemination. In the late 19th century, many missionaries and cultural envoys came to Shanghai by ship to conduct cultural diffusing and communicating. For example, Japanese had sneaked into Shanghai to inspect by cruises from the 1860s to the Sino-Japanese war of 1846-1845. Due to the different polities between leased territory and Chinese territory, the environment for cultural communication in Shanghai was relatively diverse, active and open. In the 20th century, many students went abroad to search for the national vision through Shanghai Harbor, such as Zhou Enlai, Xu Zhimo and Lin Fengmian. At that time, the entire Shanghai was the whole China’s port which connected to the world, i.e., United States, Germany, Britain, France and Soviet Union. Meanwhile, many world-famous cultural elites came to Shanghai by cruise to communicate. For example, Einstein arrived at Huishan Port and started to stop in Shanghai to spread his thoughts, and the series of stories about Jews’ were immigrated to Shanghai by cruise23.

In this way, Huangpu Port, Huishan Port and Shiliupu port were responsible for this mission. These facts illustrated the significance role of Shanghai acted in modern international cultural communication. So, Shanghai was called the Window of Communication for Chinese and Western Culture, connecting China with the world24.

Besides, some intangible folk art recorded activities happened in ordinary life as well as in official memory, such as the songs of port workers implied the spirit of teams and their feelings of life.

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Epilogue

These elements described above represent urban history and recall urban memory as well. As British historian pointed out that cultural heritages reflect and record history, which are not equal to history itself\textsuperscript{25}. The historical events or daily life events that happened at the port sites give reality, narrative and enchantment to urban files and cultural products. At the same time, the urban memory is constantly intercepted, recorded, rehearsed and played back in literature and art works by writers, artists and architects.

There is no doubt that the port heritages, as Shanghai’s memory in modern times, represent the city’s specific character, historical information and social identification. Given by the urban objects, places and events\textsuperscript{26}, the cultural value of Shanghai port heritage is far outweigh its material one. The port heritages have historic significance to modern Shanghai and play an irreplaceable part in urban identity. The modern ports in Shanghai play a key role in modern China. The paper provides an opportunity to reading this unique heritage.

However, a few questions should be studied further, such as how to evaluate and classify the value of the relevant object, place and events related to ports, how to represent historical information or immaterial relics in the present context of the waterfront, how to link these fragmented, historic place and objects together, and how to protect the authenticity of port heritage to merge these memory into the new need of the citizen.

Nevertheless, port heritage with unique material relics and immaterial information makes a great contribution to recalling the massive memory and making identity of the port city, which should be preserved definitely.

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