Fuzhou Shipyard at Fujian Province: Early Divergence in Late Qing Modernization

In the second half of the nineteenth century, Fujian, a treaty port region along the Chinese coast, was undoubtedly at the frontier in the confrontation with imperialism. Two of the five treaty ports under the Treaty of Nanjing were located within Fujian province. Although not as globally renowned as Shanghai, Fujian saw the arrival of imperialism in its full panoply of ironclads, missionary evangelization, and financial muscle. In addition, it was in Fujian that the dying Qing made its first attempt to respond to the impact of the West. In 1866, spearheaded by Zuo Zongtang, the Qing government established Fuzhou Shipyard at Fuzhou, the capital city of Fujian, which started the Self-Strengthening Movement (1866-1894). Since then, Fujian society experienced the kind of transformation that no one would have anticipated, certainly not the Qing authority. As the hub of intensive interaction between China and the West, Fujian is therefore a valuable site to observe the transformation that spread in China in the second half of the nineteenth century.

The transformation overtook China and eventually knocked it out of the dynastic cycles. For thousands of years, China was ruled by a succession of different dynasties, and not until the more powerful West appeared did China depart from the dynastic cycle pattern. Therefore, how China responded and absorbed Western impact preoccupied many scholars who see China's modernization as a result of the convergence of two sets of historical constructions. Externally, the sudden advent of Western imperialism posed both a threat and model to the "celestial empire". Internally, growing nationalism called for reform, and new capital and market system were taking shape.

Since Max Weber, it has become prevalent among Western scholarship to assume the picture of China passively responding to Western impact. Inherent in their assumption is that they deny the internal spontaneous progress in Chinese society. Many believe that some unique political and cultural factors obstructed the formation of capitalist society. They seek

these factors by comparing China's historical experience to a normative model, based on the West's experience, and saw any divergences from the model as a handicap. Max Weber, who ranked amongst the most influential, believed that China lacked what he called the Protestant Ethic and was trapped in the anti-mercantile ideology of Confucianism. In his influential work, *The Religion of China: Confucianism and Taoism,* Weber argued that the indispensable ethical qualities of the modern capitalist entrepreneur derived from the Protestant Ethic in Puritanism, and China not only lacked this seed of capitalist spirit but also harbored a belief system that was firmly against rational pursuit of personal gain.[1] Many studies like this constitute the rationality behind the picture of a passive China.

However, gradually scholars found that picture unsatisfactory because it obscures what really happened during the second half of the nineteenth century in China. Scholars like Weber distanced themselves from historical reality due to their Eurocentric perspective. For example, Weber never visited China and knew no Chinese, and his only sources of information about China were Western-language literature on China. Later scholars moved away from the Eurocentric cross-cultural analysis, and they started to give more credits to the internal force within Chinese society. Notably, in the 1970s Mark Elvin proposed the model of the High-level equilibrium trap. In this groundbreaking model, Elvin probed into what really happened inside Chinese textile industry, acknowledged the positive development in the society, and argued, "the usual criteria of 'backwardness' do not apply."[2] This new perspective offers us an alternative to the stereotypical description of Chinese society under Eurocentric analysis.

This new perspective is both very inspiring and yet very obscuring. It is very revealing and inspiring in the sense that it opens up an entirely unexplored new world for

[1] Max Weber, *The Religion of China: Confucianism and Taoism* (New York: Free Press, 1951), 226-249.
[2] Mark Elvin, "The high-level equilibrium trap: the cause of the decline of invention in the traditional Chinese textile industry," in *Economic Organization in Chinese Society*, ed. W. E. Willmott (Stanford: Stanford University Press, 1972), 169.

further investigation by scholars. The real socio-economic condition of Chinese society at the eve of its departure from dynastic cycle awaits exploration and how a lively Chinese society, instead of a passive one, interacted with Western impact becomes exciting topic for historians. Recent scholarship has already made progress along this new direction.[3] However, such new recognition of positive progress within Chinese society pose even more difficult questions. When many scholars question why China failed to escape the high-level equilibrium trap, culturally they still subscribe to the assumption that Confucianism is antagonistic to technical innovation and mercantile activity. Not to mention that whether Confucianism is inherently anti-mercantile and anti-technology is a topic in great dispute in philosophy, we must make a distinction between the ideal Confucian order and the actual social practice in Chinese society. For instance, In Tokugawa Japan, Osaka merchants even used neo-Confucianism to justify their profit-seeking activity and this Shingaku, argued by Robert Bellah, provided the foundation for Japan's industrialization.[4]

Politically, scholars blame the failure on the Qing government. Often people compare the Qing government with the Meiji regime of Japan. Ever since the Meiji Restoration of 1868, the Japanese modernization has been known as active social changes and progress. If the Qing also had positive internal development, how did its modernization ended in humiliating defeat in 1894? Answers to that question often point to incompetence on the part of the Qing government compared to the Meiji regime. However, the assumption beneath those answers that China was a nation-state just like Japan was is questionable. Now with

---

[3] In his *The Great Divergence,* Kenneth Pomeranz criticizes Euro-centralism writing that "we cannot understand pre-1800 global conjunctures in terms of a Europe-centered world system; we have, instead, a polycentric world with no dominant center." Kenneth Pomeranz, *The Great Divergence* (New Jersey: Princeton University Press, 2000), 4. In agreement with Pomeranz, R. Bin Wong in his *China Transformed* argues that similarities between China and Europe before 1800 were enormous and China was not as backwards as Eurocentric studies show. R Bin Wong, *China Transformed: Historical Change and the Limits of European Experience* (Ithaca: Cornell University Press, 1997). In his *Reorient: Global Economy in the Asian* Age, Andre Gunder Frank also argues for a shift of attention from Europe to Asian in 19th century and highlight the dominant role played by Asian economy in the international market. Andre Gunder Frank, *Reorient: Global Economy in the Asian Age* (California: University of California Press, 1998).

[4] Robert N. Bellah, *Tokugawa Religion: The Values of Pre-Industrial Japan* (Glencoe, IL: Free Press, 1957), 159-166.

recognition of positive social changes within Chinese society, China's identity as nation-state needs question and the level of centralization needs re-examination. Due to the sheer size of China, any social changes could compromise the level of centralization. Therefore, instead of superficially playing with cultural factors or nation-state assumption, we need to study how modernization really started given the background of positive social changes. Immediately, Fuzhou Shipyard's experience at Fujian provides a breakthrough point and suggests the complexity behind the stage.

Fuzhou provides special insight into the question of how late Qing modernization started given changing social conditions, because of the strong regionalism in late 19th century. During the second half of the nineteenth century, endemic peasant uprising, such as the White Lotus and Taiping Rebellion, ravaged the country. Especially, the central government survived the Taiping Rebellion by rallying military support of provincial gentries. Famous among these gentries were figures like Zeng Guofan and Li Hongzhang. This shift in power from Beijing to provincial level further weakened the central government. This observation of rising provincial power and even competition between the center and the region in late Qing is by no means novel among historians. A growing group of scholars have been giving increasingly more credit to the role played by regionalism in late Qing, and new theories of possible competition between the center and the region over various resources facilitated our understanding of that time period. At the same time, some caution against the model of strong regionalism in late Qing should be noteworthy. In "The Limits of Regional Power in the Late Qing Period: A Reappraisal", K. C. Liu discusses the regionalism defined by Franz Michael and cautiously discusses the limit of such regionalism in late Qing.[5]

[5] Franz Michael, "Regionalism in Nineteenth-Century China," introduction to Stanley Spector, *Li Hung-chang and the Huai Army: A Study in Nineteenth-Century Chinese Regionalism* (Seattle, University of Washington Press, 1964), xxi-xliii. In this essay Michael defines regionalism in late Qing as "the emergence in key areas of China of military and political power centers that assumed some of the important functions of the state but still remained within its framework." Throughout this discussion, Michael discusses various regional political leaders and focuses on regionalism in political arena.

Essentially, according to Liu's analysis, due to the design of the bureaucratic institution of Qing, the imperial power was little impaired by the regional trend and the state still survived upon its monopoly in appointment of key official positions in the province.[6] Indeed, state might still have tight control over its provincial governors, but non-compliance or token compliance with Beijing's directives was as likely owing to the provincial officials' inability to enforce them as to their unwillingness to carry them out. In a word, although Liu raised caution against the kind of regionalism that has an emphasis on growing autonomous power of provincial leaders, regionalism might well exist in the social and economic conditions. As a matter of fact, regionalism outside of political arena has a stronger role in the last decades of Qing. As observed by William Skinner,

> Fairly early in my research on Chinese cities it became clear that in late imperial times they formed not a single integrated urban system but several regional systems, each only tenuously connected with its neighbors. Each system of cities developed within a physiographic region. Regions differed from one another not only in resource endowment or potential, but also in the timing and nature of the development process.[7]

Although Skinner is talking about city studies on late Qing China, this observation applies to any study on that time period. The crucial point is that the lack of a single integrated urban system and the fragmentation into different physiographic regions render any holistic study on late Qing sterile. Therefore, in order to confront some of the unexamined assumptions and unveil previously overlooked internal structural changes, the very representation of the late

[6] K. C. Liu, "The Limits of Regional Power in the Late Qing Period: A Reappraisal" in *The Tsing Hua Journal of Chinese Studies*, New Series 10.2, (Beijing, Tsing Hua University, July 1974), 176-223.
[7] G. William Skinner, "Regional Urbanization in Nineteenth-Century China," in *The City in Late Imperial China*, ed. G. William Skinner (Stanford: Stanford University Press, 1977), 211.

Qing as a strongly centralized state has come under serious reconsideration, and the re-interpretation of Qing's modernization with reorientation from center to periphery and with particular attention to the early divergences within the nation itself has the potential to yield new findings.[8]

The purpose of this current research is a new attempt to examine the kind of social change China had gone through in the second half of the 19th century, by focusing on the interaction between Fuzhou Shipyard and Fujian society. Fuzhou Shipyard, as the first genuine attempt to study from the West, became the best laboratory for Chinese tradition to react with Western impact. As a national program, it was the best example to re-examine the validity of nation-state identity of late Qing. Fuzhou Shipyard's experience at Fujian suggests the complexity previously overlooked behind the social change, and the comparison between China and Japan at this period seems not to be valid anymore. In contrast to the picture of institutional and cultural ossification, the shipyard's experience demonstrates that the late Qing's economic institution, social system and the elites who ran them showed much flexibility and genuine will for change. Such fast development brought significant changes unexpected by Beijing and soon went off the track planned by the Qing court.

Fuzhou Shipyard was established upon the suggestion of the governor-general of Fujian, Zuo Zongtang in 1866. It was representative of the series of self-salvation efforts Qing government made after the defeats in both Opium War of 1842 and Arrow War of 1860.

[8] Several important studies have already appeared and redirected our attention to the complexity of the story in the periphery. William T. Rowe, in his influential book, *Hankow: Commerce and Society in a Chinese City 1796-1889* (Stanford: Stanford University Press 1984), focuses on the development of regional autonomy in the late Qing by deeply studying the city of Hankow. From the perspective of urbanization study, Rowe once again refutes Weberian observation of a passive stagnant Chinese society. More importantly, his insights deep into Hankow society reveals that the city's position was already somewhat closer to the pole of autonomy, and although not in legalistic term, Hankow's local merchant institution grew into a quasi-government. His findings in Hankow has great implication for the study of provincial autonomy in the late Qing, which proves that narrow focus on just one city can yield findings much greater than it seems would do. With similar approach, Charlton M Lewis draws our attention to the role played by Hunan province on China's road to revolution in 1911 in his *Prologue to the Chinese Revolution: The Transformation of Ideas and Institutions in Hunan Province, 1891-1907* (Cambridge: Harvard University Press, 1976). In order to study the transformation of ideas and institutions in Hunan, Lewis discusses several local secret organizations and influential social groups, and their response to imperialism. A broader purpose of this book is that Lewis tries to show how revolutionary trend in Hunan influenced the national revolution.

Its mandate was to build modern navy and train modern naval officers for the Qing Empire. Along with Kiangnan Arsenal, Fuzhou Shipyard represented the earliest industrialization effort under Qing dynasty. At that time, many programs we now know, such as Kuan-tu Shang-pan or Kuan-shang Ho-pan, had yet to be created by Qing. Without any precedent, Zuo Zongtang started the design of this entire project with the help of two foreign advisors, Paul-Alexander Neveue d'Aiguebelle and Prosper Giquel.[9] From its establishment in 1866 to its shutdown in 1907, it had always been a purely state-funded project. Although after the Sino-Japanese War in 1894 there were serious efforts to bring in private investors, these attempts ended fruitlessly. In the official report to the throne, the imperial commissioner concluded that Fuzhou Shipyard, as a military arsenal, was "too large in scale for any Chinese merchant, and also too sensitive for recruiting foreign investors."[10]

The first previously overlooked internal mechanics my research will reveal is the shipyard's growing reliance on local economy. Indeed, as many studies have already showed, unlike later Kuan-tu Shang-pan projects, Fuzhou Shipyard never tapped into local private capital and it was a national project that happened to be located in Fujian province and had remained aloof from local economy ever since. However, a closer look into the initial design of this project surprisingly reveals that it was its state funding policy tied the shipyard's fate to local economy. Additionally, as the financial situation in the shipyard gradually became worse, it was the local market that it turned to for help. Later in the first section of close study, I will focus on the connection between Fuzhou Shipyard and the local economy of Fujian province.

The other unexamined assumption I will treat in detail is the conventional representation of Fuzhou Shipyard as a much-welcomed savior of the country. Despite its pitiful shutdown at the end, Fuzhou Shipyard still enjoyed good reputation among later

[9] Shen Yan and Fang Baochuan, ed., *Chuan zheng zou yi quan bian* (*Fuzhou Shipyard's Memorials Compilation*) (Beijing: National Library of China Publishing House, 2011), Vol. 1, 18.
[10] *Chuan zheng zou yi quan bian,* Vol. 4, 371.

generations as the landmark of advanced technology and the moment of patriotic awakening. In addition, considering the widespread patriotism associated with that time period, we have generally taken for granted that industrialization projects like Fuzhou Shipyard should surely appeal to the popular feeling of anti-imperialism at that time. On the national level, undoubtedly Chinese people should largely feel proud of having a modern shipyard and modern navy. In its locality, however, Fuzhou Shipyard received much more mixed attitudes from Fujian people at its time. It was not that Fujian people were inherently more conservative compared to the rest of the country. Instead, compared to people in other provinces, Fujian people now had a military shipyard located in front of their doorstep interfering in their everyday life. Therefore, the perception of Fuzhou Shipyard is a much richer story if we closely examine its influence in its locality. Later in the second section, I will probe deeper into Fujian society and try to reconstruct the picture of Fujian people's life since the presence of Fuzhou Shipyard.

The primary sources included this study fall into roughly three categories. First of all, official documents of Fuzhou Shipyard and Fujian industrialization help to tell the story in institution level. Sources like *Chuan zheng zou yi quan bian* (船政奏议全编) and *Hai fang dang* Vol. 2 (海防档乙) are the main archives for Fuzhou Shipyard. Then, sources like *Yang wu yun dong* (洋务运动) and *Zhongguo jin dai gong ye shi zi liao* (中国近代工业史资料) provide the big picture of Self-Strengthening Movement and industrialization in Fujian. Secondly, in order to study social changes, this study also includes sources about local society of Fujian. For example, *Fuzhou wen shi zi liao xuan ji* (福州文史资料选辑) and *Fuzhou mawei gang tu zhi* (福州马尾港图志) have documents of personal diaries and letters. Last but not the least, in order to add diversity to primary sources, this research also incorporates perspectives of foreign observers at that time. *Social Life of the Chinese*, by missionary Justus Doolittle who spent thirteen years in Fuzhou, gives the best account of

Fuzhou society. Henry Noel Shore, a French naval officer, visited Fuzhou Shipyard and his personal diary looked the shipyard from a Western point of view. In addition to these three categories, various other important sources are also included, such as the personal documents of Shen Baozhen, official documents at Fuzhou custom, and *Shen Bao* (申报).

Close Study I: The Shipyard and Local Economy

This section studies from institutional perspective and relies on sources such as *Chuan zheng zou yi quan bian* (船政奏议全编), *Hai fang dang* Vol. 2 (海防档乙), and *Yang wu yun dong* (洋务运动). Data on local economy come from *Zhongguo jin dai gong ye shi zi liao* (中国近代工业史资料) and *Fuzhou hai guan zhi 1861-1989* (福州海关志 1861-1989).

It is true that Fuzhou Shipyard is a purely state-funded project that happened to be located at Fuzhou, but it does not mean that the central government set aside part of its budget for the funding of the shipyard. Interestingly, almost all of its funds in its 42-year operation came from Fujian province, especially Fuzhou custom. In his first memorial to emperor Tongzhi, Zuo Zongtang proposed that the initial start-up funds should be roughly four hundred thousand tales of silver and later monthly budget should range from forty to fifty thousand tales of silver.[11] In this proposal, Zuo suggested that both the start-up fund and monthly funds should come from tariff collected at Fuzhou custom. According to the state taxation policy at that time, each year 40% of the tariff collected at Fuzhou custom should be transferred to Hu Bu, a central department in charge of national treasury, and the rest 60% remained within Fujian government.[12] In the edict back from the emperor, the central authority agreed to fund the initial start-up budget of four hundred thousand tales of silver with the 40% of the tariff from Fuzhou custom, and then commanded Fujian government to

11 *Chuan zheng zou yi quan bian,* Vol.1, 11.

12 Shen Baozhen, *Shen wensu gong zheng shu (Official Documents of Shen Baozhen)* (Wushishan ci, 1892), Vol. 5, 73-74.

fund the shipyard's monthly budget of fifty thousand tales with the 60% percent of the tariff by declaring: "given current deficit in national treasury, the 40% tariff at Fuzhou custom must be transferred to Hu Bu each year. Should the 60% tariff at Fuzhou custom come short to fund the shipyard, Fujian government should allocate other local taxes to cover."[13]

The brief summary above encapsulates the initial plan for the funding of Fuzhou Shipyard, which was the real meaning of "state-funded project" in this case. Before we continue our analysis, we need to highlight three crucial points in this summary. First of all, although the central government agreed to pay for the cost of initial establishment, it firmly refused any further responsibility for the shipyard's monthly expenditure. Therefore, the financial situation of the shipyard was seamlessly tied to local tax revenue. Secondly, not the entire 60% tariff at Fuzhou custom was devoted to the shipyard, and instead, Fuzhou Shipyard was merely one of the many projects funded by this source. Consequently, Fuzhou Shipyard would need to compete for its funds when 60% tariff fell short to cover all of its responsibilities. Last but not the least, the monthly budget of the shipyard was a fixed amount of fifty thousand tales according to this plan and had no consideration of variation, something a modern factory would very likely encounter.

If only this plan had worked perfectly, then Fuzhou Shipyard would function simply as a state arsenal, and then there would not have been complex connection between the shipyard and local economy at all. When Zuo Zongtang convinced the state with his confidence, he predicted, "In the first two years, the shipyard probably will cost more and build fewer ships. However, with increasingly more experience, the shipyard will be more efficient and be able to produce more ships with less cost. Therefore, in the next five years the total cost will be less than three million tales."[14] Clearly, in Zuo's vision, the proposed

---

13 *Chuan zheng zou yi quan bian,* Vol.1, 21.

14 Chen Yuanhui, ed., *Zhongguo jin dai jiao yu shi zi liao hui bian (Archives for Education History of Early-modern China)* (Shanghai: Shanghai Education Press, 2007), Vol. 3, 293.

funding of fifty thousand tales each month should be more than enough for the shipyard because the cost should drop after the first two years, so the total budget of three million tales for five years should have left enough buffer zone for the actual expenditure to vary. However, in retrospect, we already know that the financial history of Fuzhou Shipyard had always been full of troubles and Fujian government constantly had difficulties providing the shipyard with fifty thousand tales each month. According to our interpretation of the initial funding plan above, two loopholes existed in this plan. First of all, Fuzhou Shipyard had to compete with our various projects for funding from the 60% tariff at Fuzhou custom, so the local government could arbitrarily assign priority on some of the projects and cut funding on the other. In addition to subjective cut on its funding, Fuzhou Shipyard's financial situation was also directly determined by the total amount of tariff collected by Fuzhou custom and thus indirectly linked to the import and export market of local economy.

In early days when income at Fuzhou custom was still around its peak, Fuzhou Shipyard already started to encounter arbitrary funding cut by Fujian government. In the second half of the nineteenth century, the overall financial condition for Qing government was in trouble. The growing expenditure, during Taiping Rebellion and the reconstruction after that, rose out of proportion to agrarian revenues. The so-called *xiekuan*, transferring funds from provinces that had budget surplus to provinces with deficit, happened increasingly more often. With this background, Fuzhou Shipyard faced fierce competition for its share of funds from the 60% tariff at Fuzhou custom. According to the table compiled by Lin Qingyuan, from November 1866 to June 1874, Fuzhou Shipyard enjoyed the best days of its financial history. In these 94 months, the shipyard received a total of 4.7 million tales of silver, exactly 50 thousand tales per month. However, the situation changed abruptly and substantially between July 1874 and December 1875. During these 18 months, in average the

shipyard only receive less than 40 thousand tales each month.[15] Since then, the financial situation at the shipyard had only gradually got worse.

Behind these numbers, complicated picture of interaction between the shipyard and Fujian government explains how the shipyard lost its funding during the competition. Known for its affluent tax revenue from tea trade and tariff from Fuzhou custom, Fujian was often required for *xiekuan* by the national treasury, so the 60% tariff at Fuzhou custom was under heavy demanded. In 1877, Qing court demanded more tax revenue from many provinces for the construction of the mausoleum of Tongzhi emperor, and with no exception Fujian had to contribute to it. In the same year, two new projects entered the coverage of the 60% tariff at Fuzhou custom, both of which were labeled as first priority by Hu Bu. With such sudden rise in competition, Shen Baozhen complained to the throne that because Fujian government had to cover more urgent needs first, Fuzhou Shipyard had failed to receive any funding from the 60%, and the deficit of the 60% at Fuzhou Custom was already 620 thousand taels.[16] In his memorial to the throne, the governor-general of Fuzhou, Wen Yu explained that demand on the 60% tariff at Fuzhou custom had now surpassed the total amount available, and if were to cover Fuzhou Shipyard, then funding for other projects would fall short.[17] Because now Fuzhou custom faced a total demand that exceeded its total income, Fujian government had to cut funding for certain projects. With other competing projects rated more important, Fuzhou Shipyard failed to secure its 50 thousand tales each month. In fact, the 60% tariff at Fuzhou custom was so overwhelmed in 1877 that even though in 1875 the central authority already agreed that Fujian government only needed to pay the Shipyard 30 thousand tales with the 60% tariff at Fuzhou custom, and the 40% tariff at Fuzhou custom would cover the

---

15 Lin Qingyuan, *Fujian chuan zheng ju shi gao (History of Fuzhou Shipyard)* (Fujian: Fujian People's Press, 1986), 216. A table compiled from the *Chuan zheng zou yi quan bian*

16 Shen Baozhen, *Shen wensu gong zheng shu,* Vol. 5, 72-74.

17 Zhongguo shi xue hui (China Historical Research Association), *Yang wu yun dong (Self-Strengthening Movement)* (Shanghai: Shanghai People's Press, 1961), Vol. 5, 197.

rest 20 thousand tales, Fuzhou custom still could not pay in full amount.[18] That is why in the table between 1876 and 1882, the 40% tariff paid the full amount of 20 thousand tales per month but the shipyard still only receive around 35 thousand each month. Besides mid 1970s, throughout its existence Fuzhou Shipyard had to fight for funding with other local expenditures and constantly appealed to both central government and Fujian government. In other words, although Fuzhou Shipyard was created as a state arsenal, it survived as an integrated part of Fujian government.

In addition to the ways of dividing the cake, the total size of the cake also determined the financial condition of Fuzhou Shipyard. The other factor to be examined is the financial situation of Fuzhou custom. According to the official records of Fuzhou custom, from 1862 to 1888, the tariff collected rose dramatically from roughly 1.45 million to 2.26 million tales of silver. However, after its peak at 1888, the amount of tariff started to drop and by the time of 1907 the total tariff was only 914 thousand tales. Especially, after 1895 the numbers started to drop very quickly.[19] This pattern of tariff variation correlated pretty well with financial history of the shipyard in the long term. In the short term, the various ways of dividing the tariff put some fluctuation into the amount the shipyard receive every month, but in the long run, the dwindling amount of funds for the shipyard reflected the deterioration of local economy.

What these numbers above speak of was actually the tea export industry of Fujian province. Since early Qing, Fujian province had been famous for the quality of its tea produced on the nearby Mountain Wuyi. Thus tea trade and export was a major source of income for Fujian government. Between 1842 and 1853, although Fuzhou and Amoy were opened as treaty ports, tea trade was under monopoly by Chinese merchants according to the

---

18 *Yang wu yun dong*, Vol. 5, 185.

19 Zhonghua ren min gong he guo Fuzhou hai guan (People's Republic of China Fuzhou Custom), *Fuzhou hai guan zhi (Official Records of Fuzhou Custom)* (Xiamen: Lujiang Press, 1991), 304-307.

law and all foreign merchants could only import tea from Canton. Therefore, all tea from Fujian had to be shipped to Canton by Chinese merchants through inland water transportation. In 1853, due to the turbulence caused by Taiping Rebellion and the opening of tea trade to foreign merchants at Fuzhou, both Chinese merchants and foreign merchants shifted transportation from inland water system to the sea. "Since the opening of tea trade at Fuzhou, tea trade at Fuzhou multiplied. Tea from other provinces was also transported to Fuzhou port to be shipped to all over the world via sea. Thus, transportation cost decreased dramatically and tea trade at Fuzhou became much more attractive to merchants."[20] Justus Doolittle, missionary at Fuzhou, witnessed this great change and wrote that, "in 1853, Fuzhou came suddenly into importance as a market for black tea, mainly through the enterprise of Messer. Russell and Co., an American firm. In that year fourteen foreign vessels arrived at Fuzhou, and in 1856 on hundred and forty-eight vessels."[21] Unlike Shanghai and Canton, Fuzhou furnishes no silk for exportation.[22] In the memoir of one Fuzhou merchants, he wrote that, "Fuzhou did not produce silk locally so silk merchants had to purchase silk from other provinces."[23] Therefore, tea export was the major pillar for local economy.

Naturally, manufacturers were keen to cash in on the burgeoning demand. Russians were the first to join this market. In 1872, Russian merchants moved their brick tea factories from Hankow to Fuzhou, and by 1876, Fuzhou had in total of ten Russian brick tea factories.[24] Previously in Hankow, they had to use inland water transportation to ship brick tea from Hankow to Shanghai, then transported it to Tianjin via sea, and at last transport to Siberia by land. Now with new factories in Fuzhou, they not only were closer to tea

---

20 Lin, Qingyuan, ed., *Fujian jin dai jing ji shi (Early-modern Economic History of Fujian)* (Fujian: Fujian Education Press, 2001), 200.

21 Justus Doolittle, *Social Life of the Chinese: Daily Life in China* (London: Kegan Paul, 2002), 3.

22 Doolittle, *Social Life of the Chinese: Daily Life in China,* 3.

23 Zhongguo ren min zheng zhi xie shang hui yi Fujian sheng Fuzhou shi wei yuan hui wen shi zi liao gong zuo zu (The Chinese People's Political Consultative Conference Fuzhou Historical Archives Committee), *Fuzhou wen shi zi liao xuan ji (Historical Documents Collections of Fuzhou)*, Vol. 4, 85.

24 Sun Yutang and Wang Jinyu, ed., *Zhongguo jin dai gong ye shi zi liao (Historical Records of China's Early-modern Industrialization)* (Beijing: Science Press, 1957), Vol. 1, 58-61.

production on Mountain Wuyi but also cut expense on transportation by direct ocean shipping from Fuzhou to Tianjin.[25] Local Chinese merchants, especially compradors, were also early players in this market. In 1874, a Chinese comprador found a brick tea factory in Fuzhou, called Yuexinglong. This was the first modern Chinese enterprise in Fujian and was among the earliest in the entire country.[26] Shortly after, in 1875 two new Chinese brick tea factories were established at other counties in Fujian.[27] Obviously, its treaty ports identity and famous tea resource stimulated the early establishment of modern brick tea factories at Fujian.

However, the period of prosperity did not last long. From the very start, Chinese brick tea factories were at disadvantage compared to their Russia competitors. According to documents, in 1875, the total production in Chinese tea factories was less than half of the production of Russian factories.[28] Among three of the Chinese brick tea factories, two went out of business in 1876 and the other one relocated.[29] Not just Chinese factories, the overall tea export industry at Fujian was in decline. In 1880s, black tea production in India and Japan started to rival that of Fujian. Intense international competition forced the price of black tea to drop, and heavy taxation on tea trade in Fujian made the situation even worse.[30] With much lower profits, tea trade in Fujian started to lose its attractiveness among merchants and thus fell into decline. According to the documentation of Fuzhou custom, the volume of tea export peaked in 1880 and started to drop very fast, and in 1894 the volume was only half of the volume of 1880.[31] Comparing Fujian with places like India and Sri Lanka, the documentation indicates that in 1886 black tea exports at Fuzhou was much more than the

---

25 Lin Xing, *Fujian cheng shi xian dai hua yan jiu: cheng shi fa zhan yu she hui bian qian 1843-1949 (Fujian Urbanization Study: City Development and Social Change 1843-1949)* (Tianjin: Tianjin Ancient Documents Press, 2009), 72.

26 *Zhong guo jin dai gong ye shi zi liao,* Vol.1, 58-59.

27 Ibid.

28 Ibid.

29 Ibid., 60.

30 *Fujian jin dai jing ji shi,* 201.

31 *Fujian cheng shi xian dai hua yan jiu,* 46.

sum of those at India and Sri Lanka, in 1888 Fuzhou and India were at the same level, and in 1889, Fuzhou was far behind India.[32] The almost perfect correlation between tea trade volume at Fujian and the tariff amount at Fuzhou custom demonstrate how local Fujian economy deteriorated along with the decline of its tea exports industry. With heavy reliance on local economy, Fuzhou Shipyard also suffered with local tea exports.

The impact of Fujian economy on the shipyard was enhanced by the fact that Fuzhou Shipyard could not receive help from outside. Throughout its troubled times, Fuzhou Shipyard, as a state-funded project, always first turned to central government for help, hoping that central authority could pressure Fujian government or transfer *xiekuan* from other provinces. Most of the time, central government only responded by pressuring Fujian government to support Fuzhou Shipyard with local tax revenue besides tariff from Fuzhou custom. Central government's solution to the fund shortage caused by high maintenance at Fuzhou Shipyard was a very typical example. For every ship it built, Fuzhou Shipyard had to spend money on its maintenance until it was transferred to somewhere else. By 1970s, with many ships left unassigned, Fuzhou Shipyard had to spend a significant part of its monthly fifty-thousand-tale budget on maintenance. In 1874, in order to cover maintenance cost separately, central government instructed Fujian government to cover it with local tax revenue from foreign medicine. However, shortly local tax revenue from foreign medicine failed to pay Fuzhou Shipyard in full amount. In 1876, the imperial commissioner at the shipyard reported to central government severe shortage in maintenance funding. In the memorial, it writes that Fujian government only paid the Shipyard 126 thousand tales, much less than the need of 230 thousand tales, and the shipyard had to slow down construction process and transfer part of its budget to cover maintenance.[33] In the same memorial, the

---

32 *Fujian jin dai jing ji shi*, 201. A table Lin Qingyuan compiled from *Commercial Report at Fuzhou Custom of 1889*.

33 *Yang wu yun dong*, Vol. 5, 185.

imperial commissioner further explained that Fujian suffered great loss from a flood this year and thus had much less tax revenue. In the reply from central government, it only pressured Fujian government to give priority to Fuzhou Shipyard and had no mention of any *xiekuan* from other provinces.[34] In fact, the only *xiekuan* Fuzhou Shipyard ever received was from Gansu province in 1873. In 1873, Zuo Zongtang, then as governor-general of Gansu province, sent a memorial to the throne, suggesting that Fuzhou Shipyard was much more important than the anti-rebellion campaign at Xinjiang so he would like to transfer part of his campaign funds to the shipyard.[35] This case of help from outside Fujian was exceptional, because Zuo Zongtang was the founder and chief designer of Fuzhou Shipyard. To sum up, far from being a state-funded project, Fuzhou Shipyard only had Fujian economy behind itself and essentially remained a local project. Fuzhou Shipyard's identity as a national industrialization project became questionable given its inability to reach for help outside Fujian.

Consequently, having nowhere else to turn to, Fuzhou Shipyard made several attempts to join local Fujian markets looking for a complement to unstable state funds. The first experiment was to produce cargo vessels for lease or sale to private shipping companies. Water transport of grain each year was the core of the national tax system and was a very large shipment business for both water and land transportation. This annual transport of grain was mostly carried by thousands of small junk boats via inland water system. As early as in his first proposal to the throne, Zuo Zongtang briefly sketched his business plan, suggesting, "ships built at the shipyard could be leased to merchants and other state department for the shipment of grains."[36] In this plan, Zuo was trying to make shipyard as efficient as possible, deploying these ships as warships during conflicts and leasing them to shipping business in peacetime. Later in 1871, when grand secretary Song Jin criticized the ships from the

---

34 Ibid., 196.

35 *Fuzhou wen shi zi liao xuan ji,* Vol. 19, 36.

36 *Chuan zheng zou yi quan bian,* Vol. 1, 11.

shipyard for being useless and asked to call it off, he also proposed to lease ships that had already been built to private business.[37] Now with many people like Song Jin criticizing ships from the shipyard for being useless toys at the dock, officials in the shipyard started to seriously consider the options of lease and sale. Responding to Song Jin's attack, Shen Baozhen, the imperial commissioner at Fuzhou Shipyard, explained that the warships built in the shipyard had limited cargo space and could not function as cargo vessels, and leasing warships to private business "would not be beneficial to merchants even if the shipyard do not charge them rentals."[38] Then he further suggests that in order to generate some income, the shipyard could open a separate production line to produce cargo vessels. In the same memorial, Shen strongly supported the introduction of steam ships into the transport of grain, arguing, "in the shipment of grain from Shanghai to Tianjin last year, junk boats used several months to finish, but it only took steam ships a few days."[39] Therefore, in 1872, Fuzhou Shipyard and other powerful leaders of Self-Strengthening Movement started to carry out this plan.

In 1872, Li Hongzhang, one of the most powerful sponsors of Self-Strengthening Movement, submitted a very detailed business plan for Fuzhou Shipyard to the throne. In this plan, following Shen's vision of two separate production lines, Li had two different suggestions for warships and cargo vessels. In terms of warships, Li suggested that all warships built at the shipyard should be assigned to different fleets, these fleets should pay for construction and maintenance themselves, and in addition central government should forbid all departments and fleets to order ships from foreign shipyards and command them to order ships only from Fuzhou Shipyard.[40] As for lease and sale of cargo vessels to merchants, Li anticipated much more complexity. According to Li's analysis, Chinese merchants did not

---

37 *Yang wu yun dong,* Vol. 5, 106.
38 Ibid., 115.
39 Ibid.
40 Ibid., 122-123.

have the capital to establish a shipping business with modern steam ships, and additionally now foreign shipping companies had occupied the majority of shipping market and Chinese fledgling shipping companies had no chance to withstand such competition. Therefore, Li proposed that the in order to compete with foreign shipping companies there must be leaderships for Chinese merchants, who must be expert in shipping business and trusted by Chinese merchants, and these Chinese shipping companies should be granted access to the national transport of grain.[41] With this detailed proposal, in 1873 Li sponsored the founding of Chinese Merchants Steamship Navigation Company, one of the earliest Kuan-tu shang-pan projects.

Clearly, the need for Fuzhou Shipyard to participate in the market catalyzed the formation of Chinese Merchants Steamship Navigation Company. According to Li's design, this new project should function as the leadership for Chinese merchants, and more importantly as the intermediary between Fuzhou Shipyard and private shipping business, introducing cargo vessels built at the shipyard into the market. By 1875, Li reported that Chinese Merchants Steamship Navigation Company had been expanding its market share, and now had a total of 8 steamships including the ones transferred from Fuzhou Shipyard.[42] Thus through Chinese Merchants Steamship Navigation Company, Fuzhou Shipyard started to become an active part of shipping business. In other words, Fuzhou Shipyard no longer remained an exclusive military arsenal that only passively received impact from market, but instead, strove for its share of market in the fledgling steamship shipping business like a normal shipyard.

However, despite the promising start, the collaboration between Fuzhou Shipyard and Chinese Merchants Steamship Navigation Company failed to be an effective solution to financial struggle at the Shipyard. Since the shipyard's formal entrance into the market in

[41] Ibid., 123.
[42] Ibid., Vol. 6, 8.

1873, realities had been constantly frustrating to its original plan. First of all, Li originally envisioned that Chinese Merchants Steamship Navigation Company should take over the national transport of grain, so cargo vessels at the shipyard could have a guaranteed demand. This vision was soon proved to be just wishful thinking. Secondly, when Shen Baozhen proposed a separate production line for cargo vessels, he was aiming at the demand for steamships by Chinese private shipping companies. This ambition was also soon cast down by intensive competition from foreign shipyards. Last but not the least, the separation of two production lines within the Shipyard turned out to be ambiguous and caused much confusion during the production process.

As we mentioned above, in his proposal, Li Hongzhang suggested that Chinese shipping companies should have access to the transport of grain. Li stressed the point that, "those Chinese shipping companies who rented ships from Fuzhou Shipyard should have permission to transport grain for the government. Only in this way could they have guaranteed market share and not be ousted by strong foreign competitors."[43] However, in 1873, steamships under Chinese Merchants Steamship Navigation Company only shipped two hundred thousand *dan* of grain, which was negligible compared to the total amount of more than one million *dan* of grain.[44] Obviously, in this competition between advanced steamships and backward junk boats, the former failed to win a fair share in the market. To answer this puzzling outcome, Nanyang Trading Minister Li Zongxi wrote to the throne that, "Currently ocean shipping with steamships was only limited to Jiangsu and Zhejiang provinces, and junk boat shipping was still operating. Junk boat shipping business was connected to the stability of Shanghai market, so we should not suddenly replace junk boats

43 Ibid., Vol. 5, 123.

44 Zhong yang yan jiu yuan jin dai shi yan jiu suo (Central Institute of Early Modern China Studies), *Hai fang dang (Coastal Defense Archive)* (Taipei: Central Institute of Early Modern China Studies), Vol. 2, 496.

with steamships."[45] According to Li's observation, the steamship's failure to crowd out old junk boats was an institutional issue, instead of a commercial one. The national transport of grain had been a time-honored system for China, so junk boat's shipping business had long been entangled with the private interests of many powerful figures.

The shipyard encounter similar institutional obstacle, when Zuo Zongtang proposed to deploy steamers to ship salt in Huainan area. The shipping and distribution of salt had always been a government monopoly in China, and junk boats carried out the shipping and selected merchant agents around the country handled the sale. In one letter to a famous merchant, Zuo discussed the idea of replacing junks with steamers in salt shipping. Zuo had this ideal vision that shipping with more efficient steamers could not only lower salt price for people but also be beneficial to all salt *yamen*.[46] However, soon Zuo found this plan almost impossible to carry out. In his report to *Zongli Yamen,* Zuo explained that many officials of southern China were not very supportive to this plan, and among the many merchant agents attitudes towards this plan were also quite mixed.[47] Therefore, major obstacle to the introduction of modern steamers into government shipping business was not technological problem, but institutional ones in current bureaucracy and market system.

In Fujian local shipping market, situation was the also grim for steamships. In Fujian timber trade was very large in volume, so the shipment of large number logs was everyday scene on Min River. In 1975, when a British naval officer, named Henry Shore, first visited Fuzhou, he jotted down what he saw on Min River. In his diary, Shore witnessed hundreds of junks carrying a large number of logs, and he also wrote that, "a great deal of carrying was at one time done by steamers, but this ruined so many junk owners and throw so many people out of employment that now, so I am given to understand, the Chinese timber merchants have

---

[45] Ibid.

[46] *Yang wu yun dong,* Vol. 5, 457.

[47] Ibid., 460.

agreed to ship in junks only."[48] Based on Shore's observation, local market at Fuzhou reflected the overall situation for steamship as discussed by Li Zongxi. Despite the high efficiency of steamships, the technological advantage at Fuzhou Shipyard still could not triumph over the inertia with the traditional market structure. With such a small market share in the transport of grain, Chinese Merchants Steamship Navigation Company failed to provide demand for ships built at the shipyard.

Besides the institutional cause for the small market share, the other major factor was overwhelming competition from foreign shipyards. As we mentioned above, Li Hongzhang reported that in 1875, Chinese Merchants Steamship Navigation Company had a total of 8 ships. However, document indicates that among the 8 steamers only 3 were products from Fuzhou Shipyard.[49] In 1873, when the company needed three more steamers, it only took in two from the Shipyard, and for the third one it chose to order from a British shipyard in England.[50] The major factor that discouraged Li Hongzhang from signing for more ships from the shipyard was the high cost of production. According to Li's report to the throne, due to inefficiency in the shipyard, ships produced at the shipyard were more expensive than ships produced abroad. When the company needed to purchase insurance for ships it had acquired from the shipyard, these foreign insurance companies estimated the price based on Western standard, so the insured amount fell short to cover the actual cost of the ships.[51] Li also pointed out that, in order to compete with foreign shipping companies, Chinese merchants had to purchase ships from abroad because they were cheaper and of higher quality compared to the ones built by the shipyard. Zheng Guanying, a famous scholar of late Qing, explains that the Shipyard had to import most of the materials it needed and even if the

---

48 Henry Shore, *The Flight of the Lapwing: A Naval Officer's Jottings in China, Formosa and Japan* (London: Longmans, Green and co., 1881), 90.
49 *Hai fang dang*, Vol. 2, 502.
50 Ibid., 486.
51 Ibid.

foreign merchants did not try to profiteer from this, the shipping coast had already been a heavy burden, not to mention the racketeers in the business, so it was not surprise that the cost of production was much higher in the shipyard.[52] Therefore, higher efficiency at foreign shipyards posed a threat to the shipyard, and the loss of autonomous tariff policy under unequal treaties only made the situation worse. Without any protect from tariff policy, the fledgling shipyard was exposed to full power competition from more advanced Western shipyards.

As a student of Western shipbuilding technology, Fuzhou Shipyard was very likely to be less advanced and less efficient compared to its Western counterparts. However, the major cause of its inefficiency and worse quality was the ambiguity in its two production lines, warships and cargo vessels. As we mentioned above, when Zuo Zongtang first proposed the design of Fuzhou Shipyard, he envisioned all ships built at the shipyard to be cargo vessels during peacetime and warships during conflicts. Although later Shen Baoshen disapproved the validity of such an ambiguous plan and emphasized the unbridgeable differences between warships and cargo vessels, ship design in the shipyard nonetheless considered both functions in each single ship production. In a report to *Zongli yamen,* Zuo Zongtang even praised the merits of cargo vessels with a warship design. In this report, it writes that the shipyard often needed to lease ships to shipping companies, so it tried to design ships that could function both as warships and as cargo vessels. According to Zuo, Fuzhou Shipyard's hybrid design made its cargo vessels stronger and safer compared to Western cargo ships.[53]

In 1874, Shen Bao, a major newspaper at Shanghai, commented on cargo ships built by Fuzhou Shipyard, saying that the ships were sturdy but not fuel-efficient and had very

---

[52] Zheng Guanying, *Sheng shi wei yan (Warnings for Prosperous Times)* Vol. 8, quoted in Lin Qingyuan, *Fujian chuan zheng ju shi gao,* 114.
[53] *Yang wu yun dong,* Vol. 5, 460.

limited cargo space.[54] A closer look into the case of cargo vessel Kangji will reveal that such shortcomings, like bad fuel-efficient and small cargo space, were caused by the ambiguity in ship design, instead of immature technology. In 1880, Chinese Merchants Steamship Navigation Company signed for another cargo vessels from the shipyard, named Kangji. Just after they took in this ship, Li Hongzhang saw several problems in this cargo vessel. In his memorial to the throne, Li pointed out that Kangji had a warship design instead of cargo ship. First of all, Kangji did not have a flat bottom like usual cargo vessels did, which helped the ship to move fast but rendered its cargo space very small. Additionally, Kangji had a design of narrow deck and elongated body, typical in warships, so the space for passenger was also quite limited. Therefore, in this memorial Li asked the shipyard to fix these problems.[55]

Such ambiguity in design not only undermined the quality of cargo vessels, but also compromised the effectiveness of the warships built at the shipyard. In 1885, one year after the crushing defeat in Sino-French War, in his memorial to the throne, Pei Mengsen, imperial commissioner at the shipyard, criticized that ship designs in the past decades had always been ambiguous in their functions. Among the many ships built by the shipyard, only Yangwu could qualify as a warship and others qualified neither as warship nor as cargo vessels. This ambiguous design philosophy at the shipyard proved to be disastrous for Fujian fleet in 1884 Sino-French War. Therefore, Pei argued that since the mandate of Fuzhou Shipyard was to build a modern navy for the empire, the shipyard would no longer engage in cargo vessel production.[56] Although after Pei, his successors attempted some buildings of cargo ships to solve growing budget deficit, the shipyard's large-scale formal participation in shipping business ended in Pei's tenure.

---

54 *Shen Bao* (Shanghai, 1872-1949), September 17, 1974.
55 *Hai fang dang*, Vol. 2, 851.
56 *Yang wu yun dong*, Vol. 5, 319.

Before we continue into Close Study II, in the analysis above, some important patterns have already emerged. It seems like our story about China's early modernization is not the same as the stories we are once told, at least not the same in the case of Fuzhou Shipyard. Unlike Meiji Restoration, China's early modernization, in the case of Fuzhou Shipyard, was not a national experience. Japan's early industrialization was a coordinated effort funded by heavy taxation on agriculture. However, with strong regionalism, China's early modernization might not be as coordinated as we think. At least in the case of Fuzhou Shipyard, we do not find a strong centralized tax system behind the shipyard. As we analyzed above, Fuzhou Shipyard was only involved in the regional budget plan of Fujian. Besides fragmentation in national budget plan, fragmentation in the national schedule of industrialization was even more conspicuous. The replacement of junk boats with steamers should be a natural step in a country's modernization process. The strong inertia in the transportation system implied that the industrialization schedule at Fuzhou Shipyard was not synchronized with the modernization pace of the entire country.

Close Study II: the Shipyard and Fujian Society

This section studies the interaction between Fuzhou Shipyard and Fuzhou society. The source base includes *Fuzhou wen shi zi liao xuan ji* (福州文史资料选辑) and *Fuzhou Mawei gang tu zhi* (福州马尾港图志). Personal diaries from missionary Doolittle and naval officer Shore, *Social Life of the Chinese: Daily Life in China* and *The Flight of the Lapwing: A Naval Officer's Jottings in China, Formosa and Japan,* provide important witness to such interaction.

Now as we look at Fuzhou Shipyard back in time, we often see the conventional representation of Fuzhou Shipyard as the much-anticipated savior of the empire who eventually failed to save the day. Advanced technology, ironclads, and modern naval

academy are always the first things historians will praise about the shipyard. Insufficient funding, dated management style, and corruption are often the things historians feel pitiful about the shipyard. Besides things within the shipyard, we also often see national debate between the liberal and the conservative, triggered by Fuzhou Shipyard. This summary is by no means comprehensive, but it basically encapsulates the historical reconstruction on Fuzhou Shipyard done by historians to this day. However, our life experiences tell us that nothing in the world exist in such a form like a black-and-white silent film. Fuzhou Shipyard once existed like a normal present-day factory does today. Back in 1870s, the shipyard also interacted with the surrounding population and environment, and it also brought both favorable and adverse changes to them. To Chinese people in the rest of the country, Fuzhou Shipyard might just mean a remote military shipyard that constantly brought them advanced ships. Fuzhou Shipyard meant different experience to Fujian people. However, there is no need to stereotype a different experience for Fujian people, because within Fujian, experience about Fuzhou Shipyard also varied among different social groups. Therefore it is would be reductionist reasoning to highlight a certain kind of experience as "Fujian experience."

The city of Fuzhou, where the shipyard was located, was a city of the first rank in its region. In contrast to Hankow, Fuzhou was both the center for trade and also center for administration.[57] Fuzhou was not only the capital city of Fujian province and the residence of its governor, but also the office of the governor-general whose jurisdiction covered both Fujian and Zhejiang provinces. To make the administrative ranks more complicated in Fuzhou city, it is also the residence of the district magistrate of Fuzhou prefecture, and additionally it also hosted the Tartar general whose rank was the same as the governor-general. Therefore, According to Mark Elvin's system, Fuzhou was the political and commercial center for its regional urban system. When first lieutenant Henry Shore visited

[57] Rowe, *Hankow: Commerce and Society in a Chinese City 1796-1889,* 23.

the city, he described that, "it is enclosed by a high and massive wall about seven miles in circumference, and according to Chinese authority is computed to hold a population of six hundred thousand. The streets are very narrow, very dirty, and of course very badly paved with rough blocks of granite."[58] According to this description, Fuzhou was no different from other Chinese major cities of that time. Despite its administrative and commercial significance, Fuzhou was still a Chinese pre-industrial city.

The location of Fuzhou Shipyard was by no means any remote rural corner. When Shore reached Fujian provinces, he traveled up Min River from the mouth towards Fuzhou city. Once his ship got close to Fuzhou city, the first thing he saw was Fuzhou Shipyard. As Shore wrote, "we steam into a plain, while a pagoda on a wooded promontory ahead, and ships at anchor, show that our destination is reached. A little further on, behind the spur of a mountain, smoking chimneys, workshops, storehouses, wharfs and shipping, show where the Portsmouth of China lies---- the Fuzhou Shipyard."[59] The place where the shipyard was located was called Mawei, on the north bank of the Min River. Mawei was about 30 kilometer west of the mouth of Min River, between the estuary and Fuzhou city. The channel between Mawei and the river mouth had cliffs on both sides. According to the official gazette of Fuzhou, Mawei held a very strategically important position and guarded the entrance to Fuzhou city.[60] When imperial commissioner of the Shipyard, Pei Mengsen inspected the terrain of Mawei, he praised it to be the most strategically important position to locate a military shipyard among the 7 coastal provinces.[61] Although the port of Mawei was deep inside Min River, it could harbor ships up to seven thousand tons. According to historical documents, from the mouth of Min River to Maweri it took steamers two hours, and after tide

---

58 Shore, *The Flight of the Lapwing: A Naval Officer's Jottings in China, Formosa and Japan,* 93.
59 Ibid., 89.
60 Lin Xuanzhi, ed., *Fuzhou mawei gang tu zhi (Local Gazetteers of Mawei Port)* (Fujian: Fujian Map Press, 1984), 6.
61 Ibid., 7.

came in large ships up to seven thousand tons could travel from the mouth to Mawei port. Before foreign investors built shipyards at Mawei, steamships could only travel up from the mouth to Guantou, a place located downstream of Mawei.[62] Since the establishment of Fuzhou Shipyard, Mawei had formally replaced Guantou to become the major port receiving steamers of even larger tonnage from sea.[63]

According to the description above, Fuzhou Shipyard was located not only at a strategically important position but also at the center of local river-shipping business. Thanks to the establishment of Fuzhou Shipyard, vessels could travel further into Min River, thus closer to Fuzhou city, and Mawei port could handle more traffic and trade volume, which brought huge benefit to local shipping business. Therefore, we should not expect the shipyard to be a remote and exclusive military complex that remained aloof from its surroundings. In the rest of this section, I will first closely study how the presence of Fuzhou Shipyard brought different changes to people of different social groups. After this section, I will focus on the Sino-French War of 1884 that took place in Fuzhou and centered on Fuzhou Shipyard. My concern is not on how the war developed or why Qing lost, but on how the war affected Fuzhou people's life and affected their perception of the Shipyard.

At the bottom of the society, peasants seemingly did not to have anything to do with modern industry like the Shipyard, but actually the presence of the shipyard had its largest impact on this social group. As we have already known, since 1840s, the intrusion of many foreign factories, tea plantations, and shipyards had rendered many peasants around the treaty ports landless. Innumerable rice paddies gave way to factories and plantations. In addition to the loss of land, peasants could no longer make extra gains through handicrafts due to the surge of cheap foreign imports. When Fuzhou Shipyard initially started to settle down at Mawei, it posed similar threats to local peasants, so riots and protests occurred.

---

[62] Ibid., 10.
[63] Ibid., 23.

According to the official report of Fujian government, Fuzhou Shipyard purchased in total 328 *mou* of land at the start, which were basically all of the rice paddies in its locality. The report also pointed out that, in order to help local peasants resettle, the shipyard paid extra compensation for each *mou* of land.[64] Shore also noted in his diary that, the site of Fuzhou Shipyard had once all been rice paddy fields. [65] In 1866, when the shipyard was still in construction, a group of peasants from thirteen of the local villages came to the shipyard, protesting the enclosure of land for the shipyard.[66] According to the document, quarrel and even violence occurred between these peasants and official bailiffs. As the imperial commissioner of Fuzhou Shipyard, Shen Baozhen had to come to mediate and calm the angry crowds. No matter how hard Shen tried to persuade with reason and appeal with emotion, the crowds refused to calm down and even threw rocks at officials. Shen was hit at his ankle, so he had to retreat. The next morning, Shen deployed five gunboats and three hundred soldiers to involved villages, demanding the turn-in of culprits who had thrown rocks the earlier day. Under such threatening, peasants turned in those culprits. Eventually, two were sentenced to death, sixteen were severely punished and the riots ended. From this incident, we can see how initially local peasants perceived the shipyard. In this case, local peasants did not have any ideological objection to Fuzhou Shipyard, and their reaction was only conditioned on the adverse effects the presence of shipyard brought to their lives. Considering that throwing rocks at an imperial commissioner should be considered felony at that time, we can roughly understand the scale of such a riots. Needless to say, local peasants did not embrace the shipyard as the pride for the country, but considered it as a threat to their lands and means of living.

---

64 Chen, *Zhongguo jin dai jiao yu shi zi liao hui bian,* Vol. 3, 303.

65 Shore, *The Flight of the Lapwing: A Naval Officer's Jottings in China, Formosa and Japan,* 96.

66 *Fuzhou wen shi zi liao xuan ji,* Vol. 22, 13-14.

Despite such an unhappy start, local peasants later largely benefited from the shipyard. As we mentioned earlier, the coming of foreign factories and shipyards created masses of landless peasants. These peasants soon became the first group of proletarian workers in treaty ports, while the rest of the country at large were still in the rigid social hierarchy of gentries, peasants, craftsmen and merchants. Even before the shipyard came to Fuzhou in 1866, many local landless peasants had already had working experience in foreign shipyards and steel works. Similar to foreign factories, Fuzhou Shipyard also brought a great deal of job opportunities to local landless peasants. According to Shen's report, "Fuzhou lacked in natural resources, and people were poor and could hardly find any means of living. Since the establishment of the shipyard, local people rushed towards the shipyard for job position. The shipyard provided means of living to more than ten thousand local families."[67] Just like a present-day factory will do to its locality in our time, Fuzhou Shipyard solved many unemployment issues at its locality. According to a document from Ministry of Foreign Affairs of Japan, since the establishment of the shipyard, the surrounding area had become mostly residence of workers of the shipyard and people whose means of living depended on the shipyard.[68]

Although today we do not have diaries or personal documents from these workers, Shore's notes about what he saw in these workers should be helpful. When Shore saw these workmen, he first described them as steady and persevering, and compared to their Western brethren, they did not have worker's union or bitter feud against the employers.[69] Then Shore wrote that

---

[67] *Chuan zheng zou yi quan bian,* Vol. 4, 270.

[68] *Fuzhou wen shi zi liao xuan ji,* Vol 22, 11.

[69] Shore, *The Flight of the Lapwing: A Naval Officer's Jottings in China, Formosa and Japan,* 102.

> Their skill and aptitude to learn is universally acknowledged, while their simple tastes and moderate wants enable them to compete successfully in foreign lands with Western craftsmen. Their appearance in America and our own colonies has already wrought a revolution in the conditions of labor, whilst the alarm which has recently been sounded from San Francisco may be accepted as a warning of the conflict which is impending between the handicraftsmen of China and the West when brought into direct competition.[70]

Interestingly, Shore is making a comparison between workmen in the shipyard and Chinese immigrant workers in other places such as San Francisco. We can draw two important implications about workers in the shipyard from this comparison. First of all, they did not look like landless peasants any more, and Shore confirmed their aptitude as professional skilled workers. In other words, the shipyard successfully transformed the group of landless peasants into a new social group of industry workers. The other one is that Shore found one striking similarity between the shipyard workers and Chinese immigrant workers, their simple tastes and moderate wants. Chinese immigrant workers abroad were well known for their cheap labor and moderate demand on working conditions. The alarm in San Francisco was very likely to be the Chinese exclusion movement in San Francisco, which resulted in Page Act of 1875. In a sense, the strong similarity between workers at the two places indicated strong similarity between the working environments at the two places. Similar to San Francisco, Mawei had the quality of an industrial complex, which was a remarkable

[70] Ibid.

achievement in this backward agrarian empire. Even Shore admitted that products of the shipyard were "quite equal to anything turned out of our own engineering establishments".[71]

Interestingly, while Shore was praising the ability of workers of the shipyard, he also highlighted that the only thing differentiated Fuzhou Shipyard from Western dockyards was workmen at the shipyard. As Shore observes, "there are may incongruities which strike the eye of a stranger - for instance, the gaily tinted varnished paper umbrellas of the workmen which are stuck about everywhere," and the workmen at the shipyard reminded him that this was not Europe.[72] Incongruities, in this case, meant the incongruities between workmen's overall look and the industrial environment in the shipyard. According to Shore, although the working environment and product quality at the shipyard even rivaled Western counterparts, the workers still had pigtails and used paper umbrella.

Reactions towards the shipyard were much more mixed among local scholar-gentries. This mixture reflected the complicated social conditions in treaty ports many historians have observed. While most of the inland provinces of China were still a social backwater, along treaty ports Chinese traditions had already started to clash with new thinking and new social structures. Under this background, social and cultural stratification started to emerge in treaty ports society, so attitudes towards a modern military shipyard also varied among scholar-gentries.

When Fuzhou Shipyard first came in, criticism among local scholars started to spread. At that early stage, the shipyard just started and had not showed any sign of inefficiency or corruption, so these critic voices were mostly from an ideological perspective. In 1867, Yang Jun, headmaster of a local private academy, composed a poem to scorn the idea of a Western style shipyard. In this poem, Yang was not targeting at any specific problem in the shipyard or troubles the shipyard brought to the locality. Basically, Yang was arguing that means of

---

[71] Shore, *The Flight of the Lapwing: A Naval Officer's Jottings in China, Formosa and Japan*, 97-98.
[72] Shore, *The Flight of the Lapwing: A Naval Officer's Jottings in China, Formosa and Japan*, 98.

self-salvation should lie in our own culture, but now the shipyard was forcing people to read foreign books, forgetting about the teaching of Confucius and Mencius.[73] We also see another poem from a local female poet, who was daughter of the governor-general and married to a local *Juren*. She criticized the shipyard for being a severe violation towards moral principle of Chinese society.[74] Another poem we have was by local *Juren*. In the poem, the poet claimed that the shipyard would appear to be a joke to later generations.[75] These critical voices in local Fuzhou resonated with many of the conservative voices in the government when Zuo Zongtang first proposed the idea of Fuzhou Shipyard. In these three cases, the identities of these three poets have something in common that they were all beneficiaries of the Confucian system. As a headmaster of a Confucian academy, Yang Jun was undoubtedly a promoter of Confucian teaching; the female poet's father and husband were all participants in the traditional system; as for the last *Juren* poet, his identity indicates him as a dedicated follower of this Confucian examination system. Although it is not my intention to construct stereotypical voices for all people with these three identities, this correlation between their opinions and their identities provides us a glance into the social stratification in the treaty ports. These critical voices indicate that among the scholar-gentries in the treaty port, many still subscribed to the traditional canon of Confucianism and perceived Western influence as undesirable.

Apart from oppositions from local gentry, Fuzhou Shipyard also received immense support from them, especially ones who were already experienced with foreign affairs. When Zuo Zongtang first established the shipyard, instead of leaving the shipyard to bureaucratic system, Zuo handpicked candidates for key positions in the shipyard. In his report to the

---

73 Lin, *Fuzhou mawei gang tu zhi,* 302. The poem writes that, "谁习博昌船，乃为今创局？立国贵自强，彼此交相勖。捷径开终南，岂知生使独。别有海外书，孔孟何须读。扬眉举趾人，谈笑倾流俗。惜无御者妻，晏子逢路曲。弃置复弃置，难谋升斗粟。金石歌草庐，无怪吾徒促。"

74 Ibid., 303.

75 Ibid., 304.

throne, Zuo argued that Fuzhou Shipyard was different from normal government department, so his criteria were not social status but familiarity with foreign affairs.[76] In this report, almost all of the candidates Zuo recommended were scholar-gentries along the treaty ports, especially Fujian local gentries. The most prominent example would be Shen Baozhem, the first imperial commissioner at the Shipyard. When Zuo strongly recommended Shen to be the leader of the shipyard, he praised him to be "a local gentry official respected by both Chinese and foreign people."[77] Shen Baozhen originally was a local gentry at Houguan county of Fujian province and later started his political career in the campaign against Taiping Rebellion. When Zuo approached him in 1866, Shen was on leave from his official post due to the passing of his mother. Besides Shen, Zuo also highlighted another local gentry named Huang Weixuan. Huang was also a local gentry of Fujian, and according to Zuo's report, Huang was very familiar with navigation and good at engineer. According to Zuo, Huang joined Prosper Giquel in finding a good location for the shipyard, and in this process Huang drew many maps and made many measurements of several possible locations.[78] Obviously, these scholar gentries became the foundation of the shipyard. Nowhere else in Qing in early 1860s could Zuo find a crew who were already familiar with Western affairs. Since the opening of treaty ports in 1840s, Chinese gentry in coastal regions had already started to familiarize themselves with Western novelties, so these human resources in Fujian became the natural foundation of the shipyard.

The two groups of gentry above reflected the kind of social division in treaty port society. In the case of Fuzhou Shipyard, clash between the two groups also happened. In 1866, Fujian government received anonymous letter accusing Zhou Kaixi, staff at the shipyard, of misconduct. At the same time, Ye Wennan, also staff at the shipyard, was

[76] *Chuan zheng zou yi quan bian,* Vol. 1, 74.
[77] Ibid., 27.
[78] Ibid., 73.

somehow involved into a lawsuit with a local scholar-gentry. In his report to the throne on these two matters, Shen Baozhen complained, "local authorities knew that the anonymous letter and the lawsuit were merely slanders aiming to obstruct the normal operation of the shipyard, but they still let these slanders get their way."[79] Not just Ye and Zhou, many officials in the shipyard became targets of local satire poems. In one case, a local poet composed a poem attacking three important officials in the shipyard for being corrupted.[80] These conflicts exemplify the kind of cultural clash in treaty port society where raw traditional Chinese culture met novel Western influence.

Before, we head into the next section on Sino-French War, we need to highlight some significant patterns that compliment our findings in Close Study I. As we have seen above, even before the existence of Fuzhou Shipyard, some significant social changes were already taking place in treaty port areas. In this case, Fuzhou Shipyard becomes our special lens and our entrance into such complicated social changes. The incongruities mentioned above were typical proofs of incomplete social transformation. Here "pigtail" and "paper umbrella" were the symbols of traditional Chinese society. Shore was criticizing the lack of full-scale social development albeit the great progress in shipbuilding technology. As Shore writes, "the underdeveloped state of the country, the absence of roads, rails, or telegraphs, schools and colleges where education in the modern sense of the word can be obtained, the absence of manufactures on any extended or scientific scale, and the rude appliances for agriculture."[81] In other words, such incongruities resulted from the different paces of development among different aspects of the society. Although new industrial culture and new social group were taking shape, the big social background lagged behind. The two completely different attitudes among local gentry further enhanced that observation. In the case of local gentry,

[79] *Yang wu yun dong*, Vol.5, 58.

[80] Lin, *Fujian chuan zheng ju shi gao,* 22. The poem writes, "吴号抽筋周剥皮，夏名刮骨更稀奇，三人声势常相倚，聚敛鸿名遍天涯." The involved Wu, Zhou and Xia were all gentries in the shipyard.

[81] Shore, *The Flight of the Lapwing: A Naval Officer's Jottings in China, Formosa and Japan,* 237.

incongruities existed in the form of social stratification. While part of the gentry's class was changing fast, others remained still. Therefore, not only that there was fragmentation among different regional modernization schedules, as we have analyzed in Close Study I, but also that in terms of paces of development, parts of the society started to diverge from the rest. In the case of Fuzhou Shipyard, the heavy emphasis on shipbuilding technology speeded up the development in industrial and technological capacities of the society while ignored other internal development.

The Sino-French War and Fujian Identity

Sources mostly come from one volume of *Fuzhou wen shi zi liao xuan ji* (福州文史资料选辑) that is dedicated to the Sino-French War of 1884. *Fuzhou Mawei gang tu zhi* (福州马尾港图志) also contains some personal letter and memoir on this war.

After we separately study various social groups, we now shift our attention to the Sino-French War that occurred in Fuzhou in 1884. This particular war draws our interest because it was the moment when anti-imperialism reached a peak in Fuzhou, which affected how local people perceived Fuzhou Shipyard. First of all, this incident best demonstrates the dilemma Fuzhou Shipyard had been facing: where did its loyalty lie, to Beijing or to local Fuzhou people? Additionally, the little help Fujian received in this war further exacerbated the relationship between Fujian and Beijing. Last but not the least, at this high point of anti-imperialism, the awkward position of the shipyard became so prominent that local people started to question the wisdom of having a Western-style shipyard. In 1884 after the war broke our between China and France in Vietnam, French admiral Anatole- Amedee- Prosper Courbet led a French fleet to southeastern coast of China, watching out for Nanyang Fleet and Fuzhou Fleet of China. Fuzhou Shipyard was the base for Fuzhou Fleet and the most important arsenal of Chinese navy, so it naturally became a priority target. However, Fuzhou

Fleet and the French fleet did not get into battle immediately, and instead two sides stood facing each other in stalemate for quite some time. It was during the stalemate that Fuzhou Shipyard faced its dilemma and test.

At the start of the stalemate, there were intense discussion among Fuzhou people whether Fuzhou Fleet should block the mouth of Min River, so French fleet could not approach Fuzhou city. According to a diary of a local private tutor, local people demanded to block the entrance of Min River, but the officials responded, "The river cannot be blocked, because merchants vessels of many friendly countries are passing by everyday. If we block the river, it will cause diplomatic troubles."[82] The officials mentioned here were imperial commissioner at the shipyard He Ruzhang, coastal defense imperial commissioner Zhang Peilun, and governor-general He Jing. However, whether or not to block the river was not their decision to make. In an edict from the throne, it writes, "He Ruzhang and Zhang Peilun suggested that if French ships attempt to enter the river, we should block the river mouth. Now after discussion in the central court, we think that whether or not to block the river is a big diplomatic issue and we need to notify every foreign ambassadors before we block."[83] Obviously, both He Ruzhang and Zhang Peilun knew that blocking the river was the right thing to do, but they had to obey order from Beijing. Due to this indecisiveness, French warships started to enter Min River one by one and stood facing Fuzhou Fleet right in front of the Fuzhou Shipyard.

At the same time, strong nationalism started cause social anxiety among local people. According to the diary of the tutor,

> The next day, villagers at the downstream of Min River submitted a letter to He Ruzhang, demanding war against French fleet. These villages also started

[82] Lin, *Fuzhou Mawei gang tu zhi*, 127.
[83] *Fuzhou wen shi zi liao xuan ji*, Vol. 3, 221.

> to form militia themselves and killed several French. He chastised the letter and their actions, and sent in army to quell the violence. Then these villagers turned to Zhang Peilun, and also got turned down by Zhang. At the end, they returned home very angrily.[84]

According to this description, by turning the popular appeal, He and Zhang antagonized local people. However, again they did not have the authority to make the decision. Actually, after the first two French warships entered the river, Zhang Peilun submitted an urgent memorial to Beijing, writing, "today two French ships entered Min River, we did not block, considering the ongoing peace talk. Last time we also received command from Beiyang saying that if the enemy does not move, we should not move. But now, if we still sit waiting, the enemy will penetrate deep into Min River, and thus we will lose our advantage."[85]

Consequently, during the stalemate, local people started lose their trust in Fuzhou Shipyard as represented by He Ruzhang. After the war broke out, He and Zhang soon found out that they had lost the support from local people. According to the memoir of a local gentry, after they lost the war to the French, He and Zhang received hostilities from local villagers. During his retreat, when Zhang reached a local village, "local villagers refused to receive him, and Zhang had to stay in a Buddhist temple for the night." During He's retreat, when he tried to stay in a shrine for one night, local villagers set fire to the shrine in order to chase him away. At the second day, He tried to stay in a city guild house for one night, but citizens repelled him again.[86] Later, when many witnesses wrote their memoir about this war, they all pointed out the failure to block the river mouth during stalemate and the passive

---

[84] Lin, *Fuzhou Mawei gang tu zhi,* 127.
[85] *Fuzhou wen shi zi liao xuan ji*, Vol. 3, 212.
[86] Lin, *Fuzhou Mawei gang tu zhi*, 146.

response of the fleet were the major reasons for the defeat. Therefore, all the blame war put on Zhang and He.

Not only that the interest of local Fujian people conflicted with the decision of the central court, but also that Fujian experienced the war alone without much help from other provinces. During the stalemate, Zhang and He sought for reinforcement from Beiyang Fleet and Nanyang Fleet. In a letter He wrote to his family after the war, He complained that he lost the war because both Nanyang and Beiyang fleets refused to help.[87] Two more onlookers testified to this helpless situation of He Ruzhang. In his later memoir, Pei Mengsen defended for He by saying that He could not get help from Nanyang or Beiyang fleet and was not allowed to open fire first.[88] Chen Baochen, also a government official whose family was an influential gentry family in Fuzhou, made similar defense for He Ruzhang.[89] In this sense, although the war was named Sino-French War, from the perspective of Fuzhou people they were alone against strong French fleet. Therefore, despite strong nationalism, regionalism still appeared in the form of selfish concern for the regional interest of Fujian province. In his diary, an American sailor witnessed that during the stalemate local people rushed to collect debts and pack their belongings, preparing to escape.[90] In a personal letter of a staff at Fuzhou custom, he complained that after the war broke out, Fujian Fleet blocked Min River, so now after the war ended Min River became impassable to steamships, which caused much inconvenience for local trade.[91] Besides their concern for national humiliation, local people also became equally, if not more, concerned with their own safety and the damage done to their home province.

---

87 Ibid., 159.
88 Ibid., 167.
89 Ibid., 174.
90 Ibid., 136.
91 Ibid., 162.

The war also featured the peak of anti-imperialism at Fujian, which contributed greatly to the loss of support of Fuzhou Shipyard among local people. According to the memoir of a local witness, after the war, indiscriminate anti-imperialism feeling started to spread quickly among Fuzhou people. Out of caution, every foreign properties put out big labels on their front door saying that they were not French.[92] Fuzhou people even started question that whether or not the shipyard was bribed by the French. Throughout the entire incident, what Fuzhou people saw was that "He and Zhang did not prepare actively for the war, and the forts they built were also useless. When people demanded war, they refused. So there must have been collusion between the shipyard and the French."[93] With such outrage, Fuzhou people started to draw satire paintings, ridiculing how He and Zhang colluded with the French.[94] At the end of the war, people's suspicion reached a high point. One day, when a foreigner entered the office of He Ruzhang, local people all thought that he must be a French and the undisputable proof of collusion, so thousands of local people marched towards He's office and demanded to kill He and the foreigner. No matter how hard He and Zhang explained, the crowd would not listen. Then, Pei Mengsen, who had a good reputation among local villagers and who would later become imperial commissioner at the shipyard, came out explaining that that foreigner was an English merchant not a French. Therefore, the crowd started to believe and then left.[95]

In this incident, although the entire Qing Empire suffered the humiliation of the defeat, it was only Fujian that suffered the damage. Therefore, the war experience for Fujian people was different than that for people elsewhere. In a sense, local Fujian people were innocent victims because the only reason why the war took place at Fuzhou not some other coastal city was the existence of Fuzhou Shipyard. Thus in this specific incident, the existence of Fuzhou

[92] Ibid.
[93] Ibid., 130.
[94] Ibid.
[95] Ibid.

Shipyard had adverse influence against the interest of local people. In our two sections of close study, we have shown that before 1884, Fuzhou Shipyard had effectively been integrated into Fujian province. Economically, it had been part of Fujian budget system since its beginning and its later development tied it even tighter to the local economy. Socially, despite the initial conflicts with local people, Fuzhou Shipyard was deeply rooted into local society and based itself on the local human resources. Despite all these deep roots and perfect integration, when the war broke out the shipyard suddenly lost all of its support from its locality. When the war broke out, directives from above conflicted with popular demand from below, and Fuzhou Shipyard yielded to the former. At that moment, Fuzhou Shipyard stopped being a regional project and reversed back into a national arsenal. In a sense, Fuzhou Shipyard was caught in an awkward position during this conflict between center and region. When Fuzhou people received no substantial aids from other provinces, instinct of self-preservation further exacerbated relationship between center and region. In this particular case, Fuzhou Shipyard's special identity as a Western-style project combined with strong anti-imperialism inflamed local opposition against the shipyard.

Conclusion

When the Qing government designed the project of Fuzhou Shipyard, the funding policy negated its meaning as a national industrialization effort. As we have analyzed above, the ensuing financial difficulties in the shipyard made it effectively a regional phenomenon. However, it still had to observe directives from Beijing. Thus, Fuzhou Shipyard represented the link between Beijing and Fujian in this modernization endeavor. Our analysis of the Sino-French War just demonstrated how tenuous this link was.

More importantly, tenuous connections existed in other aspects as well. When local Fujian brick tea factory owners lost their competition to their more technologically advanced

Russian competitors, they were among the first to experience the significance of technological advantage in free market competition. In stark contrast, the rest of the country was still protecting the business of junk boats against the introduction of more efficient steamships into the national transportation system. In addition, around the treaty ports, traditional agriculture had already been giving way to foreign factories and shipyards. A new social group was in formation from these landless peasants and environment in the shipyard also started to resemble the much more industrialized San Francisco. However, the overall social customs and traditions still remained those of an agrarian society instead of an industrialized one. This uneven development posed striking incongruities to a foreign observer. Last but not the least, among the gentry in treaty ports, divisions within the group was taking shape. Scholar-gentry with similar liberal thinking started to recognize each other and worked together to bring about changes they believed to be necessary, while their more conservative members still resisted such changes.

Therefore, the modernization experience in late Qing was far from homogeneous. In the story above, we have found early divergence within China itself. Usually when historians talk about divergence, they are discussing how China and Western Europe diverged. Our close analysis at provincial level reveals similar divergence within China in three different forms: fragmentation in regional modernization, uneven development in social transformation, and conflict between center and region. Concerning fragmentation in regional modernization, we have seen how Fuzhou Shipyard struggled to survive on insufficient funding from Fujian government. That was a typical conflict between a backward agrarian economy and a modern capital-intense industry. Only such a conflict could break the high-level equilibrium between China's expenditure and agrarian income. Substantial modernization efforts would not come until this equilibrium was broken. We have generally associated 1842 with the destruction of the equilibrium, thus the start of China's

modernization. However, as the earliest capital-intense industrialization project, Fuzhou Shipyard did not come into existence until 1866. When the shipyard did started to challenge the equilibrium, only Fujian economy experienced this shock, because the shipyard had nothing to do with tax revenues in other provinces. Thus, regional divergence came in when the entire country did not experience that challenge at the same time. While most of the country was still slumbering in the equilibrium trap, Fujian had already started to experience the many social changes we have talked above.

With respect to uneven social development, Qing's strong emphasis on military modernization speeded up the development of heavy industry while overlooked development in other social infrastructure. The lack of comprehensive modernization plan was more like an intentional decision than a major blunder on the part of Qing court. The entire Self-Strengthening Movement started under the slogan of *Zhong ti xi yong*, which can be roughly translated as "Chinese culture as essence and Western technology as tools." When founding Fuzhou Shipyard, Qing court had no intention to adopt anything Western other than modern shipbuilding technology. Therefore, certain aspects of the society were forced to remain unchanging and other embarked on early modernization. If Fuzhou Shipyard was just a straightforward military modernization, then there should have been no difficulties and oppositions, because ideally a stronger national defense should be desirable for everyone and the import of technology was like a simple add-on. However, in reality, in order for the shipyard to develop smoothly and efficiently, adjustment and even reforms were required in many existing systems. Therefore, Self-Strengthening Movement was a reform broader in scale than its original design, and Fuzhou Shipyard challenged many aspects of the country that Qing was not ready to change yet. Therefore, all those factors that contributed to the failure of the shipyard, such as dated management style and corruption, actually resulted from

the uneven social development. In this modernization process, certain parts of the society diverged from the big picture.

In the framework of center vs. region analysis, divergence in the first two forms contributed to the divergence between national interest and regional interest. Fragmentation in regional modernization schedule brought about different regional concerns and regional self-consciousness. Inconsonance from uneven social development caused social anxieties that further inflamed the talk of regional concerns. In the case of Fujian, all these hidden divergence exploded in the Sino-French War. As we already know, the purpose of all those industrialization efforts under the Self-Strengthening Movement was the self-preservation of the Qing monarchy. Such a selfish purpose made any regional interest expendable, so divergence between the center and the region was inevitable.

Therefore, the early divergence in late Qing modernization made the regions the real thrusters of the modernization endeavor. Specifically in the case of Fuzhou Shipyard, although it was considered a failed attempt in national level, the import of foreign technological resources, the influx of managerial experience into official ranks, and the direct involvement with local society brought about subtle but drastic changes not only in local industrialization, but also in the attitudes and values among gentry-officials. If viewed in the framework of center versus periphery, Fujian, instead of Beijing, became the source of inspiration that provided guidance for future modernization. For example, experience of Fujian inspired Qing officials to realize the inadequacy of agrarian income and the potential of merchant class, and thus they started to establish the first Kuan-tu Shang-pan project, Chinese Merchants Steamship Navigation Company. Not just Fujian, many other regions provided different kinds of inspiration to the overall modernization plan. For Rowe, merchant institutions at Hankow were among the most prominent initial supporters of the republican

cause in 1911.[96] For Lewis, Hunan was the pioneer in the search for a new order and Hunanese's leadership in later revolution were among the most prominent.[97] Thus, with full awareness of early divergence in late Qing modernization, we should interpret the decades of modernization between 1866 and 1920s as a modernization from the bottom, instead of from the top. Unlike Meiji experience of Japan, where comprehensive modernization instructions came from the top, early modernization in China was deeply rooted into different regions and early divergence in development among different regions gave each region their unique significance in those decades.

Bibliography

Weber, Max. *The Religion of China: Confucianism and Taoism.* New York, Free Press, 1951.

Elvin, Mark. "The High-level Equilibrium Trap: the Cause of the Decline of Invention in the Traditional Chinese Textile Industry," in *Economic Organization in Chinese Society.* Edited by W. E. Willmott. Stanford: Stanford University Press, 1972.

Skinner, G. William. "Regional Urbanization in Nineteenth-Century China," in *The City in Late Imperial China*. Edited by G. William Skinner. Stanford: Stanford University Press, 1977.

Elvin, Mark, ed. *The Chinese City between Two Worlds.* Stanford: Stanford University Press, 1974.

Pomeranz, Kenneth. *The Great Divergence.* New Jersey: Princeton University Press, 2000.

Wong, R. Bin. *China Transformed.* Ithaca: Cornell University Press, 1997.

Frank, Andre Gunder. *Reorient: Global Economy in the Asian Age.* California: University of California Press, 1998.

Bellah, Robert. N. *Tokugawa Religion: The Values of Pre-industrial Japan.* Glencoe, IL: Free Press, 1957.

Liu, K. C. "The Limits of Regional Power in the Late Qing Period: A Reappraisal," in *The Tsing Hua Journal of Chinese Studies,* New Series 10.2. Beijing, Tsing Hua University, 1874.

Michael, Franz. "Regionalism in Nineteenth-Century China," introduction to Stanley Spector, *Li Hung-chang and the Huai Army: A Study in Nineteenth-Century Chinese Regionalism*. Seattle: University of Washington Press, 1964.

Rowe, T. William. *Hankow: Commerce and Society in a Chinese City 1796-1889.* Stanford: Stanford University Press, 1984.

Bergere, Marie-Claire. *The Golden Age of the Chinese Bourgeoisie 1911-1937.* Translated by Janet Lloyd. London: Cambridge University Press, 1989.

---

96 Rowe, *Hankow: Commerce and Society in a Chinese City 1796-1889,* 346.

97 Lewis, *Prologue to the Chinese Revolution: The Transformation of Ideas and Institutions in Hunan Province, 1891-1907*, 15.

Lewis, Charlton. M. *Prologue to the Chinese Revolution: The Transformation of Ideas and Institutions in Hunan Province, 1891-1907.* Cambridge: Harvard University Press, 1976.

Lin, Qingyuan. *Fujian chuan zheng ju shi gao (Historial Documents of Fuzhou Shipyard).* Fujian: Fujian People's Press, 1986. 林庆元：福建船政局史稿

Lin, Qingyuan. *Fujian jin dai jing ji shi (Fujian Early-modern Economic History).* Fujian: Fujian Education Press, 2001. 林庆元：福建近代经济史

Lin, Xing. *Fujian cheng shi xian dai hua yan jiu: cheng shi fa zhan yu she hui bian qian 1843-1949 (Fujian Urbanization Study: City Development and Social Change 1843-1949).* Tianjin: Tianjin Ancient Documents Press, 2009. 林星：福建城市现代化研究：城市发展与社会变迁 1843-1949.

Smith, Thomas C. *Political Change and Industrial Development in Japan: Government Enterprise, 1868-1880.* Stanford: Stanford University Press, 1955.

Doolittle, Justus. *Social Life of the Chinese: Daily Life in China.* London: Kegan Paul, 2002.

Shore, Henry Noel. *The Flight of the Lapwing: A Naval Officer's Jottings in China, Formosa and Japan.* London: Longmans, Green and co., 1881.

Zhongguo shi xue hui (China Historical Research Association). *Yangwu yundong (Self-Strengthening Movement).* Vol. 5. Shanghai: Shanghai People's Press, 1961. 中国史学会主编：洋务运动，第五册

Zhong yang yan jiu yuan jin dai shi yan jiu suo (Central Institute of Early Modern China Studies). *Hai fang dang (Coastal Defense Archive)*. Vol. 2. Taipei: Central Institute of Early Modern China Studies, 1957. 中央研究院近代史研究所编：海防档

Shen Yan and Fang Baochuan, ed. *Chuan zheng zou yi quan bian (Compilation of Memorials about Fuzhou Shipyard)*. Vol. 1-4. Beijing: National Library of China Publishing House, 2011. 沈岩，方宝川主编：船政奏议全编

Shen bao (Shen Newspaper). Shanghai: 1872-1949.申报, 上海

Zhongguo ren min zheng zhi xie shang hui yi Fujian Sheng Fuzhou Shi wei yuan hui wen shi zi liao gong zuo zu (the Chinese People's Political Consultative Conference Fuzhou Historical Archives Committee). *Fuzhou wen shi zi liao xuan ji (Fuzhou Historical Documents Collections)*. Vol. 1-22. Published quarterly. Fuzhou: 1981-2009. 中国人民政治协商会议福建省福州市委员会文史资料工作组编：福州文史资料选辑

Lin, Xuanzhi, ed. *Fuzhou Mawei gang tu zhi (A Local Gazetteers of Mawei)*. Fuzhou: Fujian Map Press, 1984. 林萱治主编：福州马尾港图志

Zhonghua Ren min Gong he guo Fuzhou hai guan (People's Republic of China Fuzhou Custom). *Fuzhou hai guan zhi 1861-1989 (Records of Fuzhou Custom 1861-1989)*. Xiamen: Lujiang Press, 1991. 中华人民共和国福州海关：福州海关志 1861-1989.

Sun Yutang and Wang Jinyu, ed. *Zhongguo jin dai gong ye shi zi liao (Historical Records of China's Industrialization)*. Vol. 1. Beijing: Science Press, 1957. 孙毓棠，汪敬虞主编：中国近代工业史资料

Shen, Baozhen. *Shen wensu gong zheng shu (Official Documents of Shen Baozhen)*. Vol. 5. Wushishan ci, 1892.