

MERCHANTS, MANDARINS, AND THE RAILWAY: INSTITUTIONAL FAILURE AND THE WUSONG RAILWAY, 1874–1877

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This article is an institutional study on the history of the ill-fated Wusong Railway, China's first operational railway. The nine-mile light railway was built by the British firm Jardine, Matheson & Co. without the Qing government's permission. After negotiations with British diplomats, the Qing government agreed to purchase the line but the reformist governor-general Shen Baozhen later ordered it to be removed to Taiwan. Unfortunately funds were never provided for the rebuilding work. This article argues that it was the Qing government's failure to raise funds for capital-intensive projects that led to the railway's final destruction.

Keywords: the Wusong Railway; Shanghai; Jardine Matheson & Co.; Li Hongzhang; Shen Baozhen; Feng Junguang; Thomas Wade; Walter Medhurst

One of the most dramatic events in the history of China's introduction of Western technology was the destruction of the Wusong 吳淞 Railway, China's first operational railway. The nine-and-a-quarter-mile light railway line was built by the British firm Jardine, Matheson & Co. (hereafter Jardine) without the Qing government's permission. It was later dismantled by Shen Baozhen 沈葆楨, a reformist senior Qing government official who had been a successful director-general of China's foremost modern shipyard and an advocate of importing Western technology. Historians debate the paradox of such a forward thinking official squelching technological advancement. Li Guoqi condemns the conservatism of Qing government officials and the short-sightedness of Shen. Blaire Currie argues that it was Confucianism embodied in politics, economy, and institutions that destroyed the Wusong Railway. However, David Pong and Saundra Sturdevant contend that Qing government officials, especially Shen Baozhen, were not hostile to the railway *per se* but had to oppose the Wusong Line as a symbol of imperialist encroachment in order to defend Confucian values and uphold Chinese sovereignty.¹

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1 Li 1961; Currie 1966; Pong 1973; Sturdevant 1976.

Indeed, like any other society, late Qing China did not lack conservatives who resisted social change, and government officials, who were deeply immersed in Confucian ideology, would not have hesitated to defend Chinese sovereignty against foreign incursions. Nevertheless, the argument seems to presume that the railway as a symbol of progress should be embraced without reservation and that Qing government officials could react to incidents like the Wusong Railway only in a monolithic way. This article revisits the history of the ill-fated light railway by laying out a factual record of the train of events leading to the final removal of the railway. It presents the dynamic late Qing politics of technology in which foreign merchants, Qing government officials, and British diplomats wrestled against each other according to their own agendas. More importantly, it seeks to understand the final fate of the Wusong Railway in institutional terms.

UNREFORMED INSTITUTIONS, UNSETTLED RAILWAY POLICY

Late imperial China was no stranger to large-scale engineering projects. The imperial court's insatiable desire for luxury goods drove the production of delicate silk textiles and fine porcelain. It committed huge human, financial, and technical resources to hydraulic engineering for irrigation, flood control, and the management of the Grand Canal, which was the empire's main economic artery. It also paid attention to the effectiveness of weaponry. If necessary, the government would not hesitate to employ foreigners, particularly the Jesuits, to introduce new knowledge and skills such as astronomical instruments and firearms in the late Ming and early Qing.² The Chinese government was successful in managing those projects, but unlike its Western European counterparts, it did not have access to institutions such as banks, bonds, and shares that helped to fund wars and spur overseas colonization from the sixteenth century and during the Industrial Revolution in Europe.³

The technological disparity between China and the West was exposed in the two Opium Wars (1839–1842, 1856–1860). In the second of these conflicts, Anglo-French troops forced the Qing emperor to flee the capital of Beijing and burnt down the summer palace. This humiliation prompted Qing government officials to call for Self-Strengthening. The history of Self-Strengthening is too complex to be related here, but suffice it to say that it was a policy that aimed at equipping Qing troops with imported or domestically made modern weaponry. Modern arsenals and shipyards, such as the Jiangnan Arsenal (Jiangnan Zhizaoju 江南製造局) and the Fuzhou Naval Yard (Fuzhou Chuanzengju 福州船政局), were established to produce modern firearms and steam warships. New schools and translation institutions were set up to introduce Western scientific and technological knowledge.⁴

The funding of the Self-Strengthening projects relied heavily on the revenues from transit dues and the foreign-managed Chinese Maritime Customs, both of which were instituted in 1854 to cope with the financial demands of the Taiping Rebellion (1851–1865),

2 Jami 2001; Bray 2008; Schäfer 2012.

3 Faure 2006.

4 Kuo and Liu 1978.

one of the most devastating wars in Chinese history. The funding arrangement was not ideal because, firstly, since the early eighteenth century the Qing government budget had remained largely unchanged because the imperial court considered stable spending and taxation to be politically wise and morally correct. Besides, all Self-Strengthening expenditures had to come from the same source of revenue, but the Qing government had failed to acknowledge the ever-increasing demands for technological development and its financial cost. In other words, the unreformed fiscal system was ill-suited to support modern large-scale engineering projects, such as the railway.

The Qing government did not have a policy on railway building, although senior officials were not ignorant of this technological development in the West. They were concerned about its potential negative impact on China and hence rejected foreign diplomats' lobbying to allow foreign entrepreneurs to build it.⁵ Qing government officials felt they had a right to do so because railways were not mentioned in the treaties between China and the Western powers. The only clause that potential railway investors could cite was article 12 of the Treaty of Tientsin (1858), a part of the peace settlement of the Second Opium War. It stated that "Subjects [of the Treaty Powers], whether at the [Treaty] Ports or at *other places*, desiring to build or open *houses, warehouses, churches, hospitals, or burial-grounds* [my emphasis], shall make their agreement for the land or buildings they require, at the rates prevailing among the people, equitably and without exaction on either side."⁶ However, the vague wording of the article opened up controversy. First, the phrase "other places" seems to have implied that foreigners were allowed to build constructions beyond the limit of the treaty ports. Although the article mentioned that five types of buildings were allowed, it did not clearly state a prohibition on other kinds of construction. This legal grey area would later become the centre of dispute between Qing and British officials.

Before the treaty could be revised, foreign merchants went through the legitimate route of applying to the Qing government. In 1863, through the British consul in Shanghai, Jardine, representing a group of foreign merchants, petitioned Li Hongzhang 李鴻章, then governor of Jiangsu, for permission to build a railway between the treaty port of Shanghai and Suzhou, a prosperous Grand Canal town famed for silk production. Li rejected the petition. In 1864, a retired partner of Jardine invited the prominent British civil engineer McDonald Stephenson, who had built railway lines in India, to visit China. Stephenson drafted a proposal for China's national railway construction and presented it to the Zongli yamen 總理衙門, which ignored it.⁷ In 1865, a British merchant built a 500-metre-long rail track outside one of the gates of the capital Beijing. Humans, not locomotives, were used to pull carriages on the track. The demonstration attracted some attention and was soon dismantled by local officials.⁸ Despite foreigners' petitions,

5 The question of the telegraph was the first to be raised by foreign diplomats. In 1862, in order to reject the lobbying of the Russian minister in Beijing, the *Zongli yamen* agreed that Russia would be the first to be given the right to build a telegraph line between Beijing and Tianjin, if China ever decided to allow foreign countries to introduce the new technology. British and American ministers soon presented their own proposals but both were rejected by the *Zongli yamen*. Baark 1997, p. 72.

6 Treaties 1908, p. 216.

7 Kent 1907, pp. 910; Lin 1937, p. 23.

8 Li 1961, p. 14.

the issue of the railway only entered senior Qing officials' policy discussions through the two memoranda sent by Robert Hart, the Inspector-General of the Chinese Maritime Customs, and Thomas Wade, then British Chargé d'Affaires in Beijing.

In 1865, Hart wrote to the Zongli yamen, pointing out the inefficiency and irrationality of the Chinese systems of taxation, military training, and the civil service. In the following year, Wade also sent a memorandum to the Zongli yamen, echoing Hart's opinions. They both suggested a wide range of reforms including sending diplomatic envoys to be stationed in Western countries, opening mines with Western technology, and adopting the telegraph and the railway.⁹ Although Wade and Hart did not offer any detailed proposals, senior Qing officials found the suggestions unacceptable. With the bitter memory of the Second Opium War, the Zongli yamen feared that the treaty powers might again force China to accept new terms of treaty revision, and hence called for a discussion.¹⁰

In their discussions, most senior Qing officials rejected the idea of opening mines with foreign technology as well as introducing the railway or the telegraph, quoting their presence in the countryside as a disturbance to local peacefulness.¹¹ Before the discussion reached any conclusion, in 1867 the Zongli yamen called for another discussion to prepare for the upcoming treaty revision.¹² The general tone of the discussion was to reject the treaty powers' potential demands, including granting foreign envoys audiences with the emperor, stationing Chinese diplomats in the capitals of the treaty powers, and building the railway and the telegraph.¹³

Despite the tone of these discussions, Shen Baozhen, the director of the Fuzhou Naval Yard, and Li Hongzhang, founder of the Jiangnan Arsenal and then governor-general of Hunan and Hubei, were not against telegraph and railway building as such. Shen memorialized in December 1867, arguing that the two technologies would be beneficial to the country and poor people, but allowing foreigners to build them as a treaty right would be totally unacceptable.¹⁴ Li held a similar view. He argued that the railway would cost millions of taels and it would be difficult to raise such a large sum. He suggested that after some decades of peace it might be possible. However, allowing foreigners to build railways and telegraphs inland would not be as good as China's building them after their own model.¹⁵ In other words, Shen and Li made a clear distinction between building a railway, which in itself would benefit China, and allowing foreigners to do so by treaty right, which was unacceptable.

It is significant that the issue of railway and telegraph building was not included in the treaty revision with Britain in 1869. Although opinions were divided, senior Qing officials were not blindly opposed to the railway. They were cautious, and determined that the railway should not be an extension of foreign influence into China.

9 *Chouban yiwu shimo*, Tongzhi reign, 40:12a–22a.

10 *Chouban yiwu shimo*, Tongzhi reign, 40:10b ff.

11 *Chouban yiwu shimo*, Tongzhi reign, 41:27b–30a; 41:41b–43a; 41:43a–49b; 45:45b–48b.

12 *Chouban yiwu shimo*, Tongzhi reign, 50:24a ff.

13 Biggerstaff 1950.

14 *Chouban yiwu shimo*, Tongzhi reign, 53:5a.

15 *Chouban yiwu shimo*, Tongzhi reign, 55:13a–14a.

However, Li Hongzhang felt the urgency of railway and telegraph building because of foreign threats to China's frontiers. In 1871, Russia, taking advantage of the Muslim rebellions in northwest China, occupied the Yili 伊犁 basin of Xinjiang province. On the southwest frontier, Britain's annexation of Burma into British India from 1852 made a British threat to Yunnan province possible. In October 1872, in a letter to his close associate Ding Richang 丁日昌, Li Hongzhang argued that China would one day use the telegraph and the railway to replace the courier service and the cart. He stressed that, to fend off Russian and British threats, the two technologies would facilitate the transportation of goods and troops, as well as transmit intelligence to the northwest and southwest.¹⁶

In general, by 1872, Qing senior officials agreed that foreigners should not be allowed to build railways or the telegraph in China because of a fear that foreigners might control communication and transportation. The officials were also concerned with the problem of funding. However, they themselves did not form a solid policy over how China might take advantage of the railway. And, before the Qing government took any real steps, foreign merchants in Shanghai decided to venture into the enterprise.

JARDINE AND THE WUSONG PROJECT

Although Jardine's earlier petition to build the Suzhou–Shanghai railway was rejected, the firm still desired to be first to enter the market especially in the area of Shanghai, which since the 1840s had gradually become a center of international trade in east China. Foreign settlements were established on the north side of the Chinese walled city and along the west bank of the Huangpu River, which led to the Yangzi River. Sandbanks in the mouth of the Huangpu River, known to foreigners as the Woosung [Wusong] Bar, had prevented large merchant ships from reaching Shanghai at low tide. In the 1860s, the foreign mercantile community made frequent pleas through Robert Hart and Thomas Wade to the Qing government to dredge the riverbed but failed to obtain any positive response.¹⁷ The difficulty would have to be addressed one way or another.

In 1865, Jardine and a group of foreign merchants formed the Woosung [Wusong] Road Company and planned to build a railway between Shanghai and Wusong, a fishing village at the mouth of the Huangpu River. The project never went beyond the promotion stage.¹⁸ In September 1872, the project was revived. The new company's major shareholders included O. B. Bradford, the American vice-consul, F. B. Johnson, Jardine's partner and concomitantly the Danish consul in Shanghai, Joseph Haas, an interpreter at the Austrian-Hungarian consulate, and, notably, the Great Northern Telegraphy Company of Denmark.¹⁹ Through the acting British consul, the company applied to the Shanghai

16 Li to Ding, *Li Wenzhong gong quanji*, Letters to Friends and Colleagues, 12:26b.

17 Hawks 1928, pp. 100–103.

18 Kent 1907, pp. 9–10; Lin 1937, p. 23.

19 One of the largest shareholders was a Chinese man named Pan Yuen Cheong, about whom we know nothing. JMA A8/118/11, "Woosung Road Company: Abstract Cost of the Road," undated, probably 1873.

Daotai 道台 (Circuit Intendant), Shen Bingcheng 沈秉成, for permission to build a *malu* 馬路 (horse road, a phrase used in China for road) between Shanghai and Wusong.²⁰

The cloak of deception was not necessarily aimed at deceiving the Daotai, who probably knew the ultimate aim of the project. According to the British diplomats, the road company did not hide its true intention, and it was agreed between the Daotai and the foreign diplomats that the term railway should not be used in the official documents in order to avoid unwanted attention and to ease land acquisition.²¹ The United States Minister to China had talked about the railway project to Feng Janguang 馮煥光, then the manager of the Jiangnan Arsenal, and later to his superior Li Hongzhang, who confirmed that Feng had reported the matter to him.²² Even some of the Zongli yamen ministers knew about the project and had conversations with Thomas Wade about the political feasibility of building a railway line between Wusong and Shanghai.²³ Although no Chinese documents verify the British and American claims, senior Qing officials would not have ignored the reports of the Chinese newspaper, the *Shenbao*, which continuously followed the railway's development from May 1873.²⁴

After obtaining permission, the road company started to acquire the leaseholds on a strip of land between Shanghai and Wusong. It registered the land deeds at the Austrian consulate.²⁵ In March 1873, Shen Bingcheng, upon the request of Bradford, instructed the Shanghai and Baoshan 寶山 magistrates to put up proclamations, ordering the local people not to interrupt the road construction works.²⁶

If Qing officials knew about the railway, they were not aware of the builders' plot to build a telegraph line. In August 1873, the Great Northern Telegraphy Company built a landline on the strip of land the Woosung Road Company had already acquired.²⁷ The line was particularly important to Shanghai's foreign mercantile community because it connected to the submarine Hong Kong-Shanghai telegraph line, which was laid by Great Northern in 1870, and ultimately to London through Singapore and India. Soon, Shen Bingcheng protested to the British consul in Shanghai, Walter Medhurst. Medhurst replied that it was built by a Danish company and called for a meeting between foreign diplomats and the Daotai. Without having received a definite reply, Shen reported to his superior, who eventually reported to the Zongli yamen. Prince Gong (Gong Qinwang 恭親王) called for the telegraph line to be removed on the grounds that the treaty did

20 Alabaster participated in the meetings for forming the company but did not subscribe to any shares. F.O. 228/577, Chaloner Alabaster to Shen Bingcheng, 15 November 1872.

21 F.O. 228/577, Walter Medhurst to Feng Janguang, 23 February 1876, Walter Medhurst to Thomas Wade, 26 February 1876.

22 Currie 1966, pp. 56–57.

23 F.O. 228/577, "Memorandum of Interview with the Ministers of the Tsungli Yamen," 16 March 1876; "Memorandum No.1 Shanghai and Woosung Railway," Thomas Wade, 25 July 1876.

24 *Shenbao*, 6 May 1873.

25 Currie 1966, p. 52. According to the land regulations of the Shanghai international settlement, foreigners had to register land deeds with the consulate of their nationality. Afterwards, the consul should send the deeds to the Shanghai Daotai, asking him to affix his seal. Kotenev 1968, pp. 557–58.

26 F.O. 228/577, O. B. Bradford to Shen Bingcheng, 19 March 1873.

27 Baark 1997, pp. 77–79.

not allow it.²⁸ However, no real action was taken by the Qing government. That could well have given the Wusong railway proposers an impression that Qing officials might protest but would not really enforce their demands.

Coincidentally, Ransomes & Rapier, a railway equipment firm in England, conceived the idea of presenting a railway to the Qing court and, in 1873, gained the support of the Duke of Sutherland, the King of Belgium, and the Manchester Chamber of Commerce. Rapier designed a small locomotive, the *Pioneer*, which weighed only 22 hundredweight (cwt, 1 cwt = 50.8 kg) and could run 15 to 20 miles per hour. They planned to include it with some other contrivances such as a fire engine and a gaslight as wedding gifts for the Tongzhi Emperor. They hoped that the young emperor might order the introduction of those technologies after he had experienced the pleasure of using them. The Duke consulted Thomas Wade on the possibility that the Qing court might accept the gift. Wade replied, “Nothing can be done.”²⁹ Robert Hart was also requested by the English promoters to assist on this matter but, like Wade, felt pessimistic. He understood well that the Qing government lacked a railway policy. In a letter to his agent in London in August 1873, Hart contended that the Qing court’s way “was not to guide but to follow events.” That is to say, the Qing central government tended to react to what had been initiated by the people. Furthermore, he commented that there had been a telegraph line between Shanghai and Wusong not because the Zongli yamen agreed to the British diplomats’ petition but because of the telegraph company’s own action in building the line without bothering to ask Qing officials for permission. Likewise, Hart considered, foreign merchants in Shanghai knew well that the Qing government would not give them permission to build railways, so they bought a road between Shanghai and Wusong in the hope of changing it into a railway line.³⁰

In 1874, American shareholders withdrew from the railway project to avoid intervening in China’s internal affairs.³¹ Jardine took over the shares and incorporated the company in London.³² The company sent an engineer to Shanghai to give an estimate for the railway. The engineer recommended a standard gauge (4 ft. 8½ in.) railway and quoted £100,000. However, the available capital after reorganization was only £20,000, which was not enough to build a standard gauge railway.³³ Before a definite decision was made about the equipment, the firm continued to acquire land between Shanghai and Wusong and the new title deeds were registered in the British consulate. Specifically, in October 1874, Jardine acquired a plot of land on the north bank of the Wenzaobang 蘊藻濱 (known as the Woosung Creek to foreigners) in Baoshan County, which was beyond the

28 At that time, the governor-general of Jiangsu, Jiangxi, and Anhui was Li Zhongxi.

29 The small engine was originally designed as the gift for the Tongzhi Emperor. For a detailed description of Ransomes & Rapier’s involvement in this project, see Rapier, 1878, pp. 95–97.

30 Fairbank, Bruner, and Matheson 1975, p. 118.

31 It was based on the principle of the Burlingame Treaty between China and the U.S. of 1868. O. B. Bradford joined the railway company without the U.S. consul-general in Shanghai’s knowledge, who demanded the American shareholders withdraw. See Currie 1966, pp. 52–53, 81.

32 PRO BT 31/2000/8598, “The application for incorporation from the Woosung Road Company.” January 1874.

33 Rapier 1878, p. 96.

limit of the foreign concession. That particular plot of land would later trigger a dispute between Qing and British officials.

THE PUSH FOR THE WUSONG PROJECT AMID CHINA'S VOLATILE FOREIGN RELATIONS

While the Shanghai–Wusong telegraph/railway scheme was progressing, Japan's invasion of Taiwan changed the Qing government's attitude towards the telegraph, and the change would later influence the Wusong Railway project. In May 1874, Japan invaded Taiwan under the pretext of punishing the island's aboriginal people who had killed shipwrecked crews from the Ryūkyūs. While the Muslim rebellion in the northwest was still raging and threats from Japan, Russia, and Britain were apparent, senior Qing officials debated whether the government should put more resources into maritime or frontier defence. In addition to the issues of purchasing powerful guns and ironclads and training troops, Li Hongzhang specifically mentioned the benefit of the railway and the telegraph in transporting troops and transmitting intelligence.³⁴

The conclusion of the 1874 debate was to devote resources to both maritime and frontier defence and build up two naval squadrons.³⁵ Particularly, Shen Baozhen, then the imperial commissioner in charge of Taiwan defence, obtained imperial permission to lay a cross-strait telegraph line. Soon, the Fujian provincial government contracted Great Northern to build China's first government authorized telegraph line between Fuzhou and Mawei 馬尾, where the Fuzhou Naval Yard was located. The Fujian authorities also drafted another contract with the telegraph company for building a line between Fuzhou and Xiamen, a treaty port. Great Northern was to manage the line on behalf of the Qing government. Yet, Shen Baozhen protested the draft contract on the grounds that the Qing government should directly manage it. Fearing that other treaty powers might use the case to force their demands, the Zongli yamen instructed the Fujian authorities to cancel the Fuzhou–Xiamen project. While Great Northern, which had already started to stock telegraph materials for the project, refused to accept such an option, Qing senior officials, including Shen, suggested buying back the line.³⁶

Before a settlement was reached between the Qing government and the Danish company, China's foreign relations plunged into crisis again over the killing of a British diplomat. In 1874, a British expedition team, which was on a mission to survey a possible railway line and a trade route from British India through Burma to China, reached the Burmese-Chinese border. The British vice-consul Raymond Augustus Margary was sent from Shanghai to meet the team but was ambushed and killed by local natives in February 1875. The British government instructed Wade to demand that the Qing government pay an indemnity, carry out an investigation into the killing, and place on trial the local senior official under whose jurisdiction the incident took place. Wade used this opportunity to raise the issue of the audience procedure, transit dues, an apology mission

34 Memorial, 10 December 1874, *Li Wenzhong gong quanji*, Memorials, 24:22b–23a.

35 Rawlinson 1967.

36 Baark 1997, pp. 107–33.

to Britain, and, most importantly, the revision of treaty terms that gave more privileges to British merchants.

Against such a background, Jardine pressed ahead with the Wusong Railway project. Workers started to build the road bank in December 1874.³⁷ Meanwhile, the firm wanted to control its risk by limiting its capital investment. In spring 1875, two directors of the road company visited Ransomes & Rapier to contract the railway firm to provide a modified *Pioneer* (20 cwt) and a narrow gauge track (2 ft 6 in.) for £28,000. Even though the quotation was substantially lower than the standard gauge one, the road company's capital still could not pay the costs. An English railway contractor agreed to contract the construction work in accordance with the estimate in return for £20,000 in cash and the remaining £8,000 of shares in the company.³⁸

By November, Jardine applied to Feng Junguang through Medhurst for the "iron gears of the carriageway (*chelu* 車路)" to be exempted from customs duty and at the same time requested the Daotai to confirm the transfer of the land formerly registered in the Austrian consulate to the British consulate. All the railway equipment arrived at Wusong in December. The workers and engineers arrived in January 1876 and started to lay tracks. It seemed that the Wusong Railway project might be accepted by the Qing government. Nevertheless, Jardine was to face Shen Baozhen, who assumed the position of governor-general of Jiansu, Jianxi, and Anhui in 1875. Unfortunately no documents establish when Shen learned about the railway. As a diligent official, he would not have missed the reports from the *Shenbao*. Nor would his subordinates such as Feng Junguang dare to hide the fact from him. According to Medhurst, Shen ordered that the railway should not cross the Wenzaobang when he inspected the Wusong area in September 1875.³⁹ The order was soon to be carried out, but with a twist.

DISPUTES

In November 1875, the Baoshan magistrate arrested and severely beat the middleman, the *dibao* 地保 (the local headman), and the proprietor, all of whom were involved in the October 1874 land acquisition, condemning them for selling public land reserved for a hall of benevolence. The proprietor died of his injuries soon afterwards.⁴⁰ In January 1876, Medhurst received a petition from the middleman's wife, requesting him to instruct Jardine to return the land. After learning the unfortunate fate of the three men, Medhurst protested to the magistrate against the cruel punishment. In reply, the magistrate told a different story, stating that, under his superior Feng Junguang's order, he had measured the land and found the dimensions much smaller than the title deed stated. Besides, a widow had petitioned that the land was her own but had been fraudulently sold to

37 *Shenbao*, 19 December 1874, 25 December 25, 21 January 1875.

38 Rapier 1878, pp. 95–97. Currie 1966, p. 53.

39 F.O. 228/577, Walter Medhurst to Thomas Wade, 26 February 1876.

40 F.O. 228/577, "Ching Hsing's wife's petition to Magistrate," 30 November 1875; "A petition presented by a Chinese woman," 13 December 1875; "Magistrate's order," 14 December 1875; "Magistrate's order," 20 December 1875.

Jardine by her brother-in-law who posed as the proprietor. Hence, he ordered the three men to return the money to Jardine and restore the land.

Feeling that the treaty rights of British nationals had been violated, Medhurst protested to Feng Junguang, questioning why the issue of fraud was only raised one year after the land was acquired. He demanded a full investigation and Feng's confirmation of the title deed. Curiously, Feng gave a different reason from the Baoshan magistrate, stating that among the title deeds, two specific pieces of land could not be confirmed. One was at the foot of a dyke, which would cause interruption to local agricultural activities. The other one on the north bank of the Wenzaobang was in the immediate vicinity of the batteries, the maritime customs' house, the sea barrier, and the Baoshan county seat, which were not part of the treaty port. Furthermore, the sale was a fraud. Therefore, Feng requested that Medhurst instruct Jardine to give up the land.⁴¹

Neither the Baoshan magistrate nor the Shanghai Daotai mentioned the railway, but Medhurst could not help but suspect that their actions had something to do with it. He replied that the treaty permitted foreigners to lease land in the treaty ports so long as certain conditions were maintained, and local authorities should not interfere with foreigners' acquisition of land. He stated that: "As to the hindrance supposed to be occasioned by the [railway] to cultivation it seems curious that such an objection should only be raised now, after the land has been purchased [leased] and the road constructed." Hence, he rejected Feng's requests.⁴²

After Jardine started to test-run the *Pioneer* on the partly finished Wusong line in February, Feng suddenly formally protested the building of the railway.⁴³ Feng told Medhurst that he was astonished by a newspaper report about the railway. He complained that, first, foreign diplomats and merchants had deceived local officials in 1872 when they applied for permission to build a road; second, the treaty did not allow railway building; third, Wusong was not within the limits of the legal anchorage and the railway would become a means of smuggling; and fourth, a fraud had been committed in Jardine's land acquisition. Therefore, Feng demanded, the construction work had to be stopped.⁴⁴

Medhurst denied any deliberate deception because the railway project had been open knowledge since 1872. He argued that the treaty did not prohibit railway building, and as long as land was acquired in accordance with the treaty, the builders had a right to "turn it into a road and to run steam carriages upon such a road." The Daotai's refusal to confirm the title deeds was a direct violation of the treaty. He also contended that foreigners had a perfect right to acquire land in Wusong.

The two men presented two completely opposite understandings of the Treaty of Tientsin. For Feng, everything that was not explicitly mentioned by the treaty was forbidden. Yet, Medhurst considered that, as long as the treaty did not forbid railway building, it should be

41 F.O. 228/577, Walter Medhurst to Feng Junguang, 11 February 1876; Feng Junguang to Walter Medhurst, 18 February 1876.

42 F.O. 228/577, Walter Medhurst to Feng Junguang, 18 February 1876.

43 *Shenbao*, 17 February 1876.

44 Feng Junguang replaced Shen Bingchen as the Shanghai *circuit intendant* in 1874. F.O. 228/577, Feng Junguang to Walter Medhurst, 20 February 1876, 23 February 1876.

allowed. They agreed that the whole matter should be referred to the Zongli yamen and the British legation, and, pending Beijing's decision, the engine should stop running.⁴⁵

In Beijing, the relationship between Thomas Wade and the Qing government had been tense because of the Margary Affair. The Wusong Railway dispute made the situation even worse. By mid-March, Prince Gong wrote to Thomas Wade, requesting that the railway construction work be stopped on the grounds that it was not allowed by the treaty.⁴⁶ In reply, Wade protested the Daotai's actions, arguing that the railway was legal and that British nationals had the right to acquire land in Baoshan County because it fell into the category of "other places." He further explained that the aim of the Wusong Railway was to demonstrate the railway's "utility and harmlessness patent to the eyes of the Chinese government." Wade demanded that the *yamen* send an instruction to the provincial authorities to restrain Feng, or, he threatened, the British government would protect its subjects' rights.⁴⁷

In several interviews with the ministers of the Zongli yamen, Wade and William Mayers, the Chinese secretary at the British Legation, pointed out that the Wusong Railway project had been a well-known fact for years even among the Zongli yamen ministers. Wade argued that the British subjects' treaty gave them the right to acquire and build railways on land which they had acquired legally. Yet, the Zongli yamen ministers declined to admit knowledge of the railway project, arguing that China was aware of the benefits of railways and the government would take its own action in due course. They insisted that because the term "railway" was not mentioned in the treaty, foreigners were not allowed to build them. They refused Wade's demands and insisted that the dispute had to be settled locally.⁴⁸

In late March, Prince Gong wrote Wade a strongly worded note, rebutting Wade's argument. The prince contended that the British concession in Shanghai was "neither a transfer nor a lease of the land to the British crown" but merely an agreement that British subjects should be allowed to rent land for their personal accommodation within a certain space, and that "The land so acquired remained Chinese territory." The prince accused Medhurst of using misleading terms in the official documents and defended Feng's actions. He argued that it was impossible to give consent to railway building. "The fact is simply this," Prince Gong wrote, "That within Chinese territory, the Chinese government must [be admitted to] possess sovereign rights, and that in respect of undertakings not provided for by Treaty, and to the execution of which local circumstances are opposed, China should neither constrain herself to yield an unwilling consent, nor should she be constrained by foreign nations into giving sanction to their introduction."⁴⁹ Nevertheless, Wade refused to accept the prince's argument, and threatened again to refer the matter to the Royal Navy.⁵⁰

45 F.O. 228/577, Walter Medhurst to Feng Janguang, 23 February 1876.

46 F.O. 228/577, Prince Gong to Thomas Wade, 12 March 1876.

47 F.O. 228/577, Thomas Wade to Prince Gong, 13 March 1876, 16 March 1876, 17 March 1876, 18 March 1876; "Memo of Interview with Ministers of the *Tsungli yamen*," 8 April 1876.

48 F.O. 228/577, "Memo of Interview with Ministers of Yamen," 16 March 1876.

49 F.O. 228/577, Prince Gong to Thomas Wade, 22 March 1876.

50 F.O. 228/577, "Record of Interview with Ministers of the Yamen," 30 March 1876.

While Wade and Mayers were quarrelling with the Zongli yamen, the controversy between Feng and Medhurst intensified. Feng had the full support of Shen Baozhen, who had already regretted that the Qing government did not expose Jardine's plot earlier on to avoid the current dispute.⁵¹ Yet, Shen knew that China could not afford to further damage its relationship with Britain.⁵² Besides, Feng also had legal advice from a British lawyer in Shanghai, William Drummond, who was prepared to go to London to file a lawsuit against Jardine. Therefore, Feng knew he had strong political and legal grounds to keep pressure on the British diplomats by sending frequent protests to Medhurst.⁵³ In early March, Feng wrote to Medhurst conveying the provincial authorities' instructions to stop the works and to restore the two pieces of disputed land. Later he sent two of his subordinates to meet with Medhurst to forward once again Shen Baozhen's order. Feng even sent an interpreter to Medhurst, presenting money, asking him to restore the land on the north side. Shen also instructed the Baoshan magistrate to order the local people not to participate in the construction work of the railway and arrested a boatman who carried ballast for Jardine. Local people even presented a petition against the railway to Jardine. Medhurst felt Feng had breached his agreement not to interrupt the construction work and hence instructed Jardine to resume running the engine. He also protested to Feng. Feng replied that he had a perfect right to prevent the labourers from attending the work because he had not confirmed the title deeds.⁵⁴ In other words, Jardine did not have full rights over the land because the land transactions were not finalized.

WEAKENED BRITISH POSITION AND NEGOTIATION

Meanwhile, in Beijing, Wade was increasingly uncomfortable with the railway's legality. Although he took a hard-line position in front of the Zongli yamen ministers, he had already been uncertain about whether the railway could be pushed into the interior beyond the Wenzaobang.⁵⁵ Now he realized that the British did not have strong legal grounds. Hence, he instructed Medhurst to consult Sir Edmund Hornby, the chief justice of the British Supreme Court in China, and at the same time to do his best to continue the construction work.⁵⁶

At this moment, Jardine was disposed to compromise. The firm offered to give up the two disputed pieces of land in exchange for the work to be carried out.⁵⁷ However, Feng replied with an even stronger protest to Medhurst, reiterating the dishonesty and illegality

51 Shen Baozhen to Wu Yuanbing, undated, probably in late February/early March 1876. *Shen Wensu gong du*, vol. 2, p. 41.

52 Shen Baozhen to Feng Junguang, undated, probably in April 1876, *Shen Wensu gong du*, vol. 2, p. 70.

53 Shen Baozhen to Wu Dating, undated, probably in March 1876, *Shen Wensu gong du*, vol. 2, p. 67.

54 FO 228/577, Feng Junguang to Walter Medhurst, 8 March 1876; Walter Medhurst to Feng Junguang, 20 March 1876; Walter Medhurst to Thomas Wade, 20 March 1876.

55 F.O. 228/577, Thomas Wade to Walter Medhurst, 20 March 1876.

56 F.O. 228/577, Thomas Wade to Walter Medhurst, 29 March 1876.

57 F.O. 228/577, Walter Medhurst to Feng Junguang, 22 March 1876; Walter Medhurst to Thomas Wade, 28 March 1876.

of the railway as well as its potential to become a means of smuggling. He demanded stoppage of the construction work.⁵⁸

It worth noting that, although Wade and Medhurst focused on the legality of the railway, they did not address Feng's argument about smuggling. Medhurst once told Wade that freight services would be a natural consequence when the railway was completed.⁵⁹ Yet, Wade was puzzled as to why the Qing officials made an issue of it, because unless the Qing government gave permission, the existence of the railway would not make loading and unloading cargoes at Wusong legal.⁶⁰ As David Pong has noted, Medhurst failed to make the pledge to Feng that such irregularity would not happen despite Wade's questioning of his wisdom in not doing so.⁶¹ The issue would later prove one of the major factors that decided the Wusong Railway's fate.

Both British and Qing officials knew the result of the Fuzhou–Xiamen telegraph dispute. In March 1876, Ding Richang, the newly appointed governor of Fujian, settled the dispute with Great Northern. Both agreed that the Qing government would purchase the telegraph equipment, and the telegraph company would train young Chinese apprentices for a year.⁶² Yet they knew the difference between the Fuzhou-Xiamen telegraph and the Wusong Railway. As Shen Baozhen told Feng Junguang, Great Northern had permission at least from the provincial authorities, albeit no imperial permission, whereas Jardine completely lacked any formal acknowledgement from the Qing government. However, Jardine had backing from Wade. Therefore, although Shen was reluctant to entertain the idea of purchasing the railway because he considered it unprofitable and the funds for operating it difficult to find, he nevertheless understood that the tense Sino-British relationship did not allow him to demand more.⁶³

In early April, Wade sent Mayers to Shanghai to collect more information on his behalf.⁶⁴ Before reaching Shanghai, Mayers visited Li Hongzhang in Tianjin. Li had been playing a significant role in the negotiation over the Margary Affair but did not openly express his view about the Wusong Railway until now. He gave Mayers an outline of how the dispute might be solved: in order to respect Chinese sovereignty, the Qing government should assume the operation of the railway. A fair compensation could be paid to the railway builders on condition that they not be encouraged to look to the undertaking as a source of excessive gain. Li also suggested that Jardine should continue as the agent running the railway for at least ten years. Before Mayers left, Li asked him to pass on a letter to Feng Junguang.⁶⁵

58 F.O. 228/577, Feng Junguang to Walter Medhurst, 29 March 1876.

59 F.O. 228/577, Walter Medhurst to Thomas Wade, 23 February 1876.

60 F.O. 228/577, Thomas Wade to Walter Medhurst, 9 April 1876.

61 Pong 1973, p. 669, footnote 110.

62 Baark 1997, pp. 129–32.

63 Shen Baozhen to Feng Junguang, undated, probably in April 1876. *Shen Wensu gong du*, vol. 2, pp. 74–75.

64 F.O. 228/577, Thomas Wade to William Mayers, 6 April 1876.

65 Li Hongzhang had a different account of this event. He told the Zongli yamen and Feng Junguang that it was Mayers who asked for a letter to Feng. Li Hongzhang to the Zongli yamen, 11 April 1876, *Li Wenzhong gong quanji*, "Letters to the Zongli yamen," 4:44a; Li Hongzhang to Feng Junguang, 10 February 1876, *Li Wenzhong gong quanji*, "Letters to Friends and Colleagues," 16:10ab; FO 228/577, 5 May 1876, Mayers to Wade.

Mayers had arrived at Shanghai in mid-April when Medhurst received Hornby's legal opinion. The question put to the chief justice was whether the Daotai was right to protest the appropriation, for the purpose of a railway, of certain plots of land, which had been acquired in accordance with treaty stipulations, although the land deeds had not been confirmed by the Daotai. Hornby replied that, "As the Treaty limits the objects for which land is to be purchased, the Taotai [Daotai] has a right to protest against any of the lots of land being applied for the purpose of a railway," and hence he had a right to protest and refuse to transfer the title deeds for which he had not known the true purpose. Yet, Hornby explained, if the Daotai knew that a railway was to be built and quietly gave assent by allowing Jardine to acquire land, then he could not refuse to confirm the title deeds. Nevertheless, Hornby stressed, the railway was not specifically allowed by treaty, and the right of railway building had to be negotiated between the two governments, and no foreign power or its subjects had any right to devote land, no matter whether it was acquired legally or not, to the building of a railway without government approval.⁶⁶

In other words, if the Qing officials knew the land was being acquired for railway building, they might, if they wanted to, grant permission for such by implication. However, because the treaty limited what might be built in treaty ports, and railways were not included, foreigners had no right to build one. Hornby's view confirmed Feng's argument and gave the British diplomats little ground for negotiation. Since Li Hongzhang had argued that it would be better to allow Jardine to complete the railway, the only remaining question was whether the Qing government would allow Jardine to manage it and for how long.

Although not authorized by Wade, Mayers now became a negotiator on behalf of Jardine. Both the Qing and British sides largely agreed on the principle of compensation but could not agree on Jardine's agency. Li Hongzhang had suggested at least ten years because China lacked experience in managing railways.⁶⁷ Feng offered only one year. Mayers proposed eight years and managed to persuade Feng to extend his offer to three years. Feng, upon Li's suggestion, urged Mayers to meet with Shen Baozhen to see if the governor-general could be convinced. The British diplomat declined. Nevertheless, Feng withdrew his offer after he received letters from Li Hongzhang and Wu Yuanbing 吳元炳, the governor of Jiangsu, who was against any compensation for Jardine and against his firm operating the railway as agent. Mayers felt unable to continue the negotiation and left Shanghai.⁶⁸

On his way back to Beijing, Mayers visited Li Hongzhang again. Li was disappointed that the dispute was not settled and discussed the Margary Affair and the Wusong Railway frankly with Mayers. He even made some suggestions about Feng Junguang's propositions. However, after he received a letter from Feng, he withdrew them on the grounds that he had no jurisdiction over affairs in Shanghai.⁶⁹

66 FO 228/577, Sir Edward Hornby to Walter Medhurst, 15 April 1876.

67 Li Hongzhang to Feng Junguang, 10 April 1876, *Li Wenzhong gong quanji*, "Letters to Friends and Colleagues," 16:11ab.

68 FO 228/577, William Mayers to Thomas Wade, 5 May 1876.

69 FO 228/577, "Memorandum of Interviews with the Governor General Li Hung-chang at Tientsin," 30 April and 1 May 1876.

With negotiations suspended, the Wusong Railway's construction work continued. In May, more engines and rolling stock arrived. In late June, half of the projected line from Shanghai to Wusong was completed and opened. Local foreign and Chinese dignitaries were invited to take the trains. Thousands of local people went to see the spectacle.⁷⁰ Jardine's Shanghai partner saw no real action taken by either local people or Qing officials to stop the construction work. He wrote to the Hong Kong headquarters, saying: "No opposition [either from the local people or from government officials] is being shown to it and Thomas Wade thinks the undertaking may now be allowed to go on."⁷¹

Wade's confidence might have had to do with his tough position against the Qing government over the Margary Affair. To force the Qing government to accept British terms, in June British warships anchored off Wusong as a demonstration of force. Wade withdrew the legation to Shanghai and threatened to sever Sino-British diplomatic ties. Qing officials even heard a rumour that Wade had entered into a pact with Russia that the troops from the two countries could invade China from Ili and India.⁷² It was the lowest point in Sino-British relations since the Second Opium War. But, just when the Wusong Railway project might have ridden the tide of gunboat diplomacy to success, a fatal accident happened.

THE DEATH OF A MAN

In early August, a Chinese man was hit by the train and died. The firm immediately suspended construction work but was hopeful that the accident would not affect the whole railway project. The Shanghai partner wrote to the Hong Kong headquarters, stating that: "He [Thomas Wade] thinks that the Chinese will simply go on ignoring the line altogether. If so well and good." In reality, they knew they were under immense pressure to sell the railway to the Qing government. The same letter continued to say: "If [the Chinese do not ignore it], I think they would purchase it, in which case they would have it taken up and carried somewhere else."⁷³ In mid-August, the Shanghai partner suggested issuing debentures or preference shares and buying another engine, because he knew that the money would be paid if the Qing government bought the railway.⁷⁴ Soon, they were prepared to sell the railway.⁷⁵

In August 1876, Thomas Wade and Li Hongzhang met in Yantai 煙台, Shandong province, to discuss issues related to the Margary Affair and the Wusong railway. Neither side wanted the Wusong Railway dispute to further damage Sino-British relations and agreed to the purchase of the railway, with the details to be settled locally.

This resolution was not what Shen Baozhen really wanted. He complained to Wu Yuanbing that Wade had taken advantage of the Margary Affair to force China to comply with British demands:

70 *Shenbao*, 30 May 1876, 30 June 1876, 1 July 1876, 10 July 1876.

71 JMA C41/1, John Bell-Irving to William Keswick, 30 June 1876.

72 Hsu 1980, pp. 82–83.

73 JMA C41/1, John Bell-Irving to William Keswick, 6 August 1876.

74 JMA C41/1, John Bell-Irving to William Keswick, 12 August 1876.

75 JMA C41/1, John Bell-Irving to William Keswick, 15 August 1876.

If the proposition to buy the railway and stop its construction is workable, there is no need to open negotiations. Under the name of negotiation, we will have to satisfy their demands after all.

He was concerned about how to operate and fund the railway after the government took it over:

We do not know where the money to buy the railway will come from. It costs money to buy it, and money to run it. Moreover, we have to hire their people. We do not even know how much the yearly loss would be. Therefore, saying that [purchasing the railway is] protecting our rights is deceiving other people and also deceiving ourselves. It may be just as simple to let foreigners build it.

Furthermore, he was suspicious that the railway had something to do with loading and unloading cargoes at Wusong:

If we allow them to build it, in future they would definitely seek to unload cargo from ships in Wusong to avoid loss. Therefore, if we buy the railway back, run it, and pay for it ourselves, at the end of the day, they would still ask us to allow them to unload cargo in Wusong. So the same drawback remains. Why should we throw out huge sums of money and take the risk of becoming a laughingstock by putting our head in the sand?⁷⁶

That is to say, he understood the true purpose of the railway was to transport cargo, hence he felt either purchasing the Wusong railway or allowing Jardine to build it was problematic. He also wrote to Feng Junguang expressing a similar view.⁷⁷ Yet he knew he would have to compromise.

In October 1876, Mayers went on board a Royal Navy warship to Nanjing for negotiations. On the Chinese side, Li dispatched Sheng Xuanhuai 盛宣懷, one of his protégés and a director of the China Merchants' Steam Navigation Company, a Chinese owned joint-stock company formed under his political patronage and government subsidies, to assist Feng Junguang and Shen Baozhen.⁷⁸ In the meeting, Shen stated that Chinese sovereignty should not be infringed and the existence of the railway was inconvenient for local agricultural activities. Shen was so unwilling to allow the railway to carry on that he even offered 300,000 taels, which was 100,000 more than Wade had demanded from Li Hongzhang at Yantai, to be put on board the British warship in order to speed up the transaction.⁷⁹ Then, Feng and Sheng suggested that the railway could be moved to a coal mine in Taiwan or to the Jiangnan Arsenal in Shanghai. However, Mayers rejected both

76 Shen Baozhen to Wu Yuanbing, undated, probably in August 1876, *Shen Wensu gongdu*, vol. 2, p. 196.

77 Shen Baozhen to Feng Junguang, undated, probably in August 1876, *Shen Wensu gongdu*, vol. 2, pp. 200–201.

78 Li also sent Zhu Qiang, a director of the China Merchants' Steam Navigation Company. But Zhu was sick and hence unable to attend the negotiation meetings.

79 Li Hongzhang to Shen Baozhen, 14 September 1876. *Li Wenzhong gong quanji*, "Letters to Friends and Colleagues," 16:20ab.

proposals and demanded that a guarantee of a certain period of working the existing railway line be given to Jardine.⁸⁰ Finally, both sides settled on an agreement that the Qing government was to purchase the Wusong Railway from Jardine for 285,000 taels from maritime customs' revenue in three instalments and allow the firm to run the passenger service for one year.

After the agreement was reached, Jardine ran the Wusong Railway at a profit.⁸¹ The line was so successful that Jardine was confident, as ever, that he would be allowed to run the railway and therefore extended the contracts with the railway employees. The firm even ordered a new locomotive and named it the "*Viceroy*."⁸² However, none of this convinced Shen Baozhen. After the last of the three instalments was paid to Jardine in October 1877, Shen Baozhen ordered his troops to dismantle the railway, disregarding a petition from the foreign and Chinese mercantile communities, and shipped all the equipment to Taiwan. Interestingly, he left the telegraph line untouched.⁸³

Shen Baozhen might have agreed to purchase the Wusong Railway, but he never intended to allow the line to remain in place. As Mayers put it, Shen desired to "terminate the unpleasant complication by buying up the railway that had been constructed without official sanction and to remove the line."⁸⁴ Shen was also concerned that, financially, the railway would damage the Qing government's interests. In January 1877, he wrote to the Zongli yamen, expressing concern that a foreign-built railway might serve only foreign interests and damage the business of China Merchants' Steam Navigation Company.⁸⁵ In a letter to Guo Songtao 郭嵩濤, he explained that:

I am most willing to manage the railway. However, Wusong is not the right place, because it would be very hard to prevent smuggling if foreigners load and unload cargo there. Besides, there would be no funds to support the railway if we strictly follow the customs regulations. Therefore [I want to] change the useless into the useful, and use it as a basis for Taiwan's defence. In future [the railway] must benefit China's north-western territory.⁸⁶

That is to say, Shen completely distrusted foreign merchants' honesty in observing maritime customs regulations. He considered that the railway would unavoidably become a means for smuggling goods between Wusong and Shanghai.

Hence, Shen Baozhen preferred to move the equipment of the railway to Taiwan as part of the newly initiated defensive measures after the 1874 crisis. The Governor of Fujian, Ding Richang, was eager to introduce Western technology to the island and had already moved the equipment of the Fuzhou-Xiamen telegraph to southern Taiwan to be rebuilt

80 FO 228/577, William Mayers to Thomas Wade, 25 October 1876.

81 *The North China Herald*, 5 February 1877, 21 April 1877.

82 *The North China Herald*, 28 July 1877.

83 Baark 1997, pp. 83–84.

84 FO 228/577, William Mayers to Walter Medhurst, 27 October 1876.

85 Pong 1973, p. 669.

86 Shen Baohen to Guo Songtao, undated, probably in August 1877, *Shen Wensu gongdu*, vol. 2, p. 324.

in 1877.⁸⁷ In January 1877, he memorialized to the throne, suggesting building a railway on Taiwan for improving the island's defence.⁸⁸ He even invited the engineer of the Wusong Railway to Taiwan to conduct a survey. Both Li Hongzhang and Shen Baozhen supported the idea but Li had reservations about building railways due to the lack of funds.⁸⁹ The imperial court largely agreed with Ding's proposal, but did not provide the much-needed funds. Because of his worsening relationship with his immediate superior, the governor-general of Fujian and Zhejiang, and his own deteriorating health, Ding resigned in 1878 and left the Wusong Railway equipment unused.

Li Hongzhang's attitude towards the Wusong Railway was intriguing. He knew about the Wusong Railway project in 1872 but kept quiet about it and he must have kept a close eye on the development of the project through Feng Junguang.⁹⁰ In April 1876, his suggestion to purchase the railway became the foundation of William Mayers' negotiations with Feng Junguang. In two interviews with Mayers in late April and early May, he showed the intention of influencing the results of the negotiations but was concerned by his lack of authority to do so.⁹¹

The evidence suggests that he might have wanted to take the Wusong Railway into his network of patronage. Jardine's partner wrote to William Mayers saying that Tang Tingshu 唐廷樞, formerly Jardine's comprador, had told him some time ago that "Li had arranged to place the management of the line in the hands of the China Merchants [Steam Navigation] Company."⁹² Tang Tingshu (better known as Tong King Sing) was at the time one of the directors of the China Merchants' Navigation Company and the promoter of Li's new enterprise, the Kaiping Coal Mine (Kaiping Meikuang 開平煤礦) in Zhili province.⁹³ That could also be why in October 1876 Li sent Sheng Xuanhuai to help the negotiations.⁹⁴ In the end, Li was not happy that Shen moved the railway to Taiwan. Li wrote to his friend in July 1877 complaining that: "Youdan [Shen Baozhen] bought the [Wusong] Railway at a considerable cost and his intention was to dismantle it. I do not know what is in his mind."⁹⁵ Yet, he could not stop Shen from moving the railway to Taiwan. Later in 1878, he complained

87 Baark 1997, pp. 107–33.

88 *Yangwu yundong*, vol. 2, pp. 346–54.

89 Li 1961, pp. 69–70.

90 An interesting incident shows how much Li Hongzhang wanted to see railways built in China. In January 1875, he proposed to Prince Gong that a railway between Beijing and Qinjiang, the former seat of the governor-general of the Southern Grand Canal, could be built for transporting goods to Beijing. He urged the prince to present the idea to the Two Empress Dowagers but was rejected. Li Hongzhang to Guo Songtao, 11 July 1877, *Li Wenzhong gong quanji*, "Letters to Friends and Colleagues," 17:12b–13a.

91 F.O. 228/577, William Mayers to Thomas Wade 30 April and 1 May 1876.

92 Currie 1966, p. 84.

93 Tang's role is intriguing. He held shares in the Woosung Road Company, and, although there is no other evidence showing how deep his involvement in the negotiations was, it is likely that he shuttled between Li and Jardine, exploiting his relationships with the two sides, passing on information and probably making suggestions.

94 Li Hongzhang sent Shen Xuanhui and Zhu Qi'ang to Shanghai. Both were directors of the China Merchants' Steam Navigation Company and also holders of the official title Circuit Intendant. *Yangwu yundong*, vol. 6, p. 135.

95 *Li Wenzhong gong quanji*, "Letters to Friends and Colleagues," 17:15b.

that the railway equipment was left wasted on the island and criticized Shen for his narrow-mindedness and stubbornness.⁹⁶

Therefore, the purchase of the line was a compromise during tense Sino-British diplomatic relations. Although Li Hongzhang and Shen Baozhen might have disagreed about how the Wusong Railway should be used after takeover, neither of them intended to destroy it. Yet, their careful calculation of how it might serve the interests of the Qing government could not foresee Ding Richang's difficulty in obtaining funds, his resignation in 1878, or Shen Baozhen's untimely death in 1879. Nevertheless, these disappointments did not deter Li Hongzhang, who by 1878 already had in mind a plan for building China's railways. In 1876 and 1877, when Tang Tingshu was planning the establishment of the Kaiping Coal Mine, he suggested to Li Hongzhang that the mine could build a railway for transporting coal and passengers.⁹⁷ The British consul in Tianjin also expected the line to be built without difficulty.⁹⁸ Yet, the project was delayed and finally, in 1881, a railway was completed between the town of Tangshan, where the Kaiping Coal Mine was located, and the village of Xugezhuang, where a canal to the coast had already been built for shipping coal. It was a standard gauge line constructed by the British civil engineer Claude William Kinder.⁹⁹

It is amazing that Jardine was so confident that the Qing government would allow it to build the Wusong Railway. The line could serve multiple purposes. It could solve the Wusong Bar problem, bring in some profit, receive a submarine telegraph, and at the same time demonstrate the utility of railways. Had it been successful, Jardine might well have extended the railway to Suzhou, as originally planned, and would be well ahead of any other firms in opening up China's railway market.¹⁰⁰ Although it lost the Wusong Railway, the firm did not suffer any financial loss. The 285,000 taels compensation from the Qing government exceeded the initial cost of 220,000 taels for acquiring land and building the railway.¹⁰¹ Furthermore, the firm tried to turn the disappointing event into an opportunity to secure contracts from the Qing government for procuring mining machinery, railway equipment, and the banking businesses to support those heavy industrial investments. In September 1876, through Tang Tingshu, Jardine sent the engineer for the Wusong Railway to Yantai and secured interviews with Li Hongzhang, to "present [to] him the willingness and ability of the firm to float loans, construct railways, open mines or anything in fact that required influence and capital to back it."¹⁰² Therefore, Jardine was still hopeful that it might be engaged in railway building in China in the future.

96 *Li Wenzhong gong quanji*, "Letters to Friends and Colleagues," 18:6a.

97 Sun 1957, vol. 2, pp. 620, 625, 627.

98 Sun 1957, vol. 2, p. 622.

99 Kinder 1890/91, pp. 278–304.

100 F.O. 228/577, Medhurst to Wade, 26 February 1876.

101 Nearly 29,500 taels for purchasing land leaseholds and £28,000 for the equipment. JMA A8/118/11, Memoranda and Accounts, "The Woosung Road Company"; BT 31/2000/8598 Company Registration of the Woosung Road Company Ltd.

102 JMA C41/1, John Bell-Irving to William Keswick, 1 September 1876.

CONCLUSION

By the 1870s, the Qing government's lukewarm attitude towards railway building created a sense of conservatism in its approach to policy. Meanwhile, attracted by the potential profits of railway building and particularly the immediate benefits of solving the Wusong Bar problem, Jardine and its business associates formed a joint-stock company for building a line between Shanghai and Wusong. Knowing that the Qing government would not give its assent to their proposal, the firm decided to apply for permission to build a road by exploiting the legal grey area created by the Treaty of Tientsin. Interestingly, Qing officials knew the proposers' real intention but allowed them to acquire land and import equipment. They only made a protest after the railway was partly built. While British diplomats were eager to protect Jardine's interests, Qing officials, who were well informed on international law, tactically mounted pressure on their British counterparts in order to take control of the railway line. The final decision to let the Qing government purchase the railway had to do with the diplomatic tension caused by the Margary Affair and the legality as seen by both the Qing officials and the British Supreme Court in China. The railway was later moved to Taiwan, where, unfortunately, local officials never used it because the funds were never provided. Therefore, the final fate of the short railway line had to do with the Qing government's unreformed institutions that failed to raise funds for a capital-intensive project.

Politically, because the Qing government insisted that railway building and operation should be controlled by China, the Wusong Railway could have served a demonstrative purpose and helped the forming of a bolder railway policy had it been allowed to remain in Shanghai or rebuild on Taiwan. However, the fundamental problem of raising funds had to be solved. The fiscal system of the Qing government remained unreformed throughout the late nineteenth century. With growing demands for purchasing weaponry for improving maritime defence, the issue of railway building was always plagued by lack of funds in the 1880s and 1890s. In 1880, a suggestion for building a network of four railway lines with Beijing as the centre sparked fierce opposition from court officials. But the real concern was the building costs. The imperial court decided to set aside the proposal on the grounds that the government could not raise enough funds for such a project and the concern over the implications of foreign loans.¹⁰³ After the Sino-French War (1884–1885), the Admiralty was established for building naval forces and railways. Li Hongzhang's plans to extend the short Kaiping Coal Mine railway section by section to Tianjin met with funding difficulties. Foreign loans had to be obtained in order for the construction work to be carried out. At the same time, the railway line in Taiwan also suffered from funding difficulties and the construction work dragged on for four years.¹⁰⁴ By 1895, the Qing government had built only 179 miles of railway, which was a dismal record.¹⁰⁵

Therefore, institutional failure was the reason for the slow growth of railway building in late Qing China. In some European countries, railway building was funded by a combination of share capital, bank loans, and bonds. In societies that came late to railway building,

103 Mi 1963 vol. 1, pp. 102–3.

104 Li 1961, pp. 45–98.

105 Feuerwerker 1980, p. 52.

governments played a strong role in raising capital, for instance through banks. Government deposits accounted for a substantial part of the total resources of banks in countries where private resources were limited.¹⁰⁶ Meiji Japan is a good example of the importance of introducing such institutions to the concept of pooling capital for railway building.

By 1892, the Meiji government had built only 550 miles of railways, which was not significantly better than Qing China's record. Yet, in 1872, the Meiji government promulgated the National Banking Act and encouraged merchants and former feudal domain lords, who held commutation bonds issued by the government to relinquish their feudal rights, to form modern banks. These banks had the rights to issue inconvertible banknotes. By the 1880s, the shareholders of the Fifteenth National Bank were encouraged by the government's promise of subsidies and decided to invest in railway building. Under government subsidies, they purchased the shares of Nippon Railway, Japan's first privately funded joint-stock railway company, which later became Japan's largest.¹⁰⁷ The strength of this reform was such that by 1892, private entrepreneurs had built 1,320 miles of railways.¹⁰⁸

Therefore, for China to build a railway network, the Qing government had to launch radical institutional reforms to make forming banks and joint-stock companies a legal right, not a favour from the throne. Unfortunately, those reforms only came in 1904 in the aftermath of the disastrous Boxer Uprising (1900), in which the allied forces of eight nations occupied Beijing and again forced the imperial court to flee.

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