



# The Times

November 2012

A journal of transport timetable history and analysis



Inside: Timetable treasure from NLA  
Back again to the Deep South

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# The Times

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Peking-Hankow Railway map/timetable envelope

## Westby Lives!

Another letter on the Deep South, from Ross Willson

I refer [again] to the article published in the April issue of The Times about the branch line from The Rock to Westby.

The proposal submitted to the Public Works Committee contemplated a proposal for a railway from The Rock via Mangoplah and Pulletop to Garryowen, thence to Jingellic. A point of interest relating to this line is that the The Rock to Pulletop Railway Act, 1919 authorised a line from 332 to 355 miles.

The Schedule to the Act specifies the route as: COMMENCING at 332 miles from Sydney at a point on the Great Southern Railway immediately beyond The Rock Railway Station; thence running in a south-east direction to a point about 3 miles south of Pulletop Homestead, the line practically follows the main road and is to the south of Burke's Creek, passing through the holdings of Mangoplah and Pulletop, and terminates at 355 miles from Sydney, being a total distance of 23 miles, and subject to such deviations and modifications as may be considered desirable by the Constructing Authority.

The map accompanying the report of the Public Works Committee of 1916 shows the mileages of The Rock, Mangoplah and Pulletop as 332, 345 and 355. The Sydney Morning Herald of 24 January 1923 included a report from Wagga Wagga that the Minister for Works and  
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The Times

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welcomes articles and letters. Send paper manuscripts or word-processor files on disk or via e-mail to the editor at the address below. Illustrations should be submitted as clean sharp photocopies on white paper or scanned GIF or TIF format images with at least 300 dpi resolution on disk or via e-mail.

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# Peking-Hankow [Beijing-Hankou] Railway Timetable of 1909

DR. BRENDAN WHYTE, *Assistant Curator of Maps*, and MR. TING ZHAO, *map cataloguer*, at the National Library of Australia

*Transliteration note: The Romanisation of Chinese placenames, particularly for cities with a long history of contact with the West, is complicated by historical attempts to render their pronunciation into Latin, English, French, German and other languages. Over its history, the railway discussed here has been known as the Peiping-Hankow, Peking-Hankow, and Beijing-Hankou Railway, the last name using the now-standard pinyin transcription system. The first time a name is given herein in a non-pinyin form (e.g. Peking), it is followed by the pinyin name in square brackets (e.g. [Beijing]).*

Earlier this year (2012), the National Library of Australia purchased a collection of historical Asian maps. One of these was a 1909 Map of Peking-Hankow Railway with time table and fare table (The Times cover image), printed and published in Shanghai by the Commercial Press. The map and timetable were in pristine condition, despite their century-old age and the thin paper on which they were printed. Both were still folded inside the envelope in which they were originally sold.

Before describing and analysing the map and timetable, a brief history of railways in China up to 1914 is given, followed by a history of the Peking-Hankow [now Beijing-Hankou] line up to the present day.

## RAILWAYS IN CHINA PRIOR TO 1914

While a handful of enlightened Chinese had recognised the usefulness of railways from soon after their development in Europe in the 1830s, it was not until the 1860s that serious proposals were made, generally by westerners themselves, to construct railways in China. These early schemes were rejected by the authorities on a variety of grounds: fear of foreign political, economic and cultural penetration; peasant opposition to land acquisition and the disturbances to local feng shui (geomancy) that construction would entail, and also a general ideological reactionary opposition to modernisation. For example, an 1863 proposal by 27 foreign firms for a line west from Shanghai to Soochow [Suzhou] was ignored, along with the more extensive proposals of Sir MacDonal Stephensson in the same year, to link Hankow with Burma; and a toy railway built by a British merchant outside the Hsuan Wu [Xuanwu] gate of Peking in 1865, to promote railways, was suppressed by the government after a hostile local reaction. Likewise when a 10-km line from Shanghai to the Yangtze [Chang Jiang]



**Figure 2.** Reformist official Zhang Zidong (with white beard) inspects construction of the Peking-Hankow railway, 1903. Source: <http://www.cnhubei.com/200412/ca636651.htm>

River mouth at Woosung [Wusong] was constructed in 1875/6 by Jardine Matheson without authorisation, the Chinese government bought it up the next year and immediately dismantled it, the rolling stock being dumped on a beach in Taiwan!

The first non-abortive railway in China was finally built in 1881: a 10-km track from the Kaipeng coal mine at Tangshan near Tianjin. It was initially horse-drawn, but soon added a steam locomotive, known as “the Rocket of China” after Robert Stephenson’s famous locomotive of 1829. By 1894 this line had been extended nearly 300 km to become the Peking-Mukden [Beijing-Shenyang] line. By the same year an 80-km line was also in operation in northern Taiwan.

Thus by 1894, China had barely less than 400 km of track, and while the railway had been grudgingly accepted by mandarins and peasants alike, it was still viewed with suspicion. With China’s defeat in the Sino-Japanese War of 1895, however (as a result of which Taiwan was ceded to Japan), the glaring inferiority of Chinese power was revealed to the West as well as to the mandarins themselves. The imperial powers were quick to scramble for concessions of all kinds, not the least of which were railway concessions, while the Chinese realised they needed to modernise, and this meant promoting industry and improving internal transportation, both of which would be realised by railways. Despite the

last gasp of the reactionaries in the Boxer rebellion of 1900, the 20 years between the Sino-Japanese War and the First World War saw almost 10,000 km of railways laid in China, 77% of which was foreign-financed. But after Japan’s defeat of Russia in the Russo-Japanese War of 1904-5, the ‘scramble for concessions’ was over, as the Chinese sought to emulate the modernisation that the Japanese had already undertaken since opening up in the 1860s. With conservatism in retreat, the government encouraged locally-financed railway operations, and after the Republican revolution which overthrew the Qing dynasty in 1911, adopted a policy to nationalise all the concessionary lines. After the First World War, western investment in Chinese railways almost ceased as those nations concentrated on their own reconstruction. Political instability in China, and her default on some loan repayments in 1917 did not help. In comparison with the two decades prior to 1914, in the following twenty years to 1935, only 6000 km of track was built in China, of which only 22% was foreign financed.

## THE PEKING-HANKOW [BEIJING-HANKOU] RAILWAY

The story of the Peking-Hankow [Beijing-Hankou] line up to 1906 is most easily given by quoting a contemporary source. A French-language account of the new railway was given in *Le Mouvement Géographique* (#28, 1906), and the facts



**Figure 3** Dazhimen station, Hankou

from that article were anonymously summarised in English in a 1906 issue of the Bulletin of the American Geographical Society, under the title “The Peking-Hankow Railway”, which also reproduced the sketch map that accompanied the original article. The American summary reads:

*The line from Peking to Hankow is 753 miles [1212 km] long between the terminal points, with short branches to mines, adding about sixty miles [100 km] to the length of the track. It traverses, from north to south, the provinces of Pechili, Honan and Hupé [i.e. Hebei, Henan & Hubei], which are among the most populous of China. The construction of the road was begun at both ends of the lines at the end of 1898 and the opening of 1899. The northern section of the work had been extended for a distance of 114 miles [183 km] south of Peking when it was interrupted in May, 1900, by the Boxer revolt. A large part of the completed portion of the railway was destroyed, a considerable number of the employees were killed, and the final completion of the road was undoubtedly set back at least a year by the insurrection.*

*Early in 1901 order was sufficiently restored, through the military occupation of Peking by the Powers, to warrant the resumption of work. There was no further interruption of the enterprise, and it was steadily – though, according to Western ideas, not very rapidly – pushed until its completion towards the end of 1905. It was officially opened on November 12 of that year [Kent 1907, 104: 15 Nov.; Sun 1954, 130: 13 Nov.].*

A little more than half the road was built by the northern working force, which met the southern party a little to the south of the Hoang River [Huang He = Yellow River].

The railway was built by the “Société d’étude de chemins de fer en Chine” [i.e. Company for the Study of Railways in China], composed of a group of French and Belgian banks and some of the leading construction companies of the two countries. This company carried out the work under a revised concession granted by the Chinese government in June, 1898, under which the capital of the company, \$250,000, was augmented by the floating of bonds to the amount of \$22,500,000 [£4,500,000], guaranteed by the Chinese

Government and by the earnings of the railroad, the debt to be paid in twenty years after 1909.

Most of the material, fixed and rolling, was imported from Belgium and France. China having little timber, even the railway ties were imported, 130,000 of them coming from France, 50,000 from the Baltic countries, a small quantity from Oregon, and the remainder from Japan. The steel works of Hanyang, near Hankow, supplied about 75,000 tons of rails. A supplementary issue of bonds to the amount of \$2,500,000 [FFR12,500,000] under the same conditions as the first loan [5% interest, security being the railway itself], was floated in 1905 to meet the final expenses of the construction and rolling stock.

At the close of last year [i.e. 1905] there were in the service 101 locomotives, 145 passenger cars (first, second, and third class), and 2,200 freight cars of from 15 to 40 tons capacity [all of French or Belgian origin]. The foreign builders of the road have formed a mining company under the name of “Mines du Luhan,” which holds the concession for the development of several coal fields that will supply the railroad with an excellent quantity of fuel.

Although the line extends in part through a very hilly and even mountainous country, there are only two short tunnels, both of them piercing the hills immediately south of the Hoang [Yellow] River. There are, however, about 100 steel bridges from 650 to 2,200 feet [200 to 670 m] in length, besides the great bridge over the Hoang River, which is wholly constructed of metal, is nearly 9,900 feet [actually 9875’ = 2915 m] long, and is one of the great bridges of the world.

The abstract of statistics in the Chinese “Returns of Trade” for 1905 says that the work on the prolongation of this railway from Hankow to Canton [i.e. Guangzhou] was deferred until it should be settled who was to construct it and with what funds, but was resumed in March, 1906, under Chinese auspices and with Chinese capital.

To fill out this contemporary account, we can add that the Chinese government

**Table 1.** Peking-Hankow Railway balance sheet 1906-1913 (units: Chinese silver dollars)

	1906	1907	1908	1909	1910	1911	1912	1913
<b>Revenue</b>								
passenger	2,459,906	2,821,786	2,908,401	3,153,309	3,688,131	3,653,977	3,453,431	?
freight	4,739,545	5,287,696	6,692,774	7,762,238	8,308,039	7,433,183	10,042,633	?
other	233,565	414,840	834,388	453,256	421,918	595,467	409,469	?
<b>Total</b>	<b>7,433,016</b>	<b>8,524,322</b>	<b>10,435,563</b>	<b>11,368,803</b>	<b>12,418,088</b>	<b>11,682,627</b>	<b>13,905,533</b>	<b>17,441,818</b>
<b>Expenses</b>	<b>2,233,951</b>	<b>2,740,885</b>	<b>3,330,181</b>	<b>3,439,040</b>	<b>3,609,999</b>	<b>3,642,043</b>	<b>4,233,701</b>	<b>5,119,806</b>
<b>Profit</b>	<b>5,199,065</b>	<b>5,783,437</b>	<b>7,105,382</b>	<b>7,929,763</b>	<b>8,808,089</b>	<b>8,040,584</b>	<b>9,671,832</b>	<b>12,322,012</b>
% of revenue	70	68	68	70	71	69	70	71

planned the line from 1889, intending to build it by itself. But by 1896, attempts to raise local capital for the line, whether by government appropriations, private subscription, or both, had failed. Foreign capital was then sought, and the negotiations leading up to the awarding of the contract to the Franco-Belgian syndicate “precipitated one of the acute periods of the ‘Battle for concessions’” by the various imperial powers (Rhea 1919, 94). The negotiations are described by Kent (1907, 96-103), who notes that even while these were in progress, the Chinese had begun construction themselves at both ends of the line from 1896, so that the Belgian concessionaire actually began its construction in 1898 from Baoding (km 146), not the initial Beijing terminal of Lukouchiao [Lugouqiao]. When construction restarted after the Boxer rebellion, the line was extended 15 kilometres from Lugouqiao to the very walls of Peking, directly outside the southern, Qianmen or Zhengyangmen, gate. This caused the line, hitherto known as the Lu-Han line (from the first two syllables of the terminal stations) to become the Pe-Han line (and it has since been renamed the Jing-Han line using the last two syllables of Beijing and Wuhan).

With the line proving very profitable even before its full completion, the Chinese were eager to free themselves of the 20% profit and management control vested in the Belgians by redeeming the loan, and did so in 1908 by means of a 30-year Anglo-French loan of £5,000,000 that left control of the line in Chinese government hands from 1 January 1909, albeit with many French technical staff (for details on the redemption, see Lee 1977, 211-223). This loan, underwritten by the Hong Kong and Shanghai Banking Corporation and the Banque de l’Indochine, was at 5% interest until 5 October 1923 and 4½% thereafter, and secured on salt revenues, and sundry taxes in the provinces of Chekiang, Kiangsu, Hupeh and Chihli [Zhejiang, Jiangsu, Hubei & Hebei].

So from 1909 to 1911 the line was managed by the Qing, and after 1911 by the Republican, governments. It comprised fully a quarter of China’s railway mileage in the first year of the republic, and generated good profits in its first decade of operation, transporting 15% of the country’s coal production. A balance sheet for the years 1906 to 1913 is given by Charignon (1914) and reproduced in part in Table 1 on Page 4. The currency is the Mexican silver dollar, the standard international currency of East Asia at the period, and to which the Chinese yuan had been pegged at par in 1889.

Table 1. Peking-Hankow Railway balance sheet 1906-1913 (units: Chinese silver dollars)

Over the period 1906-1912, passenger revenue increased almost 50%, freight revenue had more than doubled, and total revenue, expenses and profits had all increased by about 90%. Profit continued to be good until 1917, in which year extensive floods destroyed much of the track and many bridges.

An early description of the line is given by Kent (1907, 106-108):

*The gauge is standard (4’8½”), and the rails, a considerable portion of which have been turned out by the Hanyang Government Iron Works, weigh approximately 85 lbs. to the yard [i.e. 42.2 kg/m] the railway serves a thickly populated country of splendid possibilities. Running north from Hankow, for the first 60 or 70 miles [100 km] it traverses a well-watered region of great fertility. Then, for a time, the nature of the country changes, the plain giving place to picturesque hills, for the most part clad with young valleys. Embankments and cuttings carry the line ever upward until it reaches the mouth of the tunnel, the first to be constructed in China, that pierces the Hwaiyang [Dabei] Mountains, dividing the Yangtze Valley from the basin of the Yellow River. At Hsinyang [Xinyang] the plain is again reached, and for miles the line runs through an orchard country, the commencement of the Great North China Plain, stretching away to the north and the north-east beyond Peking towards the Great Wall.*

*The characteristic of the greater portion of this great plain is the unique development of the famous loess deposit, with its wonderful fertility, which renders North China one of the most productive grain-producing regions in the world. It is of interest too, in that its inhabitants, at least in the southern portion, are largely cave-dwellers. [...] And as one travels by the railway, something of this phenomenon can be observed when approaching the south bank of the Yellow River, where a series of loess hills rise with ingeniously contrived cave-dwellings at varying altitudes in the hillsides.*

*To proceed, however, the line, in brief, traverses a richer country agriculturally than that traversed by the Peking-Newchwang [i.e. Peking-Mukden = Beijing-Shenyang] line, and when the Peking Syndicate’s concession areas in Honan and Shansi [Henan & Shanxi provinces] have been developed it will serve what is thought to be one of the most inexhaustible coalfields in the world. Furthermore, a concession has been obtained for working valuable mines in Lincheng [70 km S of Shijiazhuang], in the province of Chihli [Hebei], in connection with the railway.*

*Again, the importance of the two terminals must not be overlooked in estimating the factors that should make for success. In the north is the capital, with a great population, supplied to a large extent with the necessaries of life from the rich plains to the south-west, while at the southern terminal lies primarily Hankow, the third treaty port in China, with Hanyang in the angle formed by the confluence of the Han River and the Yangtze, and Wuchang on the opposite bank of the Yangtze in close proximity. These three cities form together the industrial centre of China, the “Chicago of the East,” as they have been called, and between them boast several factories, including a large match factory, antimony ore works, the Hupeh Arsenal and Small Arms factory, and the important Hanyang Government Iron and Steel Works. Furthermore, in course of time the rich province of Shensi [Shaanxi] will be reached by the branch line between Kaifengfu [Kaifeng] and the capital city of Hsianfu [Xi’an], so that there should be every chance of favourable development in that region.*

This expected development did, indeed, occur. Myer (1985) notes that the line “provided the means by which hundreds of thousands of farmers were able to participate in handicraft production, grow cash crops, and thereby earn additional nonfarm income; it helped to create new financial institutions; it produced additional demand for products from the Hanyang Iron and Steel Works [opposite Hankou]; and it made it possible for the government to obtain more salt-tax revenue after its reform of the salt-monopoly system.” But the line also had some negative economic effects: “Its managers discouraged any new railroad construction into Shansi [i.e. Shanxi province] which might develop that province’s rich coal resources; the line often displaced workers from water and overland transportation services”.

A later study shows that adds that cotton, tobacco and sesame cultivation spread along the line simultaneously with construction, that there were increased merchant activities and peasant expectations, and that the line helped alleviate the famines of Shanxi and Shaanxi provinces in 1920-21; but otherwise benefits for the peasant appear inconclusive. The line was also plagued by inefficiencies: “expensive foreign experts, corruption, waste of resources, overstaffing and nepotism” (Edmonds 1988). Huemann (1984) holds that railways did not lead to new movements of goods, only to cheaper and quicker movement, with less spoilage and loss, along traditional routes, and that this held even for the Peking-Hankow line which as late as the 1930s was one of only six Chinese lines that did not have direct

京漢鐵路圖

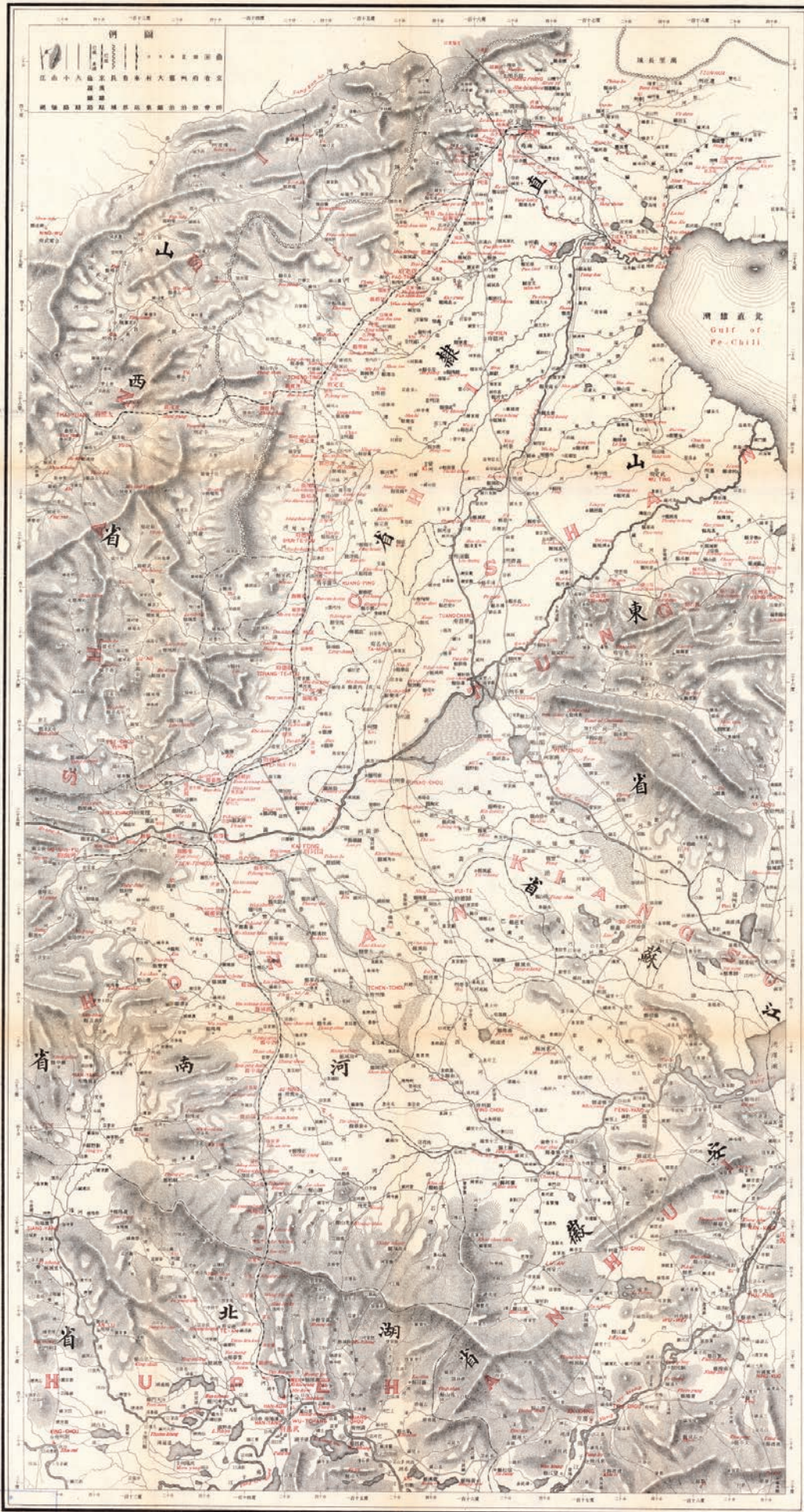


Figure 4.  
Peking-Hankow Rail-  
way map

water-route competition.

The profits and developments of the 1910s and early 1920s reversed abruptly in the middle of the latter decade when deteriorating efficiency and profits reflected China's economic stagnation and decline, affected in no small part by the political instability and civil war into which the country descended.

In 1936, the southern continuation of the line, begun in 1905, from Wuchang, on the southern bank of the Yangtze opposite Hankow, to Canton [Guangzhou] was completed. Thereafter, apart from a ferry connection over the Yangtze, passengers could ride direct from Peking to Canton.

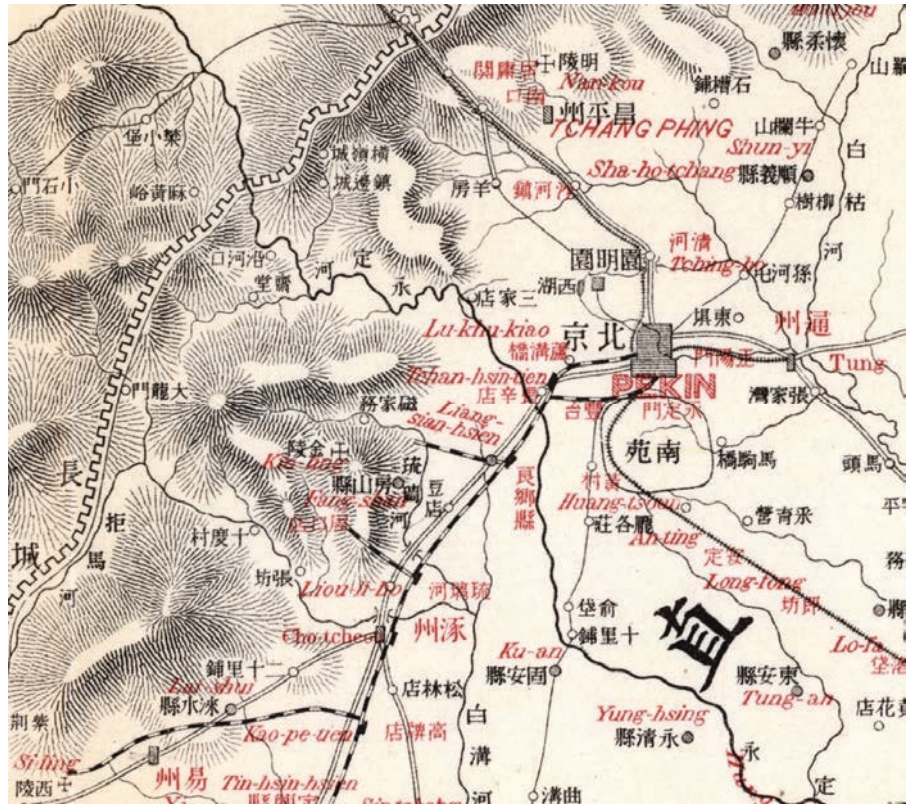
Much of the line and its rolling stock were dismantled or deliberately destroyed in the face of the Japanese advances into China in the late 1930s and early 1940s. The line was restored after the 1945, and direct connection to the southern Wuchang-Canton line was made when the first bridge over the Yangtze, a double-deck road-rail bridge, was completed with Russian assistance, opening on 15 October 1957, replacing the former ferry service. This bridge, called the Wuhan Yangtze River Bridge, was so important a project, that it featured on the 2-jiao banknote 1962-2000 (Figure 4). This connection, via Hanyang, consolidated the three sister cities of Wuchang, Hankow and Hanyang, each on a separate bank at the confluence of the Han and Yangtze rivers, into a single metropolis since known as Wuhan. Being the backbone of China's north-south communication, the line had been mostly doubled by 1957-58.

In April 1960, the 3015-metre 102-span single-track bridge of 1905 across the Yellow River north of Zhengzhou was replaced a couple of hundred metres downstream by a 2890-metre double-track bridge of 71 spans. The piles of the original bridge can still be seen today (e.g. on GoogleEarth).

By the 1990s, the line had been electrified (25kV, 50Hz), but with the need for speed in such a large and populous country, a new high-speed line paralleling the original line was proposed. Construction began on the southern Wuhan-Guangzhou section in 2005, and it opened in 2009; construction on the northern section from Wuhan to Beijing began in 2008 and the scheduled opening is set for 1 October 2012. An extension at the southern end to Kowloon in Hong Kong is expected to open in 2015.

**THE 1909 PEKING-HANKOW RAILWAY TIMETABLE AND MAP**

The 90x48 cm 1909 map is printed on a portrait 100x59 cm sheet. The 30x50 cm landscape timetable is on a 39x55 cm sheet. Both came folded in a 34x18 cm portrait envelope (Times cover).



**Figure 5.** Peking-Hankow Railway map (detail around Peking)

**THE MAP**

The map (Figures 4 & 5) is at a scale of about 1:1,425,000 and was engraved in a fairly typical cartographic style for the time. Relief is shown by hachures, which make the mountain ranges stand out as 'fuzzy caterpillars'. The map detail is entirely in black, except for all Romanised placename text which has been overprinted in red in an unidentified early Romanisation system (neither Pinyin nor Wade Giles). The Chinese names read top-to-bottom or right-to-left (which is confusing for Sinophones today used to reading left-to-right), yet the longitudes along the top and bottom margins read left-to-right! The main Peking-Hankow line and its stations are shown, as well as the several branches of that railway (but

without any stations). From north to south the branches are (see also Figure 8):

- two connections from Peking, one in the east and one in the south of the walled city, both branches converging at Tchan-hsin-tien [Changxindian];
- three short branches to the west: 16 km from Liang-sian-hsien [Liangxian Xiang] to T'oli [Tuoli]; 16 km from Liou-li-ho [Liuli He] to coal mines at Chou-k'ou-tien [Zhoukoudian]; and 43 km from Kao-pe(i)-tien [Gaobeidian] to Liang-ke-chuang [Lianggezhuang] to access the Western Qing tombs which are now a UNESCO World Heritage site (the last 10 km of this branch have since been removed back to Yi Xian);



**Figure 6.** 2-jiao note featuring Wuhan Yangtze River.

Timetable goes on these two pages



Timetable goes on these two pages

Timetable northbound trains				
Express (2nd, 3rd class) dep. every Friday with sleepers and dining car	Ordinary train (2nd, 3rd class)	Ordinary train (2nd, 3rd class)	Ordinary train (2nd, 3rd class)	Stations
	dep 7.40 am			玉带门 Yudaimen
dep 10.45 am	arr 7.50 am, dep 8.00 am	dep 3.10 pm		大智门 Dazhimen
11.00 am	8.10 am	3.30 pm		汉口江岸 Hankou Jiangan
---	8.37 am	4.05 pm		滠口 Shekou
---	9.07 am	4.54 pm.		祁家湾 Qijiawan
---	9.36 am	5.45 pm.		三阜 Sanyifu
---	9.59 am.	arr 6.15 pm.		孝感县 Xiaogan Xian
---	10.27 am			萧家港 Xiaojiangang
1.45 pm	11.00 am			花园 Huayuan
---	11.24 am			王家店 Wanjiadian
---	11.48 am			杨家店 Yanjiadian
2.45 pm	12.25 pm			广水 Guangshui
---	12.50 pm			东董店 Donghuangdian
3.41 pm	1.25 pm			新店 Xindian
---	1.46 pm			李家寨 Lijiazhai
---	2.04 pm			柳林 Liulin
arr 4.47 pm, dep 5.00 pm	arr 2.35 pm, dep 2.50 pm			信阳州 Xinyang Zhou
---	3.31 pm			长台关 Changtaiguan
---	4.00 pm			明港 Minggang
---	4.29 pm			新安县 Xin'an Xian
---	5.05 pm			确山 Queshan
arr 7.09 pm, dep 7.20 pm	arr 5.32 pm, dep 7.10 am next day			驻马店 Zhumadian
---	7.37 am			遂平县 Suiping Xian
---	8.12 am			西平县 Xiping Xian
8.38 pm	8.45 am			郾城县 Yancheng Xian
---	9.22 am			临颖县 Liying Xian
arr 9.41 pm, dep 9.56 pm	arr 9.55 am, dep 10.10 am			许州 Xuzhou
---	10.40 am			和尚桥 Heshangqiao
---	11.07 am			新郑县 Xinzheng Xian
---	11.45 am			谢庄 Xiezhuang
arr 11.45 pm, dep 12.00 am	arr 12.19 pm, dep 12.34 pm			郑州 Zhengzhou
---	1.02 pm			荣泽县 Rongze Xian
arr 12.46 am, dep 1.10 am	arr 1.19 pm, dep 1.44 pm			黄河 Huanghe
---	1.59 pm			詹店 Zhandian
---	2.25 pm			亢村 Kangan
arr 2.21 am, dep 2.37 am	arr 2.56 pm, dep 3.10 pm			新乡县 Xinxiang Xian
---	3.27 pm			潞王坟 Luwangfen
3.17 am	3.52 pm			卫辉府 Weihuifu
---	4.27 pm			淇县 Qi Xian
---	4.54 pm			滑县 Huan Xian
---	5.20 pm			汤阴县 Tangyin Xian
arr 5.14 am, dep 5.25 am	arr 5.54 pm, dep 7.10 am next day			彰德府 Zhangdefu
---	7.34 am			丰乐镇 Fenglezhen
---	8.03 am			磁州 Cizhou
---	8.28 am			马头镇 Matouzhen
---	8.52 am			邯郸县 Handan Xian
---	9.21 am			临洺关 Linmingguan
---	9.51 am			沙河县 Shahe Xian
arr 8.12 am, dep 8.25 am	arr 10.10 am, dep 10.25 am			顺德府 Shundefu
---	10.59 am			内邱县 Neiqiu Xian
---	11.28 am			镇内 Zhennei
---	11.42 am			鸭鸽营 Yageying
9.42 am	11.59 am			高邑县 Gaoyi Xian
---	12.25 pm			元氏县 Yuanshi Xian
---	12.45 pm			冀延 Jiyuan
10.48 am	1.19 pm	dep 6.35 am		石家庄 Shijiazhuang
arr 11.11 am, dep 11.16 am	arr 1.38 pm, dep 1.46 pm	arr 6.54 am, dep 6.58 am		正定府 Zhengdingfu
---	---	7.12 am		新安 Xin'an
---	---	7.31 am		东长寿 Dongchangshou
---	2.31 pm	7.49 am		新乐 Xinle
---	---	8.04 am		寨西店 Zhaixidian
12.30 pm	3.00 pm	8.25 am		定州 Dingzhou
---	---	8.43 am		清风店 Qingfengdian
---	---	9.03 am		望都 Wangdu
---	---	9.18 am		方顺桥 Fangshunqiao
---	---	9.33 am		於家庄 Yujiazhuang
arr 1.45 pm, dep 2.00 pm.	arr 4.15 pm, dep 4.29 pm	arr 9.49 am, dep 10.05 am.	dep 6.45 am	保定府 Baodingfu
---	---	10.12 am	7.05 am	漕河 Caohe
---	---	10.43 am	7.32 am	安肃县 Ansu Xian
---	---	11.03 am	7.56 am	固城 Gucheng
---	---	11.27 am	8.24 am	定兴县 Dingxing Xian
3.19 pm	5.42 pm	11.15 am	8.48 am	高碑店 Gao Beardian
---	---	12.11 pm	9.20 am	涿州 Zhuozhou
---	---	12.32 pm	9.43 am	琉璃河 Liulihe
---	---	12.58 pm	10.13 am	良乡县 Liangxiang Xian
arr 4.24 pm, dep 4.26 pm	arr 7.00 pm, dep 7.05 pm.	arr 1.14 pm, dep 1.25 pm	arr 10.30 am, dep 10.43 am	长辛店 Changxindian
---	---	1.38 pm	10.58 am	卢沟桥 Lugouqiao
---	---	1.53 pm	11.13 am	跑马场 Paomachang
arr 5.00 pm	arr 7.45 pm	arr 2.10 pm	arr 11.40 am	北京前门 Beijing Qianmen
				Stations

Stations							
玉带门 Yudaimen		arr 5.10 pm					1214
大智门 Dazhimen	arr 3.00 pm	arr 4.40 pm, dep 5.00 pm.	arr 12.10 pm		65.4 yuan	43.8 yuan	1209
汉口江岸 Hankou Jiangan	arr 2.50 pm	4.36 pm	11.55 am		65.1 yuan	43.5 yuan	1205
汉口 Shekou	---	4.05 pm	11.21 am			42.9 yuan	1192
祁家湾 Qijawan	---	3.33 pm	10.30 am			42.3 yuan	1172
三阜 Sanyifu	---	3.04 pm	9.38 am			41.7 yuan	1153
孝感县 Xiaogan Xian	---	2.43 pm	dep 9.00 am			41.1 yuan	1140
萧家港 Xiaojia gang	---	2.18 pm				40.5 yuan	1126
花园 Huayuan	12.35 pm	1.50 pm			59.7 yuan	39.9 yuan	1106
王家店 Wanjiadian	---	1.16 pm				39.3 yuan	1090
杨家店 Yanjiadian	---	12.52 pm				38.7 yuan	1075
广水 Guangshui	11.25 am	12.29 am			57.3 yuan	38.4 yuan	1061
东董店 Donghuangdian	---	11.50 am				37.8 yuan	1048
新店 Xindian	10.30 am	11.17 am			55.8 yuan	37.2 yuan	1034
李家寨 Lijiazhai	---	10.59 am				37.2 yuan	1028
柳林 Liulin	---	10.38 am				36.6 yuan	1018
信阳 Zhou	arr 9.06 am, dep 9.20 am	arr 9.51 am, dep 10.05 am			53.7 yuan	36.0 yuan	996
长台关 Changtaiguan	---	9.12 am				35.1 yuan	973
明港 Minggang	---	8.44 am				34.5 yuan	957
新安县 Xin'an Xian	---	8.15 am				33.9 yuan	943
确山 Queshan	---	7.42 am				33.3 yuan	920
驻马店 Zhumadian	arr 6.42 am, dep 6.47 am	arr 5.45 pm, dep 7.15 am next day			48.6 yuan	32.7 yuan	901
遂平县 Suiping Xian	---	5.20 pm				31.8 yuan	882
西平县 Xiping Xian	---	4.45 pm				30.9 yuan	850
郾城县 Yancheng Xian	5.00 am	4.14 pm			45 yuan	30.0 yuan	834
临颖县 Linying Xian	---	3.35 pm				29.1 yuan	806
许州 Xuzhou	arr 3.24 am, dep 3.44 am	arr 2.45 pm, dep 3.00 pm			42.3 yuan	28.2 yuan	780
和尚桥 Heshangqiao	---	2.17 pm				27.3 yuan	759
新郑县 Xinzheng Xian	---	1.50 pm				26.7 yuan	740
谢庄 Xiezhuang	---	1.12 pm				25.8 yuan	716
郑州 Zhengzhou	arr 1.13 am, dep 1.23 am	arr 12.21 pm, dep 12.36 pm			37.3 yuan	24.9 yuan	694
荣泽县 Rongze Xian	---	11.54 am				24.3 yuan	674
黄河 Huanghe	arr 12.17 am, dep 12.42 am	arr 11.16 am, dep 11.41 am				24.0 yuan	664
詹店 Zhandian	---	10.58 am				23.7 yuan	656
亢村 Kangan	---	10.32 am				23.1 yuan	638
新乡县 Xinxiang Xian	arr 10.50 pm, dep 11.00 pm	arr 9.44 am, dep 9.59 am			33.3 yuan	22.2 yuan	614
濉王坟 Suwangfen	---	9.29 am				21.9 yuan	604
卫辉府 Weihui	10.12 pm	9.06 am			31.8 yuan	21.3 yuan	589
淇县 Qi Xian	---	8.29 am				20.4 yuan	565
滑县 Jun Xian	---	8.02 am				19.8 yuan	548
汤阴县 Tangyin Xian	---	7.33 am				19.2 yuan	529
彰德府 Zhangdefu	arr 8.12 pm, dep 8.22 pm	arr 7.15 pm, dep 7.00 am next day			27.3 yuan	18.3 yuan	507
丰乐镇 Fenglezhen	---	6.53 pm				17.7 yuan	492
磁州 Cizhou	---	6.24 pm				17.1 yuan	473
马头镇 Matouzhen	---	5.59 pm				16.5 yuan	457
邯郸县 Handan Xian	---	5.35 pm				15.9 yuan	442
临漳县 Linzhang Xian	---	5.06 pm				15.3 yuan	423
沙河县 Shahe Xian	---	4.36 pm				14.7 yuan	403
顺德府 Shundefu	arr 5.45 pm, dep 6.00 pm	arr 4.00 pm, dep 4.15 pm			21 yuan	14.1 yuan	390
内邱县 Neiqiu Xian	---	3.28 pm				13.2 yuan	364
镇内 Zhennei	---	2.59 pm				12.3 yuan	343
鸭鸽营 Yageying	---	2.45 pm				12.0 yuan	335
高邑县 Gaoyi Xian	4.36 pm	2.32 pm			17.7 yuan	11.7 yuan	327
元氏县 Yuanshi Xian	---	2.03 pm				11.1 yuan	309
袁斌 Douyu	---	1.42 pm				10.8 yuan	295
石家庄 Shijiazhuang	3.39 pm	1.17 pm	arr 7.54 pm		15 yuan	9.9 yuan	277
正定府 Zhengdingfu	arr 3.12 pm, dep 3.17 pm	arr 12.43 pm, dep 12.51 pm	arr 7.31 pm, dep 7.35 pm		14.1 yuan	9.6 yuan	262
新安 Xin'an	---	---	7.18 pm			9.3 yuan	253
东长寿 Dongchangshou	---	---	6.59 pm			8.7 yuan	239
新乐 Xinle	---	12.00 pm	6.42 pm			8.1 yuan	227
寨西店 Zhaixidian	---	---	6.26 pm			7.8 yuan	217
定州 Dingzhou	2.00 pm	11.31 am	6.09 pm		11.1 yuan	7.5 yuan	205
清风店 Qingfengdian	---	---	5.47 pm			6.9 yuan	192
望都 Wangdu	---	---	5.28 pm			6.6 yuan	178
方顺桥 Fangshunqiao	---	---	5.12 pm			6.0 yuan	168
於家庄 Yujiazhuang	---	---	4.57 pm			5.7 yuan	158
保定府 Baodingfu	arr 12.29 pm, dep 12.46 pm	arr 10.01 am, dep 10.15 am	arr 4.24 pm, dep 4.40 pm	arr 7.45	8.1 yuan	5.4 yuan	146
漕河 Caohe	---	---	4.08 pm	7.28 pm		4.8 yuan	135
安肃县 Ansu Xian	---	---	3.49 pm	7.05 pm		4.5 yuan	122
固城 Gucheng	---	---	3.28 pm	6.37 pm		3.9 yuan	109
定兴县 Dingxing Xian	---	---	3.04 pm	6.09 pm		3.3 yuan	92
高碑店 Gaobeidian	11.14 am	8.50 am	2.49 pm	5.50 pm	4.5 yuan	3.0 yuan	84
涿州 Zhuozhou	---	---	2.20 pm	5.12 pm		2.4 yuan	64
琉璃河 Liulihe	---	---	1.59 pm	4.47 pm		1.8 yuan	50
良乡县 Liangxiang Xian	---	---	1.32 pm	4.13 pm		1.2 yuan	31
长辛店 Changxindian	arr 9.55 am, dep 9.57 am	arr 7.32 am, dep 7.35 am	arr 1.07 pm, dep 1.15 pm	arr 3.44 pm, dep 3.53 pm		9 jiao	21
卢沟桥 Lugouqiao	---	---	12.55 pm	3.32 pm		6 jiao	15
跑马场 Paomachang	---	---	12.41 pm	3.17 pm		3 jiao	7
北京前门 Beijing Qianmen	dep 9.20 am	dep 7.00 am	dep 12.05 pm	dep 3.00 pm	[0]	[0]	[0]
Stations	Express (2nd, 3rd class) dep every Friday with sleepers and dining car	Ordinary train (2nd, 3rd class)	Ordinary train (2nd, 3rd class)	Ordinary train (2nd, 3rd class)	Express train tickets in 2nd and 3rd class are 2/3 and 1/3 of the 1st class ticket price respectively.	Ordinary train tickets in 2nd and 3rd class are 2/3 and 1/3 of the 1st class ticket price respectively.	Distance from Beijing (km).

Timetable Southbound Trains

- a short branch of 3-4 km east from Pao-ting [Baoding] to Nankuan;

- a 230 km branch west from Huo-lu-hsien [Shijiazhuang] across the Great Wall to Taiyuan in Shanxi province;

- two branches from Hsin-hsiang-hsien [Xinxiang Xian] on the north side of the Yellow River: 120 km west to coal mines at Tse-chou [Zezhou, now Jincheng] and 75 km northeast to mines at Tao-khou [Daokou, now Hua Xian] respectively (the latter line had closed by 1968);

- two branches from Tsen-tcheou [Zhengzhou] on the south side of the Yellow River: 125 km west to Ho-nan-fu [Luoyang] and 70 km east to Kai Fong [Kaifeng] respectively;

- a short branch west from Ho-shang-kiao [Heshangqiao, now Changge] to a mine or quarry.

The map also shows other existing and proposed railways (all of which are still functioning today). The existing lines shown are:

- a section of the Peking-Mukden [Beijing-Shenyang] line into Manchuria via Tientsin [Tianjin], built 1881-1897;

- a line north from Peking through the Great Wall towards Mongolia;

- a short branch east from Peking to Tung [Tong, now Tongxian], completed in 1902, at the northern end of the Grand Canal;

- a line from the German concession of Tsingtao [Qingdao] off the map westwards to Tsi-nan [Jinan], built 1900-1904, with a 39 km southern branch from Chang-tien [Zhangdian] to Po-shan [Boshan].

The proposed line links Tientsin [Tianjin] via Tsi-nan [Jinan] southwards to Phu'kow [Pukou] on the north bank of the Yangtze opposite Nan-king [Nanjing], generally following the route of the Grand Canal.

Finally the map also shows province boundaries, and major and minor roads.

#### THE TIMETABLE: DESCRIPTION

Despite the bilingual title on the envelope, the separate timetable is only in Chinese (pp 8-9). Perhaps the original envelope came with two timetable sheets, one in each language, and the original purchaser

of this copy took and used the English timetable, and so it is only the unused map and Chinese timetable that remained to be bought by the library a century later?

Chinese at this time was written in columns from top to bottom, with the columns progressing from right to left (this has since been modernised in most situations to the standard western system of rows written left to right and read from top to bottom). Thus each station name, time, fare and distance are written downwards in their cells. The timetable has a title at the top of the page, and then paired instructions to read left-to-right for northbound Hankou to Beijing trains in the top rows, and right-to-left for southbound Beijing to Hankou trains in the bottom rows. Then there are 12 rows: the first four being for the northbound trains, a middle row with station names, four more rows for southbound trains, then an express train fare table, an ordinary train fare table, and finally a table of distances from Beijing measured in li.

The timetable is written in traditional Chinese characters, which are still used in Taiwan and Hong Kong. In the mainland, however, after the Communist Party took control in 1949, one of their reforms to increase literacy was to simplify many characters. An example is the two-character word for train 火車 (huo che, literally "fire chariot"). Note that the second character, "chariot", looks like a chariot viewed from above. This character was simplified to 车, which is obviously easier to write, but unfortunately loses some of its pictorial etymology.

In western countries there are words for numerals (one, two, three) and separate numerals or digits (1, 2, 3). Chinese does not have this distinction, the characters for numbers being both word and numeral at the same time. The numbers used in the times, fares and distances utilise the standard Chinese digits (which did not need further simplifying), yet note how only the distances include the numeral 0. Western numbers use the position of each digit within a number to indicate its value in terms of powers of ten (e.g. 321 means '3 hundreds, 2 tens and 1 one') and therefore a 0 is necessary as a placeholder to indicate when there are none of a particular power of ten present (e.g. 301 means '3 hundreds,

0 tens and 1 one'). In contrast traditional Chinese numbers are written with a specific character for each power of ten following the number of multiples of that power (e.g. 321 is written 三百二十一 i.e. 3 100 2 10 1); when a particular power of ten is not present in a number, it is simply left out: 301 is written 三百一 (i.e. 3 100 1), without any need to explicitly state that there are no tens in the number.

It is not clear why the time and fares in the timetable use the traditional numbering system, while the distances use the western system (and have to adopt a zero character to do so). Current Chinese-language timetables (thankfully!) use the western numbering system and digits for times, probably because it this results in numbers of uniform length (e.g. 4 digits in a 12 or 24-hour clock) which makes it much easier to scan a list of times. For example, even if you don't read Chinese, note how much easier it is to scan and compare the cells of the distance table than the time or fare tables.

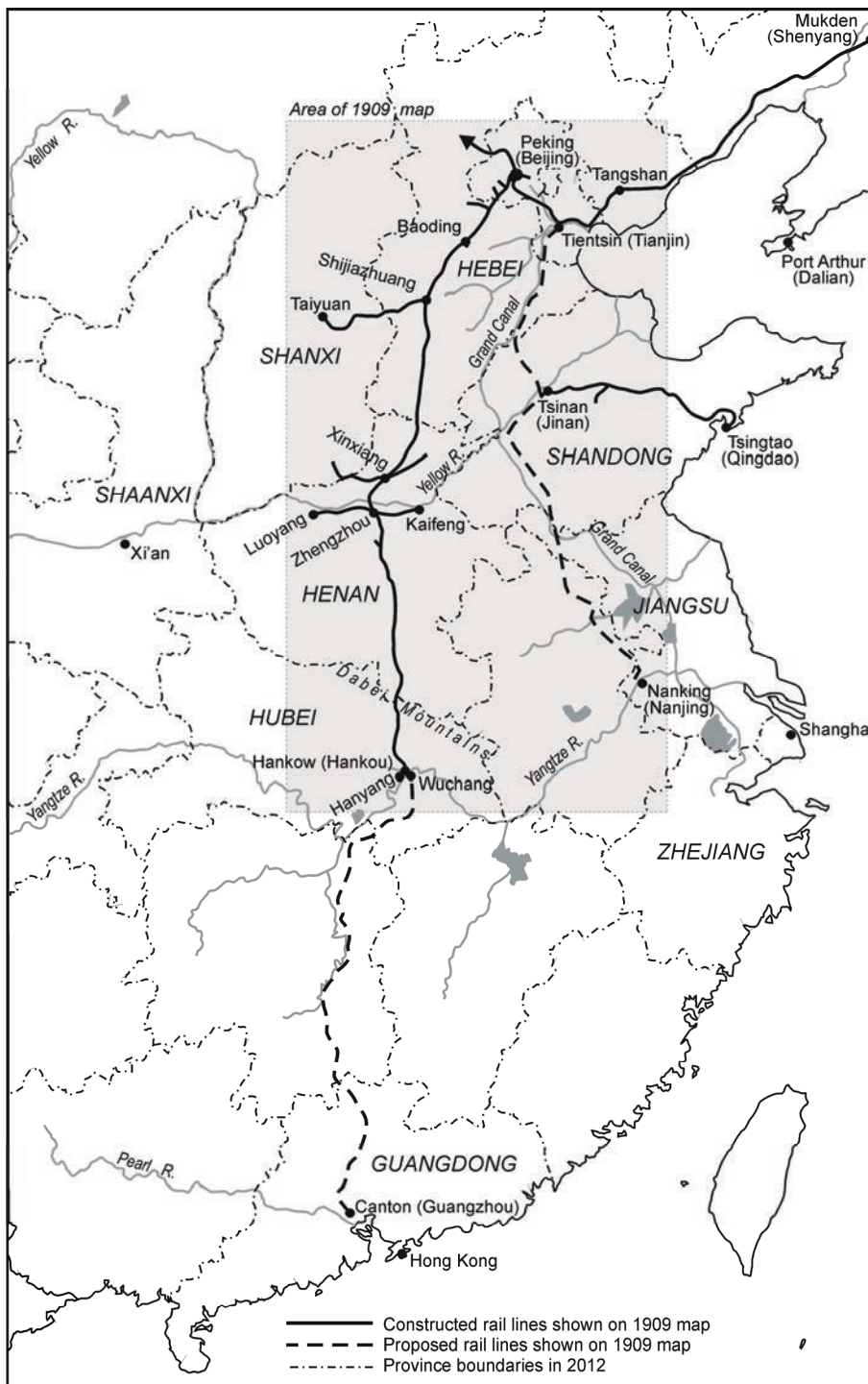
Note also that the standard Chinese numeric characters are quite simple. To avoid fraud in financial transactions (where someone could easily doctor a cheque or set of accounts by adding a few strokes to 三十 (30) to get 五千 (5000)), a more complicated set of 'banker's numbers' also exists (known as da xie, 大寫; simplified: 大写), which prevent such digital manipulation, but these do not appear on the timetable.

For the departure and arrival times in the timetable, the format is: <time of day><time><arrival/departure indicator>. Only at the initial departure point, or a changeover in time of day, is time of day (i.e. a.m. or p.m.) indicated, using one or two characters before the time: 早 (zao), 晨 (chen), 早晨 (zao chen) or 上午 (shang wu) for different periods in the morning (i.e. up to 11 a.m.); 午 (wu) for noon (i.e. 11 a.m. to 1 p.m.); 下午 (xia wu) for afternoon (i.e. after 1 p.m.); and 夜 (ye) or 夜裏 (ye li; simplified: 夜里) for midnight. However, the northbound Yudaimen-Beijing ordinary has no indication at all whether it leaves at 7:40 a.m. or pm, but this must have been an inadvertent omission.

The number of hours (using a 12 hour clock) is followed by the character for hour

Western	0	1	2	3	4	5	6	7	8	9	10	100	1000
Normal Chinese	〇	一	二	三	四	五	六	七	八	九	十	百	千
Banker's Numbers	零	壹	貳	參	肆	伍	陸	柒	捌	玖	拾	佰	仟
Pinyin	líng	yī	èr	sān	sì	wǔ	liù	qī	bā	jiǔ	shí	bǎi	qiān

Table 3. Chinese numerals explained



**Figure 8.** Sketch map of eastern China showing extent of 1909 map extent and the railways it portrayed

(點 = dian; simplified: 点), then the number of minutes, and the character for minute (分 = fen).

The origin and destination stations have their times followed by 開 (kai; simplified: 开) for departure and 到 (dao) for arrival, as do any stations with separate arrival and departure times. The through ordinary train stops overnight at both Zhumadian and Zhangdefu around 6 p.m., and begins again about 7 a.m. the next day; this is shown by ...到息 (dao xi = 'arrive rest') and 次

晨...開 (ci chen... kai = 'next morning...depart').

Fares are given in currency units and sub-units: 元 (yuan; Chinese silver dollar) and 角 (jiao), where 1 yuan = 10 jiao (= 100 fen (分) = 1000 wen (文)). Yuan, jiao and fen are still the monetary units in (Red) China today.

Distances are given in li (里), a traditional Chinese unit of distance that varied in length in different eras. Possibly due to the influence of the French and Belgians in the

construction and operation of this line, a metricated li is used here, equal to 500 metres. This remains the official definition of the li today. Note that the character for li, 里, is not given after each distance, unlike the times and fares which each include the appropriate units (hours/minutes or yuan/jiao) in every cell of their rows.

**THE TIMETABLE: ANALYSIS**

For ease of reading, a translated and transposed version of the timetable is given in Tables 2A and 2B, using Pinyin for place-names and a 24-hour clock for times.

The first column is a weekly express train, leaving Dazhimen in Hankou each Friday morning at 1045, and arriving at Beijing Qianmen on Saturday evening at 1700. Of the 79 stations on the route, this train starts at the second, and stops at only 20 of the 76 intermediate stations before terminating at the end of the line. This train has sleeping and dining cars, so only needs to stop for coal or water.

The second column is for a daily ordinary train, leaving earlier than the express, and from the first station, Yudaimen in Hankou. It stops at all stations to Zhangdingfu (the 57th), but then only 5 of the next 21 before reaching the end of the line at Beijing Qianmen. This train takes three days to cover the whole route; having no sleeping cars, it stops by 1800 each night, in Zhumadian and Zhangdefu respectively, before steaming onwards at 0710 the following morning. These two overnight halts are over 13 hours each in total; most other timetabled halts are only 15 minutes each. Besides the lack of sleeping cars, this train appears not to have a dining car, so passengers presumably had to take their own food, or buy pre-made meals from platform vendors through the windows of the cars, or possibly from hawkers patrolling the corridors between stations.

The third and fourth columns are for daily local (commuter?) trains running north only a few stations at each end of the line: one from Dazhimen in Hankou to Xiaogan Xian, a 3-hour trip to cover 69 km; and one each from Shijiazhuang and Baodingfu to Beijing Qianmen, 277 and 146 km respectively.

In the other direction, southbound, the operational pattern is the same: one express each Friday and a daily ordinary train along the whole length of the line (the ordinary train leaving first and only stopping at 5 of the first 21 stations); and three daily short-haul 'commuter' trains, one at the Hankou end of the line, and two at the Beijing end.

A summary of the five trains in each direction is given as Table43.

The Hankou local runs up to Dazhimen, allowing country peasants three hours

before the return down journey.

At the Beijing end of the line, the local up from Baodingfu also gives country folk three hours in the capital, but the up from Shijiazhuang arrives two hours after its respective down has already departed (the up and down meet, for barely one minute, at Changxindian). One suspects the trains alternated destinations, running Shijiazhuang-Beijing-Baodingfu one day and Baodingfu-Beijing-Shijiazhuang the next.

### Fares

The two columns of fares give first class fares for express and ordinary trains respectively, both costed from the Beijing Qianmen. Presumably fares between any other pair of stations is simply the difference in the fares from Beijing to each of those two stations (e.g. Yudaimen to Zhengzhou ordinary first class would be 43.8 - 24.9 = 18.9 yuan). Ordinary fares are 2/3 the price of express fares. For some reason no express fare is given either Changxindian or to Huang He despite the express stopping at both stations. On a pro-rata basis, these fares should be about 1 and 36 yuan respectively. For both express and ordinary trains, second and third class fares are 2/3 and 1/3 respectively of the appropriate first-class fare. The ratios of fares by train type and class are given in

Table 45

The first-class express fares work out at about 18.5 km/yuan (or 0.54 jiao/km), and first-class ordinary fares at 27.7 km/yuan (0.36 jiao/km).

Table 6 gives approximate exchange rates in 1909 for Chinese, US and UK currencies (the Australian pound was not introduced until 1910).

Therefore a 65.1 yuan first-class express ticket from Peking to Hankou Jiangnan was equivalent to about US\$32.55 or £6/10/2½. A third class ordinary fare of 14.5 yuan in contrast was about US\$7.25 or £1/9/-.

### Distances

Measured from Beijing Qianmen, the distances have been converted from li to kilometres in the translated timetable. In Figure 6, stations have been plotted against their distances from Beijing. The straight line is the distance expected if the stations were all equally spaced. The stations in fact graph as a very shallow S-curve, indicating that stations close to each end of the line are spaced closer together, and those around 2/3 of the way from Beijing to Hankou are spaced further apart. Such a pattern is of course expected for a line such as this that joins two large important cities, and crosses a mountain range 2/3 of the way to

	Ex-press	Ordinary
First class	4.5	3
Second class	3	2
Third class	1.5	1

Table 5. Fare ratios by class and train type

Hankou, and therefore has more stations close to the two terminal cities on the flat, densely populated plains, and fewer in the middle mountainous section of the line between the Yellow and Yangtze rivers.

### 1909 vs. 2012

It is interesting to compare the 1909 timetable and fares with those of 2012, just over a century later. Ignoring the high-speed line which is expected to open in a couple of months, only standard trains connecting the two cities are considered here. A search of <http://www.chinatrains.com/stntostn.php> for trains between Beijing West and Wuhan Hankou returns six trains in each direction each day (Table 7), of which only two in each direction originate or terminate at Wuhan Hankou, the others running via Wuhan Hankou between Beijing and cities further south. (A number of other trains to and from Beijing pass through Wuhan Hankou without

Direction	Origin	Destination	Type	Freq.	Dep.	Arr.	Dist. (km)	Total time	Total halts	Run time	Speed (total) (km/h)	Speed (run) (km/h)	% time in halt
N-S	Beijing Qianmen	Dazhimen (Hankou)	Exp.	weekly	0920 Fri	1500 Sat	1209	29h10	2h13	26h57	41.5	44.9	7.6
N-S	Beijing Qianmen	Yudaimen (Hankou)	Ord. through	daily	0700	1710 +2 days	1214	58h10	27h39	30h31	20.9	39.8	47.5
N-S	Beijing Qianmen	Shijiazhuang	Ord. local (down)	daily	1205	1954	277	7h49	0h28	7h21	35.4	37.7	5.9
N-S	Beijing Qianmen	Baodingfu	Ord. local (down)	daily	1500	1945	146	4h45	0h09	4h36	30.7	31.7	3.2
N-S	Xiaogan Xian	Dazhimen (Hankou)	Ord. local (up)	daily	0900	1210	69	3h10	0	3h10	21.8	21.8	0
S-N	Dazhimen (Hankou)	Beijing Qianmen	Exp.	weekly	1045 Fri	1700 Sat	1209	30h15	2h20	27h55	40.0	43.3	7.7
S-N	Yudaimen (Hankou)	Beijing Qianmen	Ord. through	daily	0740	1945 +2 days	1214	60h05	29h00	31h05	20.2	39.1	48.2
S-N	Shijiazhuang	Beijing Qianmen	Ord. local (up)	daily	0635	1410	277	7h35	0h31	7h04	36.5	39.2	6.8
S-N	Baodingfu	Beijing Qianmen	Ord. local (up)	daily	0645	1140	146	4h55	0h13	4h42	29.7	31.1	4.4
S-N	Dazhimen (Hankou)	Xiaogan Xian	Ord. local (down)	daily	1510	1815	69	3h05	0	3h05	22.4	22.4	0

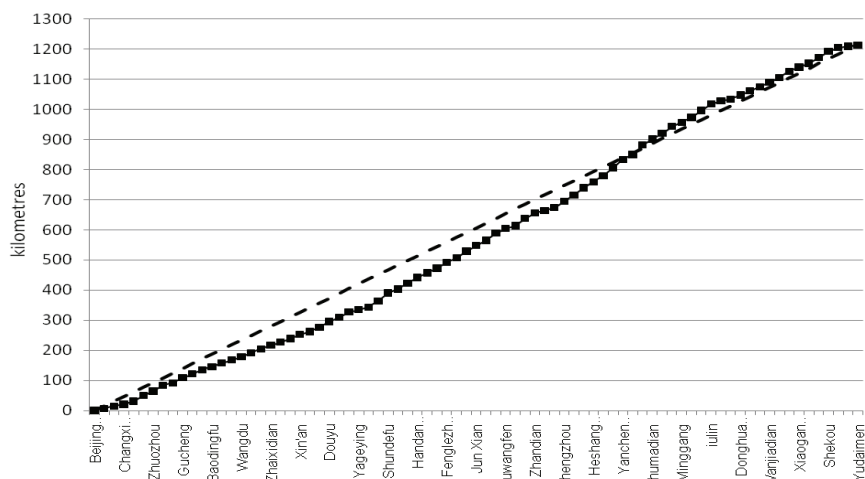
Table 5 1909 timetable summary

	Yuan	US\$	UK sh.
Yuan 1	--	0.50	2/-
US \$1	2.0	--	4/-
UK 1sh.	0.5	0.25	--

**Table 6.** 1909 exchange rates

stopping, halting at Wuhan Wuchang on the other side of the Yangtze instead. They are not considered here). Thus the terminal station columns are titled ‘to’ and ‘from’ rather than ‘origin’ and ‘destination’ as used Table 3 for the 1909 timetable.

So in the course of a century, besides the incredible extension of Chinese railways, which continues today as high-speed lines are added to the network, there has been a more than five-fold increase in the number of through trains serving Beijing and Hankou from 8 to 42 per week in each direction. Travel time has reduced from 29h10 to as little as a third of that: 9h41, and conversely average speed has almost tripled from 40-45 km/h to up to 124 km/h. If the yuan of 2012 can be considered the same currency as that of 1909, then fares have increased 6.6 times for the most expensive fares (1909 1st class express vs. 2012 upper berth soft sleeper) and tenfold for the cheapest fares (1909 3rd class ordinary vs. 2012 2nd class seat), but such a comparison is rife with caveats. At 6.5 yuan per AUD\$1, current Chinese fares on this line range from about AUD\$23 to \$66 for the 1200 km journey. Compare that to the current 1691km Brisbane-Cairns route: 24 or 31 hours at 70 or 55 km/h (tilt train or Sunlander respectively) for a massive \$265 to \$479 fare range. The Chinese



**Figure 9.** Distances of stations from Beijing Qianmen superimposed on a line indicating hypothetical equidistant stations.

trains offer sleepers for one-sixth the price and go at twice the speed as our fastest long-distance trains. It’s certainly something to ponder during the endless, expensive hours of your next interminable long-distance Australian trip...

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Train no.	From	To	Freq.	Dep.	Arr.	Total time	Dist. (km)	Speed (km/h)	Fare Seat (2nd/1st cl.)	Fare Hard sleeper (lower/middle/upper)	Fare Soft sleeper (lower/upper)
D121	Beijing West	Wuhan Hankou	daily	0839	1852	10h13m	1205	118	284/355	---	---
D125	“	“	daily	0952	1959	10h7m	1205	119	284/355	---	---
T5	“	“	daily	1544	0257 +1 day	11h13m	1205	107	154/---	265/275/284	412/431
Z3	“	“	daily	2053	0634 +1 day	9h41m	1205	124	---/246	---	412/431
Z77	“	“	daily	2111	0708 +1 day	9h57m	1205	121	154/246	265/275/284	412/431
K619	“	“	daily	2311	1531 +1 day	16h20m	1196	73	149/---	257/266/275	399/417
T6	Wuhan Hankou	Beijing West	daily	0039	1202	11h23m	1205	106	154/---	265/275/284	412/431
K620	“	“	daily	0519	2108	15h49m	1196	76	149/---	257/266/275	399/417
D126	“	“	daily	0806	1819	10h13m	1205	118	284/355	---	---
D124	“	“	daily	0905	1919	10h14m	1205	118	284/355	---	---
Z78	“	“	daily	2024	0647 +1 day	10h23m	1205	116	154/246	265/275/284	412/431
Z4	“	“	daily	2110	0654 +1 day	9h44m	1205	124	154/246	265/275/284	412/431

**Table 7.** 2012 Beijing—Hankow timetable

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**Figure 10.** Opening of Wuhan Yangtze River Bridge, 15 October 1957

(Continued from page 2)

Railways had instructed the Commissioners to commence a new railway from The Rock to Pullitop and Mangoplah.

Two notices, dated 11 March 1924, were gazetted under subsection 151(5) of the Public Works Act, 1912 providing for the construction by the Railway Commissioners of a railway, 26 miles 9.29 chains in length, from The Rock to Pulletop. The plan and book of reference could be seen in the head office in Bridge Street and at the Court of Petty Sessions, Wagga Wagga. A map was published in the Herald of 16 February 1923 – the distance was quoted as 25 miles. This railway was confirmed by a notice dated 6 June which was gazetted on 13 June 1924. However, the mileages quoted in the working timetable indicate that the Westby line was 25 miles 45 chains in length. It would thus seem that advantage was taken of the underlined proviso contained in the Schedule to extend the line and that it was not constructed for the full distance so sanctioned.

The first sod was turned at Mangoplah on 15 February 1923 and the line opened on 5 August 1925. The Daily Advertiser (Wagga Wagga) of 5 August reported that an official opening “will not be held for some time” because of commitments of the Minister.

Weekly Notice No. 31 of 1925 referred to Pullitop – its spelling was altered to Pulletop by a notification in WN No. 32.

The cessation of operation of the railway was retrospectively authorised by section 3 of the Government Railways and Transport (Amendment) Act, 1961 with effect from 10 July 1956. The last train had operated from Mangoplah to Westby on 16 January 1952 shortly before the destruction of this section by bushfires on 24-25 January.

The question of closing railways needs some explanation. Many lines in NSW have been closed and removed without any involvement by Parliament. Those few Acts passed relating to the closure of some railways, such as the Ballina to Booyong (Cessation of Operation) Act, 1953, while retrospectively (in that case back to 1948) sanctioning the closure and extinguishing rights, relate principally to providing that the railway land “... may be dealt with as superfluous lands under the Public Works Act, 1912, ...”.

Paragraph 5(3)(b) of the Transport Administration Act 1988 made it clear that the State Rail Authority could alter or discontinue any of its railway services. Section 92 of this Act provided that “Unless otherwise (formally) directed by the Minister, the ... Authority is not required to maintain a railway line on which it does not operate any services.”.

Subsection 93(1) stipulated that “The ... Authority shall not, unless authorised by an Act of Parliament, close a railway line.”. Subsection 93(2) provided that “... a railway line is closed if the land con-

cerned is sold or otherwise disposed of or the railway tracks and other works concerned are removed.”.

These provisions did not, of course, affect the basic principle that a transport authority does not require statutory authority to “close” (in the sense of ceasing to operate it) a railway. This principle that a power may be exercised from time to time is sufficient, in the absence of any provision to the contrary, to empower a railway operator to discontinue an individual service.

This matter was covered by subsection 32 (I) of the Interpretation Act, 1897 which provided that: “Where an Act confers a power or imposes a duty, then, unless the contrary intention appears, the power may be exercised, and the duty shall be performed, from time to time, as occasion requires. This principle had been first embodied in a NSW Act of 26 July 1852.

Subsection 48(1) of the Interpretation Act 1987 re-enacts this principle providing that “If an Act ... confers or imposes a function on any person or body, the function may be exercised (or ... a duty... performed) from time to time as occasion requires.”. It should be recognized that, in practical terms, the discontinuance of operation might well, over a period, constitute “closure” in the sense that over a period the railway could deteriorate very substantially because of the impact of nature.