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by

Yoshinori Kigoshi

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Labor Management System in Fushun Coal Mines under the South Manchurian Railway Company[1]

Yoshinori Kigoshi (Nagoya University, Japan)

Abstract

This study, which examines a case of a Manchurian coal mine operated under a Japanese company, elucidates reasons for the extensive use of contract systems throughout modern China. A particularly clear feature of the modern Chinese economy is the so-called “Bao” contract system, which has existed for a long time. It was designated as the "Batou" system, named after a contractor in Manchuria. Historically, the contract system has existed universally during the rise of the modern mining industry in Europe and Japan. Nevertheless, it disappeared along with the development of the urban labor market and with the progress of mechanization in European and Japanese production processes. What is the “Chinese feature” of the contract system? Japanese companies attempted to reform the contracting system in Manchuria to produce a direct labor management system. At that time, Japanese managers restricted the power of contractors, but failed to eliminate the influence of Chinese foremen (*Xiao Batou*) who oversaw the Chinese miners directly. This study specifically examines the role of Chinese foremen. Results suggest that the essence of the Chinese contract system is embodied in the Chinese foreman function.

[1] This article is based on an article that originally appeared in *Nihonshi Kenkyu* (Journal of Japanese History) No.560: pp.1-22. (Apr 2009). The English version has been revised substantially.

Introduction

Why did Japanese companies succeed in modern China? This paper presents a discussion of this historical problem by examination from the perspective of the labor management system. Labor management is the most difficult task confronting foreign companies entering China. The contract system was the safest and easiest way to avoid many difficulties. However, Japanese companies boldly challenged the contract system. They set up a system that expelled contractors and directly hired Chinese workers. With abolition of the contract system, Japanese companies were able to promote scientific management and mechanization efficiently.[2] In other words, explaining labor management system innovation is the key to explaining the success of Japanese companies in modern China. Chesneaux, Elvin, and Wright explain the reasons for the extensive existence of the contract system in modern China.[3] Nevertheless, they do not elucidate reasons for Japanese companies' ability to

[2] This paper presents the coal industry as a case, but Japanese companies are known to have aimed for direct employment in other industries in China. Notable examples include the spinning industry, banking business (Yokohama Specie Bank), and trade business (Mitsui Bussan Shanghai Branch). Cochran, *Encountering Chinese Networks*, and Tomizawa, et al. ed, *Kindai Zhugoku wo Ikita*.

[3] Chesneaux, 'The Chinese Labour Force'. Elvin, *The Pattern of the Chinese Past*. Wright, 'A Method of Evading Management'. Regarding the Chinese contract system, points of emphasis differ among researchers, but opinions on the basic contents of the system are consistent. Basic facts that have been confirmed can be summarized as three points. First, the form of the Chinese contracting system is similar to institutions in other countries, such as the butty subcontracting system in Britain, the *Naya* system and *Hanba* system in Japan, the *cai* in Vietnam, and the *ticcadari* system in India. Secondly, the Chinese contract system was formed in accordance with capitalistic management, not as a remnant of the traditional Chinese system. It has been deployed widely in coal mines where the scale of management is large, and where mechanization is advancing. Thirdly, though having a modern personality, the members of the organization consisted nearly entirely of homeland members. Therefore, it has the character of a common organization like Chinese traditional native-place association. Wright, 'A Method of Evading Management', p. 663.

manage Chinese workers directly.

This paper specifically examines the labor management of the Fushun Coal Mine in Liaoning under the South Manchurian Railway Company (SMR). Fushun, the largest coal mine in China before the Second World War, had a huge production mechanism in which enormous amounts of capital had been invested based on a new technology that was effective for the mining of the thick-layer coalfield.[4] It was necessary for Fushun to employ tens of thousands of Chinese miners to produce coal. As a key to coal mine development, SMR undertook the recruitment of many Chinese miners in a stable manner. It was a key to building a labor management system that accomplished the intentions of the Japanese engineers at the mining site. History shows that SMR positively reformed the labor management system.

In China, the contracting system was common among labor-intensive businesses. A company owner entrusted the contractor to do everything related to the workers.[5] In Manchuria, it was common for contractors called *Batou* to undertake labor-intensive businesses. Of course, Fushun also adopted *Batou* into the work to hire numerous Chinese workers. Ninsaburo Murakushi presents the first framework of analysis through comparison with the history of coal mine labor management in Japan. According to Murakushi, contract systems of two types were used in the mining industry. The first type was the form which undertook process management and labor management collectively. The second type was a form which only the labor management undertakes. Murakushi points out that the contract system of the Fushun Coal Mine under SMR was a first type initially. It shifted to the second type according to the advancement of mining technology and developed into a direct employment system in the 1930s. Murakushi referred to the *first Batou* system as the first type, and to the *second*

[4] The coal seam of Fushun coalfield has been thick so far to a degree that Japanese engineers had never witnessed. Because coal mine technology in mainland Japan could not be applied, SMR independently developed a coal mining technology suitable for the Fushun coalfield.

[5] In modern China, the contract system was seen too widely. For that reason, Japanese researchers who directly observed China at the time understood the contracting system as reflecting the character of Chinese society. Kashiwa, *Keizai Titsuzyo* and Muramatsu, *Chugoku Keizai*.

Batou system as the second type.[6] Additionally, he classified the labor management functions of *Batou* into three fields: (1) supervision of labor, (2) welfare, and (3) recruitment.

Takatsuna Hirofumi points out that Japanese staff members conducted almost all of the labor management in Fushun under the *second Batou* system, except for recruitment, and that the *second Batou* system was managed almost entirely under the direct employment system.[7] You Byoungboo also points out that *Batou* had lost the labor management function outside the recruiting department, and that the *second Batou* system was arranged to be a system which contracted the recruitment of miners professionally. He called this the *Labor Supply Contract* System.[8]

Opinion is divided among Murakushi, Takatsuna, and You Byoungboo because of an evaluation for the existence of the Chinese foreman, called *Xiao Batou*, who manages the Chinese miners directly as a subordinate of the Chinese contractor, called *Da Batou*. The organization of the Chinese contract system included managers of two kinds: *Da Batou* and *Xiao Batou*. In the *second Batou* system, *Da Batou* was not going to the mining site. The Japanese staff came to command Chinese miners with a help of *Xiao Batou*. Murakushi summarizes the function of the entire Chinese contract system with the *Xiao Batou* in mind. By contrast, Takatsuna and You Byoungboo evaluate the system from the status of *Da Batou*. Succinctly put, the point whether the existence of *Xiao Batou* was a subordinate of *Da Batou* or it was one employee of the company became a difference of the evaluation.

Takao Matsumura has conducted comprehensive research on the labor management system of SMR. Matsumura, after distinguishing between *Da Batou* and *Xiao Batou*, points out the presence of labor control functions by *Xiao Batou* in the *second Batou* system, and the subordinate relation between *Da Batou* and *Xiao Batou*. However, because the emphasis of his analysis is on the wartime labor management system, it does not refer to the concrete contents of the position and the function of *Xiao Batou*.[9] Kenji Eda also points out the presence of *Xiao Batou* in the case of loading and unloading

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[6] For the second Batou system concept of Murakushi, see Murakushi, 'Manshu heno Sekitan Gizyutsu Iten', p. 35.

[7] Takatsuna, '"Manshu" ni okeru Tankou', pp. 112–4, p. 121.

[8] You, *Mantesu Buzhun Tanko*, Chapter 5.

[9] Matsumura et.al eds, *Mantesu Roudoushi*, p. 300.

at Dalian Pier. However, *Xiao Batou* given from Dalian Pier's case means the Chinese contract system with a small number of workers as subordinates. Also, the position and function differed from the *Xiao Batou* in the Fushun Coal Mine.[10]

Earlier studies show that *Xiao Batou* acted as middleman between the Japanese staff members and the Chinese contractor in labor management. However, no report of the relevant literature describes an independent study of *Xiao Batou*. One reason is that *Da Batou* and *Xiao Batou* are not distinguished in the historical materials of SMR. They are often described collectively as *Batou*. A second reason is that, although the labor survey in Fushun Coal Mine had become abundant since the 1930s, few investigations have examined the 1910s and 1920s, when *Xiao Batou* played the most important role.

Yoshinori Kigoshi assesses labor surveys conducted at Fushun Coal Mine in the 1920s, with investigation by SMR and the government of the Republic of China, which were less likely to be used in prior studies.[11] Kigoshi inherits the concept of Murakushi. Murakushi does not conceptualize the contract system of Fushun Coal Mine in the form which distinguished it as *Da Batou* and *Xiao Batou*. Therefore, Kigoshi divides the concept of Murakushi into two types: the form in which the labor management function is borne intensively by *Da Batou*, and a form in which the labor management function of the mining division is borne by *Xiao Batou*. He designates these as the *Da Batou* system and the *Xiao Batou* system, and points out that if the change in status and function of *Xiao Batou* is examined, then SMR's ability to eliminate the contracting system can be clarified. Although he clarifies the function of labor management of *Xiao Batou*, he does not consider it in a form including the recruitment function. Additionally, he does not independently consider the status and function of *Da Batou* under the *Xiao Batou* system.[12] This article will reexamine the essence of the Batou system by integrating the functions of *Da Batou* on the *Xiao Batou* system.

The structure of this paper is the following. Section I presents a review of the *Xiao Batou* system formation process. Section II presents an examination of the labor management system in the 1920s,

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[10] Ibid., p. 498. For the author's evaluation about Matsumura et al. eds, *Mantesu Roudoushi* as a whole, see Kigoshi, 'Syohyo: Matumura Takao'.

[11] SMR, *Kounai Sagyou* and Yu Heyin, *Fushun Meikuang*.

[12] Kigoshi, 'Labour Management System'.

where *Xiao Batou* system was most popular in Fushun Coal Mine. Section III examines the process by which *Xiao Batou* system was substituted for direct management by Japanese staff. Section IV explains the recruitment that *Da Batou* had consistently grasped. This section presents examination of the social significance of the contract system in the context of Chinese rural society.

In fact, this paper presents analysis of the development process of mine digging and does not include an analysis of open air mining. Although Fushun Coal Mine is famous for open air mining, underground mining occupied over 50 per cent of the coal output for the entire period.[13]

I. *Xiao Batou* system formation process: 1901–11

1. Labor management system before SMR

Development in the modern era of Fushun coal field was started by two Qing dynasty patent companies in 1901: Huaxingli Company and Fushun Coal Mining Company.[14] The founders of each company were Chinese.[15] On January 13, 1905, after the Russo-Japanese War broke out, the Russian army took over the entire mine and dominated the coal mines, but on 9 March of the same year, as the Japan army advanced, Russian troops abandoned the coal mine.[16] Thereafter, the mining team was set up by the Japanese Army to recover the coal mine. Under supervision of the Japanese Army, mining was conducted until the facility was handed over to SMR.[17]

Mining had been done under the contract system until the coal mine was transferred to SMR.

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[13] This is true because there is no trace of reform debate as far as one can see with regard to the labor management of open air mining. It is necessary to compare the coal extraction systems of open air mining and the pit mining. Through comparison, it is also necessary to consider the reason there was no necessity for labor management system reform as a response to open air mining.

[14] SMR, *Buzhun Tanko*, pp. 7–8, pp. 23–7.

[15] Ibid., p. 33.

[16] Ibid., p. 21, p. 33, p. 37.

[17] Ibid., p. 37.

According to materials on the Japanese side, during the Russian management age, "the engineer and the process master were arranged, but everything inside the pit was entrusted to the Chinese contractor (*Da Batou*)".[18] Even in the Japanese army management era, "coal mining still has been contracted by the Chinese people".[19] The Chinese contract system was adopted because the coal mining technology level was low. Moreover, it was more important to collect workers rather than scientific process control. Regarding the mining method, the conventional method of manually digging as far as the ground pressure and aeration allowed was adopted.[20] Coal extraction was done using a pick and a shovel in hemp bags, which were then carried to the outside of the pit manually. No mechanization was done at all.[21] As for the composition of the miners, by July 1906, two pits were arranged and a "Coolie Head (Chinese)" was placed in each pit: "200 miners (Chinese) and 300 carriers (Chinese)" were there.[22] The “Coolie Head” is *Batou*. Chinese contractors were called Coolie Heads until SMR began to call them *Batou*.[23] Coal mining engineers were only 14 Japanese.[24] The recruitment figure is unavailable because of limitations on materials. However, because it was reported that "Fushun were formerly insignificant, in one cold village the number of houses of the residents was just fifty", it is easy to imagine that about 1,000 miners had to be recruited in remote areas.[25] Before SMR management, the technology level was extremely low, the amount of labor under the jurisdiction of the coal mine was

[18] Fujitaira, *Kouzan Roudousya*, p. 248.

[19] Ibid., p. 248.

[20] Kanto Totokufu, *Manshu Sangyo*, p. 124.

[21] Ibid., pp. 125–6.

[22] Ibid., pp. 131–2.

[23] According to Ohashi, *Shina Kougyou*, p. 9, the word *Batou* is said to be a word created by Japanese at the time the Fushun Coal Mine started in the hands of Japan in Manchuria. The material that can confirm that Fushun Coal Mine first used the word *Batou* is "Internal Regulations of Newcomer Miner Treatment" on April 7, 1911. Earlier materials are stated as Coolie Head or Coolie Contractor.

[24] Kanto Totokufu, *Manshu Sangyo*, p. 131.

[25] SMR, *Buzhun Tanko*, p. 2.

small, and the conditions to procure the miners locally were also restricted. The company was compelled to rely on *Batou* for the entire coal mining operation.

2. Chinese contract system reform in 1908

On April 1, 1907, SMR took over all assets from the Kanto Totokufu (Japan's Guandong Governor-General Office) and started business under the name "Fushun Coal Mine."[26] SMR Governor Shinpei Goto decided to select the chief in charge of development of Fushun and invited Takeichiro Matsuda, the director of the Mitsubishi Namazuta Coal Mine.[27] Matsuda had the experience of studying in Germany, where he learned advanced coal mine technology. He improved China's conventional method of coal mining into the advanced Western style. A new shaft was opened. Also, a steam hoisting machine and a ventilator were introduced.[28]

Labor management system reform started in 1908, only two years after SMR began operating the coal mine.[29] SMR states the purpose of the reform as follows. "Because miners have been slaughtered by Coolie Heads, incomes of miners have declined. Because they had an adverse effect on work, it was necessary to control the exploitation of Coolie Heads and to protect the miners."[30]

Two labor management systems were introduced experimentally. One was a company direct control system under which Japanese staff members directly recruited and supervised Chinese miners. Another was a contracting system by which Japanese staff conducted process control, with labor management delegated to the Chinese contractors. Reviewing the agreement between SMR and the contractor in 1910, one can confirm that the status of the Chinese contractor changed from work contractor to worker supplier by the reform of 1908.[31] The contractor status was stipulated by SMR as

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[26] Ibid., pp. 38–9.

[27] Ibid., p. 98. Matsuda was the forerunner of the Japanese coal mine industry at the time. For details related to Matsuda's career, see Takanoe, *Nihon Tankou Shi*, p. 445.

[28] SMR, *Buzhun Tanko*, pp. 98–114.

[29] Ibid., p. 245.

[30] Ibid., p. 226.

[31] Jie, *Mantie Shi*, p. 276.

follows. First, the fee received by the Chinese contractor was paid according to the total operation amount of the subordinate miners, not the contract work volume.[32] Secondly, miners' wages were delivered through the contractor as before, but they were paid according to miners' piece work volumes rather than being paid at the discretion of the contractor.[33] Thirdly, the authority in the coal mining division of the contractor was to collect Chinese miners of the number specified by SMR, send them to the mine, and command and supervise them.[34] In other words, the job of the Chinese contractor was limited to a labor supervisory function.

Because of SMR testing of the two systems, results showed that the outcome of the company direct control system was higher than that of the contract system. SMR reports, "(the company direct control system) not only increased the income of miners, but also reduced coal extraction costs. It was all right."[35] In March 1911, SMR judged that the company direct control system was best, abolished the Chinese contract system, and put all miners under the direct control of SMR.[36]

However, when the Togo pit newly opened in April 1911, it turned out that the miner recruitment did not go as SMR had expected.[37] On April 7, 1911, SMR had no choice but to revive the contract system.[38] SMR failed to abolish the contract system.

3. Chinese contract system Reform in 1911

On September 10, 1911, SMR enacted the "contractor rules" and aimed to construct a new labor management system with lessons learned from the failure of the reform in 1908.[39] The point of reform in 1911 is summarized in three points. First, the Chinese contractor was divided into *Da Batou* and

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[32] Ibid., p. 276.

[33] Ibid., p. 276.

[34] Ibid., p. 276.

[35] SMR, *Buzhun Tanko*, pp. 226–7.

[36] SMR, *Zyunen Shi*, p. 496.

[37] Ibid., p. 495.

[38] Fujitaira, *Kouzan Roudousya*, p. 243.

[39] Ibid., p. 245–7.

Xiao Batou. Each position and authority was determined. SMR made *Da Batou* a contractor. The manager who oversaw Chinese miners as *Da Batou*'s subordinate was stipulated as *Xiao Batou*.[40] It was stipulated that the authority of adoption and dismissal of *Xiao Batou* was in SMR, not in *Da Batou.* SMR made it impossible for *Da Batou* to intervene at the coal mining site.[41] Secondly, the wage payment system was changed. The miners' wages were handed over directly to the miners from the labor section of the company, rather than passing them through *Da Batou*.[42] In addition, the wages of *Xiao Batou* were not paid out from the account of *Da Batou* but were paid directly from SMR according to a fixed percentage of the total operating amount of Chinese miners under *Xiao Batou*.[43] Third, SMR divided the labor management task into a field managed by SMR and a field entrusted to *Da Batou*. SMR was responsible for welfare benefits and provided accommodation and meals to Chinese miners.[44] Recruitment was delegated to *Da Batou*.[45] Supervision of the labor process was entrusted to *Xiao Batou*.

The system introduced in the reform in 1911 differed from the labor management system introduced in the 1908 reform from the viewpoint of labor management leaders. In the reform of 1908, a system directly under the company and a contracting system were adopted simultaneously. In the contracting system, all labor management was entrusted to *Da Batou*. Reform in 1911 entrusted the recruitment department to *Da Batou*; *Xiao Batou* was responsible for labor management of the coal

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[40] Ibid., p. 245.

[41] Ibid., p. 246.

[42] SMR, *Dai Nizi Zyunen Shi*, p. 570.

[43] Fujitaira, *Kouzan Roudousya*, pp. 245–6.

[44] SMR, *Zyunen Shi*, p. 497. *Da Batou* was permitted to run a shop. However, in 1930, the company began to manage shops directly. The existing *Da Batou* shop was acquired and merged into the company's shop. Sumii, *Manshu Tangyo*, p. 136.

[45] From the time of establishment of the *Xiao Batou* system, the company set up a recruitment branch and made a direct recruitment attempt. However, the direct recruitment ended in failure, as explained in Section IV. The recruitment branch was closed or became a subsidiary of *Da Batou* recruitment. SMR, *Dai Nizi Zyunen Shi*, p. 565.

mining department.

II. *Xiao Batou* labor supervision function 1911–30

1. Technology and labor management system

The *Xiao Batou* system re-announced the same contents as the September 1911 "Contractor Rules" in May 1915 and January 1920. It continued until labor management system reform in 1931.[46] The period during which the system was adopted corresponded to the period when the "the shortwall mining with sand filling method" coal mining technology was used. This technology allowed mining of the deep part of coal seam by pouring sand into the excavation and tunnel. Filling with sand was able to prevent ground pressure. Moreover, because sand was poured with water, it was possible to prevent fires in the mine.[47] This technology was adopted in July 1911, two months before the *Xiao Batou* system was established. It was later applied to all mines from November 1912.[48]

The sand filling method was a technological innovation that lowered the probability of accidents from falling timbers and fires, but remained at the level of old technology in terms of coal extraction efficiency. The difficulty was that countless scattered mining sites existed. The number of mining sites in August 1920 is shown in Table 1. The number then reached 3,887 sites. Scattering of the mining sites made the gallery distance long and complicated, preventing mechanization of the transportation processes.

In the 1920s, mechanization of transportation and digging at the pit was not yet realized. Coal transportation was divided into three divisions. The first was transportation from the working face to the main tunnel. The second was transportation in the main tunnel. The third was transportation from the shaft to the outside of the pit. Of the three processes, mechanization was limited to transportation in the shaft. Transportation from the working face to the main tunnel, scoops and bamboo baskets were

[46] SMR, *Dai Nizi Zyunen Shi*, p. 573.

[47] SMR, *Tankou Dokuhon*, pp. 122–6.

[48] SMR, *Zyunen Shi*, p. 491.

used. In the main tunnel, the miners pushed a half-ton coal car by hand.[49] Coal was mined manually by pickaxe. Blasting mining methods were sometimes adopted. However, drilling holes for loading of explosives was done manually with a hammer and chisel.[50]

Table 1. Current number of working faces in the Fushun Coal Mine

Pit Stations	August 1920	September 1935
Oyama	947	19
Togo	400	16
Laofutai	516	25
Wandawu	383	26
Xintukeng	37	42
Longfeng	241	13
Yangbaibao	789	Transition to open air mining
Qianjinzhai	574	
Total	3,887	141

Source: Yu, *Fushun Meikuang*, pp. 39‐69 and SMR, *Tankou Dokuhon*, p. 107.

Note: This table does not include the Yantai coal mine: a branch of Fushun Coal Mine.

The labor organization for coal mining and transportation was a small unit consisting of two to four Chinese miners.[51] The labor organization of the timbering work was the same as that for the mining work. A working unit was organized from two to four Chinese workers. The actual number of workers changed flexibly according to the support timber size.[52] The labor organization of sand filling work consisted of people who put sand in a basket and those who carried the baskets. The number of constituents varied based on the conveying distance and the inclination of the working face. It was

[49] Manshikai, *Manshu Kaihatsu*, p. 87.

[50] SMR, *Kounai Sagyou*, pp. 11–15.

[51] Fujitaira, *Kouzan Roudousya*, pp. 99–100. I cannot find the name of this work unit in the Fushun Coal Mine despite intensive examination. In the Chikuho coal field in Japan, this kind of work unit was called *Hitosaki* or *Saki*. Ogino, *Chikuhou Tankou*, p. 22.

[52] SMR, *Kounai Sagyou*, pp. 23–35.

organized roughly into two to five Chinese people.[53]

Looking at the labor management system operating this unit of work, the *Xiao Batou* system was applied to the mining and transportation process, which is the core process of coal extraction. In the timbering and filling process, which is a maintenance work, the *Da Batou* system and the company direct control system were used together.[54] The numbers of Chinese miners in the pit according to the labor management system, as of August 1920, were 7,028 for the *Xiao Batou* system, 6,041 for the *Da Batou* system, 4,482 for the company direct control system, and 17,551 as the total of Chinese miners.[55]

2. Role of *Xiao Batou*

Command line in the pit

First, one must inquire into the status of *Xiao Batou* in SMR by reviewing company documents. SMR describes the status of *Batou* in Fushun as the following quotation. “Those commonly called *Xiao Batou* have more than 50 miners under control. Their task is to command the miners directly. Those who called *Da Batou* lead several *Xiao Batou*. They indirectly supervise the miners.”[56] This document states that the labor management of *Da Batou* is indirect and that the supervision of *Xiao Batou* is direct. It is readily apparent that *Xiao Batou* was in direct contact with the miners.

Next, SMR refers to the relationship between *Xiao Batou* and Japanese staff members. “*Xiao Batou* makes a tour of inspection around the working faces and supervises work. He supervises operation according to the command of the Japanese Xiao Batou.”[57] In this passage it is described as "Japanese Xiao Batou". From many other materials, it was confirmed that all *Xiao Batou* was Chinese. Apparently, this is the only description of "the Japanese Xiao Batou" in the related literature. "Japanese

[53] Ibid., pp. 36–54.

[54] Ibid., pp. 11–54.

[55] Yu Heyin, *Fushun Meikuang,* pp. 39–66.

[56] Fujitaira, *Kouzan Roudousya*, pp. 244–5.

[57] SMR, *Dai Nizi Zyunen Shi*, p. 571.

Xiao Batou" is regarded as an incorrect transcription of *Kogashira* (Japanese foreman). In Kanji, *Xiao Batou* and *Kogashira* are only one character different. The Japanese foreman was an employee of SMR who was engaged in underground labor. His position was also a supervisor.[58] *Xiao Batou* supervised Chinese miners under the command of a Japanese foreman. By contrast, no materials describe the relationship between *Da Batou* and *Xiao Batou* in the pit. However, in 1929, SMR states, "*Da Batou* does not enter the pit. *Xiao Batou* conducts the site."[59] This example clarifies that *Xiao Batou* commanded labor at a place beyond the purview of *Da Batou*.

It is circumstantial evidence that *Xiao Batou* supervised miners under the instruction of a Japanese foreman because the numbers of both are almost equal. The figures in December 1918 show that the number of *Xiao Batou* was 153.[60] By contrast, the Japanese foremen were 143 in August 1920.[61] One Japanese foreman was placed for almost every *Xiao Batou*.

As shown there, SMR states, "*Xiao Batou* have more than 50 miners under control". We examine this number in more detail. According to the data of August 1920, an average of 7,028 Chinese miners per day entered the pit. The number of *Xiao Batou* in December 1918 when the data were available was 153. The number of Chinese miners per *Xiao Batou* is 45.9. This number demonstrates that *Xiao Batou* managed about 50 Chinese miners. It follows from what has been said that the command line under the *Xiao Batou* system is summarized as the following. One Japanese foreman – One *Xiao Batou* – Fifty Chinese miners.

Command line outside of the pit

The Chinese miners were almost all single migrant workers. They lived together in a dormitory prepared by the company. Who decided when and where over 7,000 Chinese miners work? Labor placement is the most important decision outside of the pit. I would like to examine who owned the

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[58] Japanese staff members with the ability to become a supervisor, in particular, were appointed as *Kogashira*. Fujitaira, *Kouzan Roudousya*, p. 236.

[59] SMR, *Buzhun Tanko Togokou*, p. 12.

[60] Yu Heyin, *Fushun Meikuang,* p. 165.

[61] Ibid., pp. 162–4.

real power of labor placement after the 1911 reform of the contractor system.

SMR states on labor management of Chinese workers in lodging as follows. “Management of Chinese workers is controlled by the Department of Chinese Labor at each coal station. ……the housemaster and Chinese watchman patrol to monitor.”[62] And, “*Xiao Batou* is arranged for each accommodation and place one to three or four housemasters as their assistant. ……Aside from this, secretaries, servants, choremen, watchmen, cook are working. We designate these various employees all together as the care staff members for Chinese miners. The total number currently arranged in all stations is 172 people.”[63]

To summarize the description, the General Supervision Department of labor management was the Department of Chinese labor established for each coal mining station. The Department of Chinese labor was made up of the housemaster and the care staff members. The housemaster was a Japanese SMR employee of the same class as Japanese foreman.[64] All care staff were Chinese.[65] Therefore, I think that the housemaster and *Xiao Batou* were in the position of the manager.

Therefore, what was the difference between the housemaster and *Xiao Baotou*’s role? We can learn something about the difference between the housemaster and *Xiao Batou*'s role from the SMR 1935 survey. This is material from the 1930s, but it constitutes a clue to learn a part of the order system of labor placement in the 1920s. In the 1930s, the name of the Department of Chinese labor changed to the labor service department. This survey states that the housemaster conducted labor placement of Chinese miners. “Usually, one housemaster is assigned to one *Batou* (miners are 50, 60 to 100 people) by order of the labor service department. The housemaster takes care of matters related to Chinese laborers, such as management of lodging houses or maintenance of tools as well as the labor arrangement of miners.”[66] From this survey, we cannot ascertain whether the housemaster is assigned to *Da Batou* or to *Xiao Batou*. Judging from the fact that the housemaster was assigned to *Xiao Batou*

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[62] SMR, *Dai Nizi Zyunen Shi*, p. 571.

[63] Ibid., p. 574.

[64] Yu Heyin, *Fushun Meikuang,* pp. 157–62.

[65] Ibid., pp. 157–162.

[66] SMR, *Manshu Kouzan*, pp. 170–1.

in the 1920s and that the number of miners under his honor was between fifty and one hundred people in the 1930s, I thought that the housemaster was also assigned to *Xiao Batou* in the 1920s.[67] There are two notations of "miners" and "laborers" in the material. The “miners” refer to Chinese miners under *Batou*; “worker” is a generic term for Chinese employees.[68] The housemaster was responsible not only for the Chinese miners under *Batou*, but also the overall management of the Chinese employees in general.

Next, we consider the role of *Xiao Batou* in labor allocation. SMR states, “In the labor allocation, he [*Xiao Batou*] arranges appropriate miners of skill according to difficulty of work and abrupt rushing of the working face. For poor grade miners, he encourages them to demonstrate their spontaneous spirit.”[69] This passage says *Xiao Batou* did labor placement. I think that the differences in the role of labor placement between housemaster and *Xiao Batou* are distinguishable as follows. Labor placement includes two contents. First, the designation of location and time of work for each coal mining unit. Secondly, selection of miners with appropriate skills based on the designation. SMR clearly states that the role of labor placement of *Xiao Batou* is the latter. Then, the role of housemaster would have been the former. The coal mining department gives instructions to the housemaster for personnel, place and time necessary for coal mining. The housemaster accurately conveyed the order to *Xiao Batou*.

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[67] In the 1920s, *Xiao Batou* had about 50 miners per person. However, in the 1930s, as the number of *Xiao Batou* decreased compared with the number of miners, the number of miners per one *Xiao Batou* probably increased. For example, the number of *Xiao Batou* in 1938 was 54 people. Kondo, *Buzhun Tanko*, p. 5. Since it was 153 people in 1918, it declined to about one third. The reason for the decrease in the number of *Xiao Batou* is the progress in centralization of the working faces as described in Section III.

[68] SMR, *Dai Sanzi Zyunen Shi*, p. 1720.

[69] SMR, *Manshu Kouzan*, p. 182.

3. Why did the company need *Xiao Batou*?

Difficulty coordinating and motivating Chinese miners

Chinese miners engaged in coal mining activities in small work units consisting of two to four people. The SMR records show an interesting remark about how the small units were organized. “There is a habit of equally distributing the volume fee of one work unit among them. Therefore, even for a miner who belongs to the same *Batou*, the partner of the work is limited to the same villagers, relatives or friends who live together in the same dormitory. Who pairs with whom resembles an implicit agreement, so it cannot be forced by others.”[70] As SMR emphasizes, “even for a miner who belongs to the same *Batou*," the unit of work was not based on *Xiao Batou*'s command, but it was organized based on one’s own selection of Chinese miners. *Xiao Batou* failed to organize the work unit because the method of assessing wages was a calculation of the volume for each unit of work, not the individual miner. More precisely, wages were paid based on the number of coal cars conducted by the unit of work.[71] The number of coal cars was the result of collaborative work of all miners inside the unit of work. Therefore, unless an opponent was conscious of it, the Chinese miners greatly disliked becoming partners.

The wages of the Chinese miners also varied depending on where they were placed. Conditions of the working faces were diverse. Consequently, the Chinese miners had a strong interest in which working face they were placed. SMR states, “If the Chinese miners fail to take over and exchange the working face smoothly, their income is likely to be uneven. In that case, Chinese miners have strong discontentment. Some of them are determined to leave the coal mines. Therefore, it is important to equalize the wages of Chinese miners fairly by taking over and exchanging the working faces.”[72] Maintaining fairness in wages was important for increasing the willingness of Chinese miners to work. Considering the behavior style of such a Chinese miner, it can be understood that the role of *Xiao*

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[70] Fujitaira, *Kouzan Roudousya*, p. 100.

[71] Ibid., p. 242.

[72] Ibid., pp. 100–1.

Batou in labor placement was difficult for Japanese staff to substitute.

Difficulty in overseeing work

When the *Xiao Batou* system was applied in Fushun, the coal mining technology remained at a low level called shortwall mining. The greatest shortcoming of shortwall mining is that the working faces are scattered. As a result, the units of work are also dividing into exceedingly numerous units. As pointed out already, the current number of the working faces reached 3,887 places in the 1920s. As a result, labor oversight was held on a tour, not on the spot. Because the Chinese miners were not supervised at all times, laziness and stopped work often occurred among them. Actually, SMR points out three examples of such sabotage. First, when the supervisor is not at the site, the work efficiency of the Chinese miners declines. The SMR record describes the following as sabotage in the case of timbering work. "When the supervisor visits, they pretend to complete the assembly of timber poles. It is normal to not reach the completion immediately afterwards."[73] Secondly, the workers lose a feeling of tension as the number of workers inside the work unit increases. Consequently, the efficiency decreases. The SMR investigator recommends that it is desirable to reduce the number of people in a work unit. However, SMR did not pick up this recommendation. It is impossible to reduce the number of workers because it is based on process requirements.[74] Thirdly, when Chinese miners achieve a certain amount of work, they do not do any further work. SMR points out, "Even though they have finished their work, they still have plenty of room to work. It is strange that they will not do more work."[75] The SMR records state that "they are innocent lazy, so getting enough income to eat a meal of a day will not work anymore."[76]

What SMR did to crack down on such sabotage is to establish a system to award monetary bonuses to supervisors when they catch laziness on the job. Because of coal mining technology constraints, it was impossible to consolidate work units. In fact, SMR had no choice but to choose how to raise the

[73] SMR, *Kounai Sagyou*, p. 25.

[74] Ibid., p. 26–7.

[75] Ibid., p. 25.

[76] Ibid., p. 25.

supervisor's auditing capability. In fact, the purpose of reforming the contracting system in 1911 was aimed at improving the supervisor's ability. The supervisor as the reform target was *Xiao Batou*. SMR conducted two institutional reforms so that *Xiao Batou* actively seized cases of laziness among workers. First, as described earlier, SMR deprived *Da Batou*'s authority to appoint *Xiao Batou*. SMR gained control over *Xiao Batou* in the pit. At the *Da Batou* system before the reform, *Xiao Batou* appointed by *Da Batou* did not fully fulfill its responsibilities as a supervisor. In the 1920s, the timbering work remained under the *Da Batou* system. The SMR investigator states about the supervision situation in the timbering work. "Unnecessary supervisors are dispatched. No matter how lazy they are, if they can receive more wages according to the workload of the day, will they not do considerable work even if the supervisor is absent?"[77] Secondly, SMR gave *Xiao Batou* a financial motive to monitor sabotage actively. SMR linked income of *Xiao Batou* to the work volume of Chinese miners.

The *Xiao Batou* system limit

The *Xiao Batou* system protected the status and authority of *Xiao Batou* from *Da Batou*. SMR was able to reflect management intentions more strongly in the coal mining department than in the case of *Da Batou* system. Regarding this point, certain achievements were made.

However, new difficulties occurred under the *Xiao Batou* system. There are two main difficulties. First, as the authority of *Xiao Batou* rose, a tendency was found for the slavery relation to strengthen between *Xiao Batou* and the Chinese miners. For the labor dispute that occurred on April 3, 1924, caused by dissatisfaction with *Xiao Batou*'s wages, they mobilized subordinate miners to protest the company.[78]

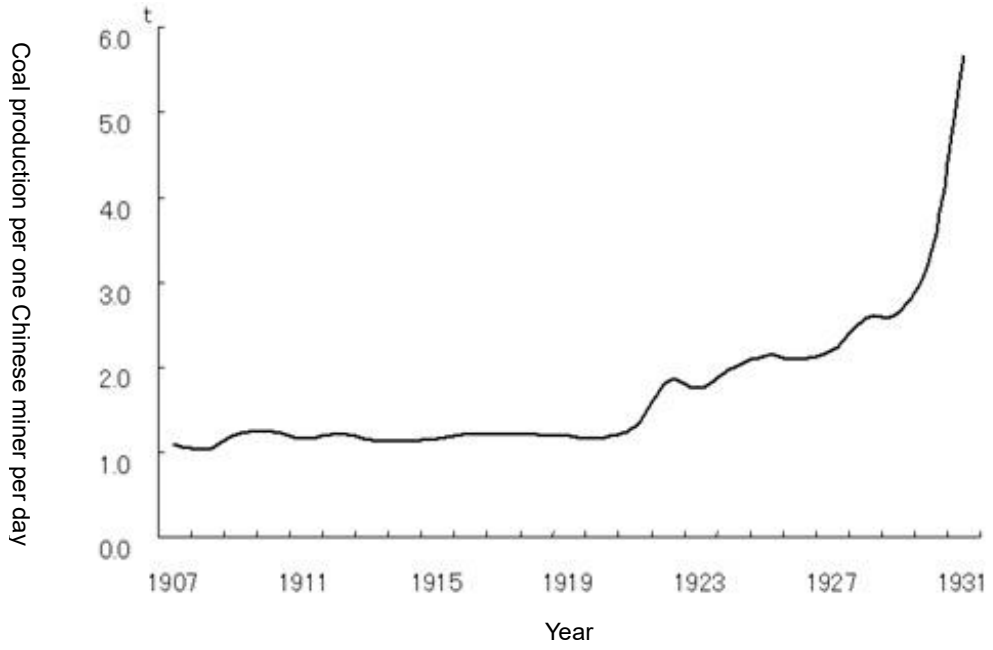
Secondly, the reform of the labor management system itself did not raise labor productivity. Figure 1 shows almost no change when comparing the labor productivity before and after the reform in 1911. The rise in productivity since 1921 was attributable to the full-scale mining of a strip coal mine. The rise from 1928 was attributable to intensification of the working faces by the introduction of new

[77] Ibid., p. 37.

[78] Jie, *Mantie Shi*, p. 366.

technology, as detailed in the next section. *Xiao Batou* made the mining wage leveling through labor arrangement. This approach "protects incompetent workers and guarantees they receive fair wages."[79] Although the power of *Xiao Batou* was able to reduce the miners' escaping rate, the effect of increasing the coal extraction efficiency was low, which indicates a limit to the crackdown on the Chinese miners' idle acts as long as the working faces were dispersed. The *Xiao Batou* system was constructed as a system that enables Japanese staff to operate the processes necessary for shortwall mining.

Figure 1. Trend of labor productivity in Fushun Coal Mine, 1907–1931.



Source: SMR, *Toukei Nenpou Taisyo Ni Nen*, p. 425, p. 431. SMR, *Toukei Nenpou Taisyo Yo Nen*, p. 439, p. 445. SMR, *Toukei Nenpou Taisyo Roku Nen*, p. 457. SMR, *Toukei Nenpou Taisyo Zyuichi Nen*, p. 437, p. 459. SMR, *Toukei Nenpou Syouwa Ni Nen*, p. 489, p. 551. SMR, *Toukei Nenpou Syouwa Roku Nen*, p. 789, p. 809.

Note: Labor productivity is calculated by coal production per one Chinese miner per day.

[79] SMR, *Kounai Sagyou*, p. 39.

III. Company direct employment system 1930–40

1. Coal mining system in the 1930s

In the 1930s Fushun coal mining system, all line management of the mining section was directly managed by Japanese staff members. This coal mining system had been progressing because of invention of new technology to consolidate the working faces in 1928. It was a new technology developed by SMR. After concentrating the working faces with the technique called longwall mining, the company further enhanced the efficiency of drainage and transport by inclining the working faces.[80] As a result of the introduction of a belt conveyor in 1930, the mechanization of coal mining was almost realized.[81]

This highly intensive and mechanized situation naturally changed the labor management system dramatically. We will confirm the concrete situation from the survey of SMR conducted in August 1940.[82] Figure 2 shows the work process and personnel at Laofutai station in Fushun Coal Mine.[83]

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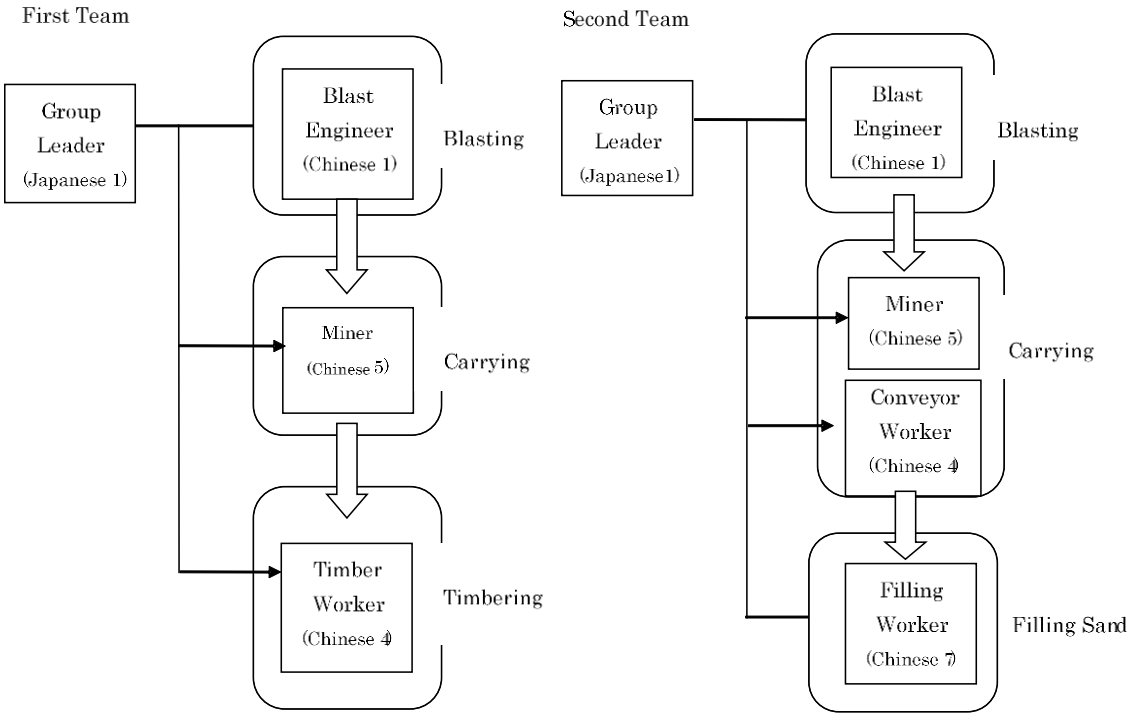
[80] SMR, *Tankou Dokuhon*, pp. 102–4.

[81] SMR, *Dai Sanzi Zyunen Shi*, p. 1717.

[82] SMR, *Buzhun Tanko Kounai Saikutsu*.

[83] After the outbreak of the second Sino-Japanese War, labor shortages occurred, especially since 1939. To strengthen the recruitment capability of the company, the "Fushun Coal Mine Batou Regulations" were revised in February 1940. The authority of *Da Batou* was strengthened. The number of *Da Batou* increased, as described by Matsumura et al. eds, *Mantesu Roudoushi*, p. 301. However, in some coal mining stations, the direct employment system in the 1930s was maintained. Laofutai station was one such station. In this section, Laofutai is picked up as a case study. In September 1944, the *Da Batou* system was revived in Laofutai station. Matsumura et al. eds, *Mantesu Roudoushi*, p. 302. War prisoners, designated as “special workers” were introduced after 1940 in Fushun. The limits of the company direct control system must be considered according to wartime labor difficulties.

Figure 2. Coal mining system under direct company employment in 1940.



Source: SMR, *Buzhun Tanko Kounai Saikutsu*, pp. 32-33.

Eleven workers were in the first coal mining team in charge during the day. The group leader, one of them, commanded 10 workers. He was responsible for all the coal mining work at the working face. The unit manager is a Japanese employee of SMR. The unit manager was appointed after a rigorous exam, called the underground leader qualification test, to take the most important responsibility at the front line of in-pit work.[84] The remaining ten people are all Chinese. Chinese laborers are divided into

[84] SMR, *Tankou Dokuhon*, pp. 387–8. Tim Wright emphasizes that the inability to speak Chinese was widespread among the Japanese staff at Fushun. Wright, 'A Method of Evading Management', p. 667. His remark is true of the entire Japanese staff. However, it appears that Japanese staff who commanded labor in the basement had acquired a lot of Chinese language ability. One piece of evidence is the existence of a work instruction manual in Chinese. Because this manual was pocket sized, Japanese staff members were able to carry it at all times. A conversation case ordering *Batou* is described in the manual as follows. "Wang Batou, come on. Why do your working faces always have

blasting work by technical workers of fixed daily salary and simple task by coal miners of volume pay. The configuration of the second coal mining team in charge of night work is almost identical to that of the first coal mining team. The maintenance work on the second team is a filling of sand. Therefore, the first team's timbering workers are replaced with filling workers. Compared with the *Xiao Batou* system explained in the previous section, it is readily apparent that the coal extraction system has undergone a major change. The entire coal mining process is integrated into one work team. Supervision of the team is enforced by one Japanese staff member. *Xiao Batou* does not exist in the coal mining process.

2. Emergence of *Working Batou*

We shall now look more carefully into how *Xiao Batou*'s position and function had been substituted for Japanese staff in the division of coal extraction. In August 1931, SMR established the "Fushun Coal Mine Batou Regulations". This was the first Chinese contract system reform in about 20 years.[85] You Byoungboo already pointed out the contents. The purpose of the reform was to reduce the authority of *Da Batou* significantly by improving the status of *Xiao Batou* in terms of salary and treatment.[86] SMR remarks at the result of this reform as follows. "Miners are assigned under unit managers. Instruction and supervision of work is done according to the lineage described above. The Fushun Coal Mine adopts the Chinese contract system in addition to this. *Batou* oversees work and guides the miners according to the instruction of staff at the pit".[87] What the passage clarifies is that *Xiao Batou* remained responsible for supervision of coal mining work in 1935. This material does not explicitly describe who the staff members giving instructions to *Xiao Batou* are. However, as presented in figure 2, it is reasonable to think that the staff is the unit manager.

At the same time, the advancement of the mining technology gradually changed the position of

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a shortage of people? Do you not know how to recruit workers?". SMR, *Kouzan Yougo Syu*, Vol. 1, p. 159.

[85] SMR, *Manshu Kouzan*, pp. 182–5.

[86] You, Mantesu Buzhun Tanko, pp. 198–9.

[87] SMR, *Manshu Kouzan*, p. 159.

Xiao Batou. Records of SMR include the following quotation: "*Batou* was mainly responsible for the duties of teaching, helping, and training the subordinate workers."[88] In addition, "On the abolition of *Batou*" was an agenda item at the Fushun Coal Mine labor team president's meeting held in August 1932. At the meeting, it was resolved that "it is necessary to have a spiritual leader to replace *Batou*".[89] Around 1938, *Xiao Batou*'s position in the division of coal extraction was effectively replaced by Japanese staff. In September 1938, SMR described the following. "*Xiao Batou* are appointed by each director belonging to the coal station chief. They are 54 people in the coal mine. The guidance and supervision of workers are their duties, but recently Japanese staff members are in charge of this."[90]

The importance of *Xiao Batou* declined from 1937 because the company chose Chinese miners who would be proficient in their work and had them instructed unskilled miners.[91] These skilled miners were called various names such as *Lingtou*, *Piaotou*, and *Wuzhang*.[92] The name of *Lingtou* is used most frequently when referring to the material. This paper therefore unifies the name with *Lingtou*. SMR summarizes the relation between *Lingtou* and Chinese miners as the following quotation. "The *Lingtou* is a leader of a work unit that has appeared recently because of the necessity of the working faces. The significance of *Lingtou* is fundamentally different from that of *Batou*. The relation between *Batou* and the workers is still a vertical relationship even when no slavery relationship exists, although the relationship between the *Lingtou* and the worker is a colleague, so it is readily apparent that labor is done together."[93]

When the Batou regulation was revised in February 1940, the skilled miners called *Lingtou* were named *Working Batou*. *Working Batou* were defined as tutors of an unskilled miners in the 1940 revised regulations.[94] SMR emphasizes that *Working Batou* is not *Batou*. "It is not a *Batou* of the

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[88] Ibid., p. 182.

[89] Sumii, *Manshu Tangyou*, p. 140.

[90] Kondo, *Buzhun Tanko*, p. 5.

[91] Sumii, *Manshu Tangyou*, p. 144.

[92] Ibid., p. 145. Kondo, *Buzhun Tanko*, p. 5.

[93] SMR, Dai Sanzi Zyunen Shi, p. 1725.

[94] Sumii, *Manshu Tangyou*, pp. 143–4.

conventional meaning. *Working Batou* is almost a working leader. There is no longer any sort of positional dependency between *Working Batou* and his underlying workers."[95]

In other words, in 1931, the "Fushun Coal Mine Batou Regulations" were content to strengthen the *Xiao Batou* system. However, the progress of mechanization clarified that the role of *Xiao Batou* was handled sufficiently by skilled miners. Rationalization of the organization was realized far beyond the intent of 1931's institutional reforms.[96]

3. Why did *Xiao Batou*'s role decline?

Aggregation of the working faces and complete mechanization of the transportation process has greatly changed the preconditions for setting *Xiao Batou* at the center of the labor management system. The largest factor is that decentralized work based on small units of work has disappeared. As the previous section showed, *Xiao Batou* was responsible for maintaining a fair sense of the Chinese miners' wages through a labor arrangement. However, in the coal mining system of the 1930s, the remarkable progress of mechanization made it very unlikely that a difference in wages occurs at the place of labor placement. For example, the use of electroporating drills had become generalized for mining in the 1930s. Thereby, blasting mining was established.[97] The time required from perforation to the bombing of the coal seam was only one and a half hours by a blast engineer. More than 20 tons of coal were excavated in one blast.[98] As a result, the work of the Chinese miners has become simple

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[95] Ibid., p. 144.

[96] You Byoungboo states that the labor management system of the 1930s in Fushun is *Sagyou Kashira Seido* (Foreman System). His *Sagyou Kashira Seido* seems to correspond to *Lingtou* mentioned in this thesis. The word *Sagyou Kashira* probably was diverted from Japanese coal mining terms. The word *Sagyou Kashira* appears in the SMR history published in July 1938. Since around 1938 the name of *Lingtou* was holding various aliases, it is considered that the word *Sagyou Kashira* was used with the meaning that *Lingtou* is the same as *Sagyou Kashira* of the Japanese coal mine.

[97] SMR, *Tankou Dokuhon*, p. 111.

[98] SMR, Buzhun Tanko Kounai Saikutsu, pp. 32–3.

manual labor of loading coal on the belt conveyor.[99] The fact that the skill of the partner affects the pay wage is also less. The *Xiao Batou*'s role of labor placement changed from an important order determining wages so far to a message directing the Chinese miners to a work place.

Agglomeration of facings made it possible for Japanese staff members to grasp the entire process of the coal mining operation at once. It became possible for Japanese staff members to monitor lazy acts of Chinese miners directly. *Xiao Batou*'s mission at the coal mining site, at most, was to teach the rookie miner the basic knowledge related to the work. This task was sufficient for a skilled Chinese miner. *Xiao Batou* no longer must go to a coal mining site like *Da Batou*.

IV. Recruitment of Chinese miners and the Chinese contract system

1. Status and role of *Da Batou*

This section specifically examines the Chinese contract system function in the recruitment of Chinese miners, mainly in the 1910s and 1920s when the *Xiao Batou* system was adopted. Even under the *Xiao Batou* system, the recruitment of the Chinese miners was consistently held by *Da Batou*. The aim of this section is to confirm the function's differences between *Da Batou* and *Xiao Batou* in the recruitment.

The characteristic of the status of *Da Batou* was that it was an independent entrepreneur, not coal mine staff, except for a period of World War II.[100] *Da Batou* was not only a contractor of a coal mine but also a manager who ran various businesses simultaneously. For example, Zheng Fuchen, who was the largest *Da Batou* in Fushun, managed a civil engineering company, a tea trade company, and a real estate business. He owned more than 200 houses in Beijing and Fushun.[101] *Da Batou* Mou Jinyi and Kang Pinqing engaged in contract work of civil engineering and cargo handling at railway stations

[99] Ibid., pp. 32–3.

[100] It was around 1940 that *Da Batou* was treated as an SMR employee. Matsumura et al. ed, *Mantesu Roudoushi*, p. 301.

[101] He, ed. *Rijun Qiangcixia*, p. 133.

and wharfs other than Fushun.[102] For *Da Batou*, Fushun Coal Mine was just one of his diverse businesses: *Xiao Batou* was one employee of *Da Batou*'s labor contracting work. In addition to *Xiao Batou*, various subordinate occupations were known. To give same examples, *Xiansheng* is a teller who calculates all payments. *Dashifu* is not only cook's chief but also a butler responsible for all of business when *Da Batou* is absent in office. Furthermore, *Xiaoda* is a servant who deals with miscellaneous affairs of all kinds.[103]

In addition, *Da Batou* has the character of a representative of the same native-place group. Looking at the hometown of the Chinese miners under *Da Batou* in 1917, they are classifiable into two major groups. The first is the people from Hebei and Liaoning Province, mainly in Chaoyang prefecture, currently Hebei province.[104] The second is from along the Shandong Railway, mainly in Jimo prefecture.[105] Here we will call the first group Hebei group and the second group Shandong group for convenience. The Hebei group originated in 1910 when Zheng Fuchen, who was from Chaoyang prefecture, was adopted as *Da Batou* in Fushun. Zheng recruited those from Chaoyang prefecture as miners. He had *Xiao Batou* from the west of Liaoning province recruit miners from their hometowns.[106] The Shandong group is derived from the fact that *Da Batou*, which the Japanese Army adopted at the Yantai branch of Fushun Coal Mine during the Russo-Japanese War, was from Jimo prefecture. Subsequently the number of miners from Shandong Province arriving in Fushun increased.[107] In April 1914, 13 *Da Batou* were present in Fushun, among whom seven *Da Batou* had

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[102] Ibid., p. 133.

[103] Takei, *Manshu no Kuli*, pp. 38–9.

[104] Calculated from "Comparative table of hometown of miners" in Fujitaira, *Kouzan Roudousya*, p. 234–5, Chaoyang prefecture is currently included in Hebei province, but during the republic of China, it belonged to Rehe province. Japanese Guandong Army integrated Rehe province into Manchukuo in 1933. Chaoyang prefecture seemed to have strong regional ties with Liaoning province where Fushun Coal Mine is located.

[105] Fujitaira, *Kouzan Roudousya*, pp. 234–5.

[106] Ibid., pp. 49–50.

[107] Ibid., p. 40.

miners who were 77–98 per cent from Shandong Province; four *Da Batou* had miners who were 72–90 per cent from Hebei Province.[108] In Fushun, there were Shandong native-place association and Zhili (formerly Hebei province) native-place association. The report of SMR states, “The majority of the members in these associations are Chinese people engaged in coal mining”.[109] *Da Batou* Zheng Fuchen was serving as director of the Zhili association.[110]

The most important role of *Da Batou* is to recruit miners through relationships of themselves or their subordinates. Herein, I would like to talk about the importance of *Da Batou* being an independent entrepreneur. During the period when the *Xiao Batou* system was adopted in Fushun, the burden of recruitment costs was important in the relationship between *Da Batou* and SMR in the recruitment. "The internal rule about Chinese miners in Fushun Coal Mine,” enacted in 1917, stipulated the burden and guarantee of recruitment costs by the following passage. “The railway and steamship fee of recruited miners are borne by the company. If the recruited miner has reached 30 working days, then the company pays the same amount of the above railway and steamship fee as bonus to *Batou* to which the miner belongs. However, if the miner escapes without reaching 30 working days, the company collects the same amount money from *Batou* to which the miner belongs.”[111] The recruitment costs were borne by SMR, but if the miners escaped, *Batou* was to compensate it. In the background of this system, the migration rate of Chinese miners was very high. By making *Da Batou* a contractor, SMR

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[108] According to "Miner’s origin table as of 18th April 1918 in Fushun Coal Mine" in Fujitaira, *Kouzan Roudousya*, pp. 232–3, the remaining two *Da Batou* had nearly the same number of miners in Hebei and Shandong. One of them, in the case of Xu Diankui, the circumstances in which the subordinate miners are divided into Hebei and Shandong were as follows. “Although Dainkui is a Shandong people, he later transferred his domicile to Hebei Province. It is said that his father is currently serving as a manager of coal mine in Xinqiu, Hebei province. Fujitaira, *Kouzan Roudousya*, p. 50.

[109] SMR, ‘Taisyo Zyuyonen Do’, p. 106.

[110] SMR, *Mantesu Kaku Kasyo*, p. 262. I cannot confirm the director of Shandong native-place association with materials.

[111] Fujitaira, *Kouzan Roudousya*, p. 62.

was able to reduce the cost and risk of recruitment. I think that the position of *Da Batou* was maintained because the costs and risks for recruiting miners were great.

2. Role of *Xiao Batou* in recruitment

There were two kinds of recruitment methods of Chinese miners: local recruitment and remote recruitment. SMR explains the following related to local recruitment. “There are two kinds of miners coming directly to this coal mine. One is a person who moves through each station of this mine. The other comes from the rural along the South Manchurian Railway or remote areas. Both come to depend on relatives, friends, and persons from the same province. According to the recommendation of *Xiao Batou*, the Chinese labor department of each station decides hiring after doing a physical examination.”[112] As described in the material above, the miners needed an identity guarantee by *Xiao Batou* at the time of adoption.

Remote recruitment was conducted as follows. “Recruiters are selected from the subordinates of *Batou* under the coal mine. Many of them are senior miners. They head for their hometown and explain the facilities and treatment of the coal mine, thereby soliciting migrant work.”[113] Senior miners were skilled Chinese miners with long service years. Who selected recruiters? SMR states the following. “*Batou* bears all responsibility for the actions of recruiters sent by him. The company has a policy of avoiding imperative interference to the greatest extent possible, except to provide predetermined allowances.”[114] Judging from the contents of the materials described above, *Da Batou* seems to have selected recruiters.

The company set up recruitment offices in many areas of Hebei and Shandong. After finishing the recruitment at the hometown, the Chinese recruiter led the applicants to the recruitment office.[115] According to Qingdao office documents in the latter half of the 1910s, recruitment proceeded in the following procedure. “First, anyone who hopes to go to Gold Mountain (another name for Fushun

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[112] SMR, *Dai Nizi Zyunen Shi*, p. 564.

[113] SMR, *Dai Nizi Zyunen Shi*, p. 564.

[114] Ibid., p. 565.

[115] Ibid., p. 565.

Coal Mine), be sure to look for an identity guarantor. Because it is necessary to check the creditability after interviewing with the office staff, come to the Qingdao office with a letter of introduction. Secondly, if the miner worked on Gold Mountain for 30 working days, the relationship with the guarantor will disappear. Thirdly, if the miner escapes before 30 working days, the company will collect five Chinese yuan of transportation charge as compensation from the guarantor."[116] The material does not specifically mention who the guarantor is. According to the internal regulations examined in the previous section, because it is stipulated that the guarantor is *Da Batou*, it is appropriate to judge that the financial guarantor is *Da Batou*. A skilled Chinese miner, who is a recruiter, seems to have played a role in guaranteeing the identity of applicants to the company. Five silver Chinese yuan is a large amount of money equivalent to the average miner's wage for three months. It is too large a deposit to be borne by a skilled miner.[117] Moreover, it is unlikely that the guarantor is a farmer. Even if farmers were accredited as guarantors, if they escaped, the company would have required a great deal of labor and time to collect the deposit.[118]

Because direct recruitment was unfavorable in terms of cost, unless there was something special, the company had adopted a policy to leave all the recruitment to *Batou*.[119] The company raises two reasons for entrustment to *Batou*. First, the problem of money lending and borrowing between *Batou* and the miners arises. The company points out that "Particularly in the case of recruitment, it is always accompanied by a problem of money lending and borrowing, so *Batou* is not pleased to undertake an

[116] Fujitaira, *Kouzan Roudousya*, pp. 64–5.

[117] The average wage of Chinese miners' daily labor in 1917 was 0.505 Japanese yen. SMR, *Buzhun Tanko Kounai Saikutsu*, p. 288. By contrast, one Japanese yen of 1917 was worth 0.70 Chinese yuan (Fengtian piao). SMR, *Manshu Kakou Zhizyou*, p. 61. Converting to Chinese yuan, the average wage per day for Chinese miners amounts to 0.354 yuan.

[118] SMR states that 'it is a very disadvantageous method for mining management to dispatch recruiters especially at a high cost'. It is unlikely that it was adopting a collection method that further requires expenses. SMR, *Dai Nizi Zyunen Shi*, p. 566.

[119] Ibid., p. 565.

unfamiliar miner who was recruited by other people together with his debt."[120] Unless *Da Batou* is fully entrusted with recruitment from the company, he did not accept the guarantee of a recruitment fee. Secondly, it is a matter of emotion and communication between *Batou* and miners. The company explains this difficulty as follows. "Occasionally company recruitment office might recruit with my own staff members and sometimes direct miners to engage in recruitment. However, because the relationship between *Batou* and the miners is a custom in maintaining the relationship between boss and servant in the work scene, in the case of a miner who is recruited for office, there is a tendency for a lack of emotional communication with *Batou*. As a result, the escape rate of miners increases."[121] Difficulty of communication is thought to refer to the relationship between *Xiao Batou* and miners. *Xiao Batou* was also originally a miner. SMR points out that the miner develops into *Xiao Batou* by experiencing the role of a recruiter. "When the farmers migrate for work, they do not leave their hometown without clear consciousness. In every village, a head exhorts them to move."[122] And, "the head is a senior member of the hometown who has many years of experience in migrant work."[123] I think that the head refers to *Xiao Batou*. Apparently, SMR hoped that *Xiao Batou* would look after the miner. Therefore, an introduction letter and identity guarantee of *Xiao Batou* is requested at the time of adoption.

3. Why did the company need *Batou*?

Based on the analysis above, the recruitment method in the *Xiao Batou* system can be summarized as a guarantor system based on nepotism. This system was consistent with the employment patterns of rural areas. SMR points out that the most common reason for the high escape rate of Chinese miners

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[120] Ibid., p. 565. During recruitment, SMR states that the difficulty of borrowing money is ever-present. Results suggest a financial relationship between *Batou* and the miners, such as subsidies and advance payment of wages. From the aspect of financial relations, it is also necessary to assess the logic and functions of the Chinese contract system.

[121] SMR, *Dai Nizi Zyunen Shi*, p. 565.

[122] Fujitaira, *Kouzan Roudousya*, p. 31.

[123] Ibid., p. 31.

is that they returned to their homeland during the farming season because 99 per cent of them had migrated from rural areas.[124] Most of the Chinese miners who left the coal mine returned to the coal mine again. By introducing a fingerprint registration system in 1924, SMR tried to ascertain the movement of Chinese miners.[125] According to a survey based on the fingerprint registration system, "of 10,854 new recruits [in 1934], there were 9,635 people who have worked in the coal mine in the past."[126] When hiring farmers with such employment patterns, SMR did not care about their movement itself. Rather SMR was conscious of the two difficulties. First, miners escape before SMR recovers recruiting costs. Secondly, they do not return to the coal mine again after they returned home. To resolve these difficulties, SMR considered the contracting system effective because a slavery relationship existed between *Batou* and miners with rural society as a background. SMR strengthened the recruiting capacity of *Batou* by combining the guarantor system into the contracting system.

Finally, I would like to mention only one point related to development after the 1930s. I have already stated that SMR revised the regulations to reduce the status of *Da Batou* sharply in 1931. Such reforms were conducted because of the influence of the Great Depression, when it was possible to secure the labor necessary for local recruitment sufficiently without remote recruiting.[127] The main

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[124] SMR points out two reasons of the labor movement other than this. First, laborers turned to other business with favorable conditions of employment. Secondly, laborers moved between stations in the coal mine. SMR, *Dai Nizi Zyunen Shi*, p. 568.

[125] Introduction of the fingerprint registration system might have promoted the introduction of a direct management system in 1930s. Tim Wright points out that the Kailuan coal mine, the second largest coal mine in China, also intended to abolish Batou in the 1930s, but because the system for registering workers was not complete, it was frustrating. Wright, 'A Method of Evading Management', p. 674.

[126] SMR, *Tankou Dokuhon*, p. 442.

[127] Regarding the recruitment situation from the Great Depression to the outbreak of the Sino-Japanese War, the company states the following. "About 100 people were recruited around the South Manchurian Railway line. Workers who escaped were able to be replaced mostly with personnel who came directly to the coal mine." SMR, *Tankou Dokuhon*, pp. 438–9.

function in the recruitment of *Da Batou* lies in the guarantee of recruiting costs. Without the need for remote recruitment, SMR has also decreased the status of *Da Batou*. In addition, revision of the Batou regulations in 1931 included contents of strengthening of authority of *Xiao Batou*. The reason for this inclusion is mainly because local recruitment is the main reason why *Xiao Batou*'s identity guarantee function has become more important. In addition, because the number of local hires increased, the importance of an identity guarantee by *Xiao Batou* increased.

Table 2. Transition of labor management system in the Fushun Coal Mine

			First Stage	Second Stage	Third Stage
			Da Batou System 1901–1911	Xiao Batou System 1911–1930	Direct Mangement 1930–1940
Coal mining section	out of the pit	Selection of supervisor	Da Batou	Company	Company
		Labor placement	Xiao Batou	XiaoBatou	Company
	in the pit	Line management	Da Batou	Company	Company
		Work supervision	Xiao Batou	XiaoBatou	Company
		Instruction and training	Xiao Batou	XiaoBatou	Skilled worker
Welfare section		Management of lodging / cooking	Da Batou	Company	Company
Recruitment section		Recruitment planing	Da Batou	Company	Company
		Burden of recruitment fee	Da Batou	Company	Abolition of remote recruitment
		Guarantee of recruitment fee	Da Batou	Da Batou	
		Selection of recruiters	Da Batou	Da Batou	
		Recruiters	Xiao Batou	XiaoBatou	
		Identity guarantee	Xiao Batou	XiaoBatou	XiaoBatou

V. Conclusion

We can summarize the analysis results above to elucidate the development of the labor management system at Fushun Coal Mine. Table 2 shows that labor management is classified into three groups: the coal mining section, the welfare section, and the recruitment section. The area of the Chinese contract system is gray. The area of the company is color coded with white. Looking from the first stage to the third stage, the area that *Da Batou* traditionally managed has shifted from grey to white. Looking only at the change in this part, the transition of the labor management system will be arranged as the process of decreasing the authority of *Da Batou* as Takatsuna and You Byoungboo state. However, by clarifying the person in charge of labor management for each section, we can obtain four new important points of knowledge as explained below.

First, reduction of *Da Batou*'s position did not directly engender direct labor management in the

working faces. The second stage labor management system was the system centered on *Xiao Batou*. The coal mining technology at this stage failed to realize aggregation of working faces. The unit of work consisted of countless small units. SMR entrusted labor management related to the operation of small work units to *Xiao Batou* and established a system to reflect the management intentions of the company in *Xiao Batou* through Japanese staff members directly under the company.

Secondly, in the third stage, reforms were developed to replace *Xiao Batou*'s functions with the directly company-controlled staff members and skilled Chinese miners. The coal mining technology at this stage succeeded in disassembling small work units by concentrating the working faces. As a result, the functional advantage of *Xiao Batou* was lost. A system under direct control of the company system centered on the Japanese chief and a skilled miner's leader was established.

Thirdly, the labor management functions of the *Da Batou* system and the *Xiao Batou* system differ. In the *Da Batou* system, the authority of *Da Batou* in coal extraction has penetrated until the selection of a work supervisor. Therefore, it was an insufficient system to reflect the company's management intention in coal mining. The *Xiao Batou* system was a system that cuts out the order relation in the coal mining division of *Da Batou* and *Xiao Batou*. This system incorporates contents that enhance the capabilities of *Xiao Batou* as a work supervisor.

Fourthly, the recruitment section in the *Xiao Batou* system developed as a guarantor system based on nepotism. The function of the *Batou* system as a whole is a labor supply contracting system, but when divided into *Da Batou* and *Xiao Batou*, their different functions become apparent. *Da Batou* guarantees offering expenses. *Xiao Batou* is responsible for the identity guarantee. The authority of *Da Batou* shrank sharply in 1930 because the necessity of a guarantee function for the recruitment fee diminished.

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