Unexpected Success: The Spread of Manchurian Plague and the Response of Japanese Colonial Rule in Korea, 1910-1911

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Abstract

This paper aims to examine the spread of Manchurian plague and the response of the Japanese colonial government. Previous studies of this issue stressed the successful, albeit forced, preventative measures taken by the Japanese colonial government. However, this paper argues that Western powers did not agree with the new theory that pneumonic plague was transmitted through respiratory infections, as discovered by Wu Liande and promoted by Kitasato Shibasaburo. They continued to believe the old Japanese theory that the plague was transmitted through fleas from rodents. The Japanese colonial government focused on reducing the rat population to prevent the spread of plague. Moreover, they had no quarantine hospitals or other equipment, and epidemic prevention programs and measures were inadequate. The success of their efforts was due less to the measures taken by the Japanese colonial government than from the low influx of Chinese laborers into Korea.

Keywords: Manchurian plague, pneumonic plague, Wu Liande, Kitasato Shibasaburo, Japanese Government-General, Rat Removal Movement, influx of Chinese laborers, quarantine

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Introduction

With regard to an assessment of colonial modernity in sanitary medical services, I have recently pointed out that the existing research acknowledged Japanese achievement while emphasizing the oppression of the Japanese colonial government (Refer to Sihn 2007). The prevalence of plague in Manchuria in 1910 coincided with the period in which Japan violated the sovereignty of the Joseon dynasty; the preventive measures taken can be examined from the viewpoint of an initial deployment of the colonial rules. Current evaluation of plague prevention from 1910-1911 does not deviate much from main research trends.

Concerning this issue, Park Yun-Jae noted that although the Japanese colonial government forcefully conducted plague prevention, it stressed the public nature of epidemic prevention to justify the colonial rules and pressured Koreans to conform. It was reported that no one was infected with the plague in Joseon (Park 2000, 786-787).

However, there are many doubts that the Japanese colonial government had exact information about pneumonic plague and took the correct measures. At that time, Western medical science's knowledge about the pneumonic plague was not fixed. As the Western powers took part in the Manchurian plague prevention, knowledge of medical science related to the leadership of plague prevention became more important. Moreover, the success of prevention did not solely depend on the capacity of the authorities. Various factors, including the growth environment of the disease, the working of the human immune system, the effect of vaccine and treatment, were involved comprehensively; thus, the successful epidemic prevention cannot be fully credited to the preventative measures taken. The Japanese colonial government was successful in preventing smallpox and cholera to some degree, but failed to entirely control them. It should also be noted that acute epidemics such as dysentery and typhoid, as well as chronic epidemics like tuberculosis and venereal disease, were on the rise. The relatively successful prevention of

malaria was due to effective treatment with quinine rather than to preventive measures.¹

The Spread of Plague and Epidemic Prevention Systems in Northern Manchuria

After being first discovered in Hong Kong in 1894 by Alexandre E. J. Yersin (1863-1943) and Kitasato Shibasaburo (1853-1931), the bubonic plague spread into Northeast China. Because Yersinia pestis (formerly Pasteurella pestis), the cause of bubonic plague, is transmitted by the bites of infected fleas to humans, the death rate from the plague was high; the epidemic did not stop even in winter. There were three kinds of plague: bubonic plague, pneumonic plague, which affected the lungs, and septicaemic plague, which affected the blood. Bubonic plague is transmitted via fleas infected with yersinia pestis. Pneumonic and septic plague can also develop from bubonic plague (Maxwell 1929, 32-41; Kiple 1993, 276).

While bubonic plague spread in East Asia in the nineteenth century, pneumonic plague appeared in Northeast China in the twentieth century. It was called *heuksabyeong* (black death), *heugyeok* (black plague), and *besdo* (pest) in Korea. In 1899, the Great Han Empire (October 1897–August 1910) passed the Rule of Epidemic Prevention, which included six infectious diseases: smallpox, typhoid fever, typhus, cholera, dysentery, and diphtheria. It did not, however, include the plague. The Japanese colonial government promulgated "legal infectious diseases" in 1915, adding paratyphoid fever, scarlet fever, and the plague (Sihn 2006, 25).

Because Korea was located between China and Japan, Chinese and Japanese infectious diseases easily passed through Korea. The plague may have spread through Korea's open ports. In December 1898, when the plague spread to Kobe in Japan, the Korean govern-

^{1.} On the relationship between the Japanese colonial government and the control of epidemic diseases, see Sihn (2007, 19-21).

ment started quarantine on vessels in Incheon on December 28, 1898, Busan on December 30, 1898, and Wonsan in December 1899, according to quarantine regulations.²

Because the plague had previously spread in nineteenth-century China and Japan, the Great Han Empire and Japanese Residency-General (February 1906-August 1910) watched the epidemic closely. However, no problems related to the plague arose during the Great Han Empire. Because the bubonic plague was not transmitted human to human and the railroad, later the main route of infection, was not constructed yet, it was unlikely for Korean people to be infected with plague during the epidemic of 1898. In contrast, environmental changes made it possible for the Manchurian plague of 1910 to spread. However, no dead bodies infected with the plague were found in Korea at the peak of the Manchurian plague. Why did not it spread to Korea?

Originally Northeast China was the birthplace of the Qing founders. Qing China prohibited the migration of the population. However, this region became an arena of struggle among Western powers from the late nineteenth and early twentieth century. The migration of the population and circulation of capital began in earnest. Most of all, after the construction of a railroad to generate military and economic profits among Russia, Japan, and China, the political, economic, and social environment in Northeast China changed a great deal. Moreover, as the price of European fur rose suddenly, Western capital was concentrated on the leather of the tarbagan (Siberian marmot) in Northeast China. Chinese seasonal laborers and hunters gathered to make money in the winter (Nathan 1968, 1-2).

On September 16, 1910, the first plague patient was identified among the Chinese carpenters working near the Russian border. The epidemic began to spread among the laborers and hunters who had formed a settlement in terribly unsanitary conditions. By October, the

^{2. &}quot;Black Death and Quarantine," *Hwangseong sinmun* (Imperial Capital News), December 2, 1899.

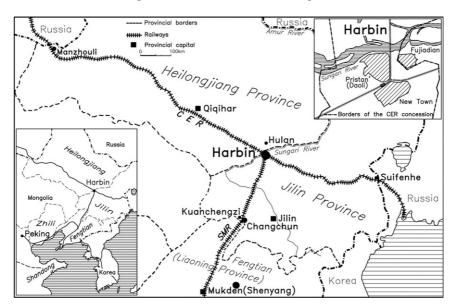


Figure 1. Manchuria and the Plague³

disease reached Manzhouli in Heilongjiang province of China. At that time, Manzhouli was a small village where 5,000 Russians and 2,000 Chinese lived. The number of Chinese rose to 10,000 during the hunting season between April and October. From October to December 1910, some 329 people in the region died of plague. The disease spread further to Harbin, Changchun, and Jilin along the railroad (Chuan 1912, 27-28; Yu 2004, 264-267) and moved rapidly southwards as the coolies in the Shandong area went home by train in the winter. The outbreak of plague had much to do with the victims' status and wealth; some coolies were prevented from boarding trains. Plague patients were found in 69 locations in three Northeast provinces. According to the death statistics of *Dongshansheng yishi baogaoshu* (The Report of Epidemics in Three Eastern Provinces),

^{3.} Cited from Gamsa (2006, 149, 153).

^{4.} In terms of death rate, coolies and beggars ranked first, the wealthy and foreigners last. See Gamsa (2006, 154-155).

Name of Province	Population	Death Statistics
Heilongjiang	1,305,817	14,812
Jilin	4,579,224	24,867
Fengtian	6,897,848	7,068
Total	12.782.889	46.747

Table 1. Population and Death Statistics in Three Eastern Provinces

some 46,747 people died of plague between October 1910 and February 1911 (Fengtian Province Epidemics Prevention Center 1911, 45).⁵ The disease reached as far as Beijing, Tianjin, and Jinan.

To maintain domination over the empire, Russia tried to establish an independent epidemic prevention system. In November 1910, Russia prohibited Chinese laborers from entering the Maritime Province of Siberia and boarding the Chinese Eastern Railway (hereinafter CER). Begun in 1898 and fully operating since 1903, the CER was laid out by Russia as the trans-Siberian route from Chita to Vladivostok in Russia, including Manzhouli to Suifenhe in China (Gamsa 2006, 147).

The local community in Manchuria was also active in preventing the disease.⁶ The Chinese government failed to deal with the issue promptly, but began to realize that prevention had much to do with the maintenance of sovereignty. The government set up the Jingshi Epidemics Prevention Office (Jingshi Fangyiju) in December 1910, followed by many provincial branches. The Chinese government made an all-out effort to control the epidemic. The general manager of epidemic prevention administration, Wu Liande (1879-1960),

^{5.} Estimated number of people who lost their lives in the epidemic (more than half of them in Jilin province) range from 42,000 to 60,000. The highest figure of 60,000 dead is put forward by Wu Liande, Nathan, and Jiao Runming. See Iijima (2000, 141-142); Wu (1959, 33); Nathan (1968, 1-2); and Jiao (2006, 108-110).

^{6.} About Russian and Japanese preventive measures in Manchuria and the conflict between the Chinese government and local community, see lijima (2000, 143-157, 187-194).

executed strong policies including quarantine, isolation, and incineration of bodies, backed by the police force (Jiao 2006, 110-118).

The outbreak of plague reached a peak at the beginning of February; from the end of the month and onwards, the disease was mostly suppressed. The governor-general of Three Eastern Provinces, Xi Liang (1853-1917), established the Fengtian Temporary Epidemics Prevention Center (Fengtian Linshi Fangyisuo). Being traditionally educated, he supported taking extensive measures, including the removal of Shandong coolies from the region, acknowledging that it was necessary to isolate the workers and burn down houses that accommodated plague patients (Nathan 1968, 75).

Japan acquired the Guandong Leased Territory (Kantoshu) at the end of the Russo-Japanese War in 1905, and institutions such as the Office of the Governor General of Guandong (Kanto Totokufu), South Manchuria Railroad Co. (Minami Manshu Tetsudo Kabushiki Kaisha; hereinafter SMR), and Bureau of Maritime Affairs of Guandong (Colonial Office Kantocho Kaimukyoku) led the actions to prevent the disease. SMR installed 17 medical centers to engage in sanitary activities. The Bureau of Maritime Affairs of Guandong took charge of inspection, which was a core activity of sanitation administration (Iijima 2000, 177-183).

In late October 1910, Abe Nakao, the director of Dalian hospital in SMR, raised the necessity of inspection of its domains. SMR subsequently conducted inspections, installed quarantine wards, and started to remove rats. On November 25, 1910, SMR started train quarantine. Because this was during the export period for soybeans, SMR took charge of inspections with a doctor using a train rather than station quarantine, which entailed stopping trains and inspecting them in a specified place. Train quarantines were more comfortable than station quarantines for those being tested. SMR executed strict inspections of the Chinese and lodging facilities in the domain of SMR. They dismissed Chinese laborers and restricted Chinese admission into Japanese stores. On January 5, 1911, as the plague patients came out of Dalian, SMR changed the train quarantine to station quarantine. The breakout of pneumonic plague continued in the

domain of SMR after the first patient was identified in southern Changchun region on December 31, 1910. The last patient was identified on March 1, 1911. Chinese workers were banned from getting on trains and were denied access to Japanese administrative areas. In case they had a special reason to enter the area, a seven-day quarantine period was imposed. The police and military were mobilized to enforce the regulation (Iijima 2000, 187-188).

One of the characteristics of epidemic prevention in the Japanese governed areas including the SMR domain was vigorous rat trapping in addition to inspection. According to a survey by the Department of Temporary Epidemic Prevention (Rinji Boekibu), under the Office of the Governor General of Guandong, some 161,629 rats were caught between January and April 1911 in Lushun, Dalian, Yingkou, Fengtian, Changchun, and Andong. Among them 70,540 were inspected for virus infection, but none yielded the plague virus (Department of Temporary Epidemic Prevention 1911, 14-16). Rat removal was not critical for epidemic prevention, but was actively undertaken nonetheless. It was simply either a misguided policy or an intentional measure to demonstrate the sanitary level of the region and to justify inspections by capturing the source of infection and producing a visible outcome.

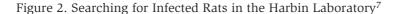
According to the SMR, Japanese expenditure in fighting the epidemic in 1910-1911 was as follows: 1,000,000 yen by the Home Government; 684,075 yen by the Office of the Governor General of Guandong; 860,863 yen by the SMR; 14,747 yen by the Japanese Hygienic Associations in Manchuria; and 142,000 yen by the Japanese Government-General of Korea (Nathan 1968, 28). Japanese Government-General expenditure for plague prevention took up six percent of Japanese total expenditure (2,701,685 yen), and 0.2 percent of Japanese Government-General expenditure (66,557,436 yen) of 1910-1911 (Japanese Government-General 1912, 246). From the viewpoint of fiscal spending, Japanese Government-General considered the Manchurian plague a secondary problem. Most fiscal spending was related to capturing rats, inspecting them for viral infection, managing quarantine wards, and spreading propaganda.

Plague Information and Prevention in Colonial Korea

It was very important to get exact information and knowledge about infectious diseases. This information and knowledge not only affected the decision on how to establish preventive measures, but also influenced who would take the lead in anti-plague measures between the Western powers and China. Russia, Japan, France and China keenly competed with bacteriological knowledge.

Wu Liande, the head of the Manchurian Plague Prevention Service and the first physician to introduce cremation and autopsy into Chinese medical practice, observed the novel fact that bacillus pestis could be found only in the lung through respiratory infections, but not in any other organs. He immediately informed medical scientists and officials in Beijing about his discovery. This discovery meant that Manchurian plague was not bubonic plague, and the anti-plague measures had to be different from the existing methods. However, many people did not understand the meaning of this discovery. Even Western doctors learned the hard way about the pneumonic nature of the plague. Japanese, Russian, and French competitors doubted Wu Liande's discovery and therefore refused to wear masks even when they were in close contact with terminal plague patients. One powerful dissenter, French doctor Gérald Mesny (1869-1911) became infected with the plague when he visited the Russian epidemic hospital without wearing a mask. Six days later, after this leading figure of the anti-plague prevention passed away, many people started realizing the nature of pneumonic plague (Wu 1959, 12).

Wu Liande was confronted by Russian epidemiologists about the origin of the Manchurian plague. The Ukrainian epidemiologist Professor Daniil Kirillovich Zabolotnyi (1866-1929), head of the Russian delegation, presented to a conference his theory on the tarbagan as the carrier of pneumonic plague. In 1900 and 1903, respectively, D. K. Zabolotnyi and Wu Liande had studied under Élie Metchnikoff (1845-1916) at the Institut Pasteur. The transmission of human plague from the tarbagan in the Transbaikal and Outer Mongolian steppe had been a favorite theory of Russian scientists since the 1860s, and one vigor-





ously promoted by D. K. Zabolotnyi. In the summer of 1911 Wu Liande travelled to Manzhouli and further into Inner Mongolia and talked to seasoned tarbagan hunters, but could find no one who had ever seen a sick animal or could recall an instance when a fellow trapper was infected. At an international congress in London, as late as 1913, Wu came up with a memorable simile: "To conclude that a man whose occupation is that of a tarbagan hunter and who develops the plague has been infected from a tarbagan is comparable to concluding that a man who sells rice and who develops the plague has been infected by the rice" (Gamsa 2006, 153, 173-174).

Kitasato Shibasaburo, who isolated and identified yersina pestis as the source of bubonic plague during the Hong Kong plague in 1894, vigorously promoted Wu Liande's theory of Manchurian

^{7.} Cited from Chinese Plague Commission (1911, 61).

plague. However, this did not mean that the Japanese military authorities and the Japanese colonial government agreed with Kitasato's opinion on Manchurian plague. While Kitasato was considered to be opposed to the policy of the Japanese government, the Japanese military authorities in China and the Japanese colonial government in Korea still continued with the Japanese scientists' old theory of the plague.⁸

The news of the plague spreading in Northeast China reached Korea in October 1910, two months after Japan occupied Korea by force. The plague was moving from Northern Manchuria to Southern Manchuria, and posed a critical hazard to Korea, as it bordered on the region. Nevertheless, no special measures were taken for the next two months. The Japanese Government-General started inspections by mid-January and announced related directives and regulations. However, they were more of a formal gesture than substantial measures.

Though the colonial authorities acknowledged the necessity of quarantine, they had no agreement about the period of quarantine. The health department of the Police Inspector General under the Japanese Government-General promulgated a ten-day quarantine for visitors from the hazardous region. After a week, the Police Inspector General regulated that "the people crossing the border should pass on fixed days and stay in appointed places. If somebody is confirmed to be healthy, they should not visit any other places." This edict had no regulations about the period of quarantine. The next day, the colonial authorities executed a three-day quarantine in Sinuiju. They hesitated over the period of quarantine; in the end, it was reduced from ten days to three. This contrasted with Chinese quarantine. Five or seven-day quarantines were maintained in China

^{8.} Kitasato's group conflicted with the medical faculty of Tokyo Imperial University between 1889 and 1914. This confrontation affected the medical policy in Japan and its colonies. See Liu (2008, 51-63).

^{9. &}quot;Black Death and Edict," Maeil sinbo (Daily News), January 15, 1911.

^{10. &}quot;Black Death and the Japanese Government-General," *Maeil sinbo*, January 21, 1911

^{11. &}quot;A Rigid Epidemic Prevention in Sinuiju," Maeil sinbo, January 24, 1911.

(Gamsa 2006, 150; Iijima 2000, 188). Actually, the colonial authorities required at least a five-day quarantine, because death usually occurred between the third and fifth days (Maxwell 1929, 35).

In Sinuiju, actual inspections began on January 21. Wonsan joined two days later.¹² The colonial authorities took a census of the population by police power, published and distributed *Heuksabyeong myeongsimnok* (A Pamphlet of Directions for Black Death), and sprinkled carbonic acid for disinfection of the plague.¹³ On January 26, as the Manchurian plague became more and more serious, the colonial authorities broke off the process of the export and import business in the four branches of Sinuiju customs, and prohibited any landings of visitors from the hazardous region.¹⁴ On January 27, the colonial authorities inspected ships from Manchuria in Sinuiju, Jinnampo, Incheon, and Busan. If they passed their quarantine, they could enter Korea proper.¹⁵

Despite strengthening inspections in major border areas and ports including Sinuiju, no quarantine ward was established. Also it was impossible to inspect everyone who walked across the Amnokgang river that stretched over 800 km. The Japanese colonial government expected cooperation in the Andong district, but the district did not actively seek measures, which made it very difficult to inspect people who crossed the frozen river on foot during the winter. Therefore, the Japanese colonial government had to dispatch military policemen for the length of 120 km between Byeokdong near Supung dam and Yongampo downstream, with Sinuiju inspection point as a center. This distance was no more than 15 percent of the whole river. Koreans were forced to join as inspectors to fill the posts. Some 800 people were compelled to do forced labor, working at MP offices and

^{12. &}quot;The Official Document of the Government-General," *Maeil sinbo*, January 24, 1911.

^{13. &}quot;A Rigid Epidemic Prevention in Sinuiju," Maeil sinbo, January 24, 1911.

^{14. &}quot;The Official Document of the Government-General," *Maeil sinbo*, January 28, 1911.

^{15. &}quot;The Official Document of the Government-General," *Maeil sinbo*, January 29, 1911.

police stands. By January 26, 91 people were confined in the Sinuiju quarantine ward. Everyone was either from Korea or Japan except for one Chinese person. 16 Inspections also began along the Dumangang river from February $1.^{17}$

Between January 14 and 27, the Sinuiju inspection center examined 1,029 Japanese, 521 Korean, 778 Chinese, and one from another country. The quarantine ward accommodated 128 Japanese, 20 Korean, and 20 Chinese. None were suspected of having the plague. The ban on the disembarkation of Chinese workers was lifted by January 21, which loosened the inspection. Meanwhile, the quarantine ward did not have sufficient capacity and some Japanese inns were used for quarantine purposes.¹⁸

As the Manchurian plague was still rampant, the police department in Gyeonggi-do province posted guards and police substations along the river in Gyeonggi-do province. The "Self-Defense Forces of Disinfection" (Bangyeok Jawidan) was organized at every *dong* (or neighborhood) and supplemented the lack of police power. It was composed of 30 men who kept watch over the riverside. Yakushigawa Tsuneyoshi, the director of MP in Gyeonggi-do province, took an optimistic view of the Self-Defense Forces of Disinfection which was made up of volunteers and was autonomous, and could be changed into a health association or fire defense union. However, from a civilian standpoint, the civilians who participated in guard and defense duties received harsh treatment without any pay. Moreover, they thought that the plague had not broken out. 20

From the early stage of epidemic prevention, Japan focused on rat removal. On January 15, 1911, the director of the health department of the Police Inspector General promulgated the edict of rat removal by mousetraps over the whole country.²¹ The colonial

^{16. &}quot;The Completion of Disinfection in Aprok River," Maeil sinbo, January 29, 1911.

^{17. &}quot;Duman Riverside and the Disinfection," Maeil sinbo, Feburary 3, 1911.

^{18. &}quot;The Number of Qurantine in Sinuiju," Maeil sinbo, Feburary 7, 1911.

^{19. &}quot;Self-Defense Forces of Disinfection," Maeil sinbo, March 1, 1911.

^{20. &}quot;A Policy of Disinfection in Joseon," Maeil sinbo, March 3, 1911.

^{21. &}quot;Black Death and Edict," Maeil sinbo, January 15, 1911.

authorities purchased rats and undertook bacteriological testing in Sinuiju and Incheon.²² Police stations in northern Gyeongseong strengthened education and propaganda to prevent plague through rat removal, and encouraged people to make efforts for rat removal.²³ The Police Inspector General sold mousetraps to encourage rat removal, spread propaganda about the royal family purchasing mousetraps, and announced plans to praise and reward outstanding captors.²⁴ On February 1, police stations in Gyeongseong captured 7,900 rats in six days.²⁵ Between January 21 and February 15, 253 rats were captured. On February 12, a prize was given to participants through a lottery.²⁶ The colonial authority bought 200-300 rats daily at Busan port to prevent the plague.²⁷ Thousands of viral tests were conducted, but no correlation was found between rats and pneumonic plague. 28 This shows that the purpose of the movement was not a preventive measure against the pneumonic plague, but was disciplining the Korean people as well as propagating sanitary activity by the colonial authorities.

Conclusion

How effective were the plague prevention activities by the Japanese colonial government? The measures of the Police Inspector General focused on the rat removal movement from the beginning. Dr. Kitasato Shibasaburo, upon visiting Korea, showed doubt about spread of pneumonic plague through rats in contrast to the bubonic plague. Dr. Kitasato emphasized that the migration of Chinese workers should be considered as the primary source of pneumonic

^{22. &}quot;Plague and Inspecting Rats," Maeil sinbo, January 15, 1911.

^{23. &}quot;Chief of Police, Suzuki's Address," Maeil sinbo, January 26, 1911.

^{24. &}quot;Promotion of Rat Removal in Two Palaces," Maeil sinbo, January 27, 1911.

^{25. &}quot;Good Grades in Capturing Rats," Maeil sinbo, February 10, 1911.

^{26. &}quot;The Deratizing Number 15,000," Maeil sinbo, February 14, 1911.

^{27. &}quot;The Number of Buying Rats in Busan Port," Maeil sinbo, February 17, 1911.

^{28. &}quot;The Inspection of Rats from Contagious Disease," Maeil sinbo, January 15, 1911.

plague.²⁹

Pneumonic plague passed from one human agent to another in the cough droplets of the patients; thus the priority was to inspect the Chinese coolies who numbered 200,000-300,000, who lived in unsanitary settlements. However, the Office of the Governor-General of Guandong and Japanese Government-General had misunderstood Manchurian plague as bubonic plague. Their prevention program and measures were operated inadequately.

The actual inspection began in late January 1911 in the Sinuiju area, and the mortality rate by plague reached a peak by then. Also, the quarantine facility was insufficient so that some people could not be effectively isolated. The reason pneumonic plague did not spread from Manchuria to Korea was mostly because Chinese coolies did not enter Korea.

The inspection period was also inappropriate. In the beginning, a ten-day inspection was planned. However, due to insufficient facilities, a three-day stay in a quarantine ward was opted for. In the case of Russia, the inspection was conducted for five days, and seven days in China and Guandong Leased Territory managed by Japan.

Next, there is a question about whether the epidemic prevention program was adequately operated. The belated actions by the Japanese colonial government involved the police and military force. The effect of their epidemic prevention actions is in doubt.

One is likely to presume the high effectiveness of the plague control policies taken by the Japanese colonial government due to their extensive propaganda and the forceful measures used by the police and military.³⁰ However, the Japanese colonial government focused on instigative and sometimes irrelevant aspects such as rat removal to restore order in the colony. The fact that Korea was away from the returning route of the Chinese coolies explains how the country avoided the disaster of the epidemics coming from Manchuria.

Medical historians have described the containment of the

^{29. &}quot;Dr. Kitasato's Lecture," Maeil sinbo, February 28, 1911.

^{30. &}quot;The Policy of Disinfection in Korea," Maeil sinbo, March 3, 1911.

Manchurian plague as a watershed event in the history of modern medicine in China (Lei forthcoming). To expand imperial territory, the Japanese colonial government in China and Korea concentrated on the containment of the Manchurian plague. However, it is hard to regard the epidemic prevention measures of the Japanese colonial government in Korea as a success in modernizing the colony. That Korea was not affected by the first spread of plague in Manchuria resulted more from the unexpected success of avoiding the influx of the virus into Korea than from measures taken by the Japanese colonial government.

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GLOSSARY

Abe Nakao (J.)	安部仲雄	Kanto Totokufu (J.)	關東都督府
Amnokgang	鴨綠江	Kanto Totokufu Rinji	關東都督府 臨時
Andong (Ch.)	安東	Boekibu (J.)	防疫部
Bangyeok Jawidan	防疫自衛團	Kantocho Kaimukyoku	關東廳 海務局
Beijing (Ch.)	北京	(J.)	
Busan	釜山	Kantoshu (J.)	關東州
Byeokdong	碧潼	Kitasato Shibasaburo	北里柴三郎
Changchun (Ch.)	長春	(J.)	
Dalian (Ch.)	大連	Lushun (Ch.)	旅順
dong	洞	Manzhouli (Ch.)	滿洲里
Dongshansheng yishi	東三省疫事	Minami Manshu	南滿洲
baogaoshu (Ch.)	報告書	Tetsudo Kabushiki	鐵道株式
Dumangang	豆滿江	Kaisha (J.)	會社
Fengtian (Ch.)	奉天	Sinuiju	新義州
Fengtian Linshi	奉天臨時	Suifenhe (Ch.)	綏芬河
Fangyisuo (Ch.)	防疫所	Supung	水豊
Gyeonggi-do	京畿道	Tianjin (Ch.)	天津
Gyeongseong	京城	Wonsan	元山
Heuksabyeong	黑死病	Wu Liande (Ch.)	伍連德
myeongsimnok	銘心錄	Xi Liang (Ch.)	錫良
heugyeok	黑疫	Yakushigawa	藥師川
Incheon	仁川	Tsuneyoshi (J.)	常義
Jingshi Fangyiju (Ch.)	京師防疫局	Yingkou (Ch.)	營口
Jinnampo	鎭南浦	Yongampo	龍巖浦

(Ch.: Chinese; J.: Japanese)