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# **The institutionalization process of smallpox vaccination in Korea: institutional initiatives of Chosŏn before 1894**

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## Abstract:

The institutionalization process of smallpox vaccination in the Korean peninsula at the end of the 19th century is a controversial topic in Korean history. Before the official annexation of Korea by Japan in 1910, the institutional initiatives conducted by Chosŏn's government for vaccination seemed to have been greatly undervalued. This perception was accentuated in previous scientific studies by the fact that we still have very few statistical sources on the number of people vaccinated before the annexation of Korea by the Japanese forces. Moreover, the outset of the institutionalization of vaccination in Korea is commonly situated to 1894 when the first laws for smallpox vaccination were enacted. But before 1894, what were exactly the initiatives done by the Chosŏn's government to create an organized system for vaccination before 1894? This study mainly explores administrative and law registers compiled between 1876 and 1894-1895.

Keywords: smallpox vaccination, institutionalization, health policies, epidemics control, modernization.

## **The institutionalization process of smallpox vaccination in**

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This scientific article comes from the second chapter of my master's degree thesis. This thesis was defended in June 2022 at Inalco, Paris (France) to Mr. KIM Daeyeol (Inalco), Mrs. POURCHEZ Laurence (Inalco, EHESS, CNRS) and Mrs. PABERZ Chloé (Inalco). The title is « Le processus d'institutionnalisation de la vaccination antivariolique dans la péninsule coréenne - Les initiatives institutionnelles du gouvernement Chosŏn et de l'Empire de Corée de 1876 à 1905 ».

# Korea: institutional initiatives of Chosŏn before 1894

Introduction:<sup>2</sup>

Smallpox vaccination was discovered in England in 1796 by the British physician Edward Jenner (1749-1823). Smallpox vaccination (牛痘, 種痘) spread on the Korean peninsula by three distinct routes: by Western medical books translated into classical Chinese which circulated between Qing dynasty China (清, 1636-1912) and Chosŏn (朝鮮國, 1392-1897) in the 19<sup>th</sup> century ; by diplomatic delegations sent to Meiji-era Japan (明治時代, 1868-1912) in the end of 19<sup>th</sup> century; and then, in a relative extent, by the medical activities of Western missionaries who arrived on Korean soil from the 1880s.

Since the second half of the 20<sup>th</sup> century, many Korean researchers have studied the introduction process of smallpox vaccination in Korea.<sup>i</sup> Some of them have been also interested in smallpox vaccination institutionalization in Korea, but their studies have mainly been focused on policies established during the colonial period of Korea.<sup>ii</sup>

The interest in smallpox vaccination policies during the colonial period seems to be a global interest in different areas of the world.<sup>iii</sup> Smallpox vaccination campaigns from the end of the 19th century to the first half of the 20th century were indeed essential elements of colonial empires' health policies, whether it was in Korea or in other parts of the world colonized by Western powers or 'Westernized' powers – like Japan. Smallpox vaccination was seen as a symbol of Western scientific superiority due to its effectiveness and simplicity. Whether it was the Dutch in Java's colonies, the British in India, or even the French in

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<sup>2</sup> All common nouns, events or proper nouns in Korean have been romanized with McCune-Reischauer's system. All the dates, expressed with the use of the expression "xth day of the xth month of the year x" do not correspond to dates of the Gregorian calendar, but on dates of the lunisolar calendar that was used during the Chosŏn dynasty. If this expression is not used, it is a date equivalent to the Gregorian calendar.

Indochina, colonial metropolises undertook to massively vaccinate the local populations as one of their most important ‘civilizing’ missions.

Yet, before the colonization of Korea, and before the first modernization reforms started in 1894 mainly under the influences of Japan<sup>iv</sup>, only a few studies have been carried out on this subject. The only research published on smallpox vaccination institutionalization in Korea before 1910 is the one written by I Kkotme (1993).

In her research, I Kkotme focuses her analysis from the signature of the Treaty of Kanghwa in 1876 (江華島條約) to the official annexation of Korea by Japan’s Empire in 1910. Although I Kkotme's analysis is essential in the Korean historiography, she had some negative approaches to the establishment of these early laws and institutions in Korea.

According to I Kkotme, laws and institutions for vaccination put in place by the governments of Chosŏn and then, by the Empire of Korea (大韓帝國, 1897-1910), never really led to the slightest concrete result before the establishment of the Korean protectorate in 1905. This negative approach is mostly explained by the lack of statistical evidence on the number of people vaccinated during this period but also by the assumed inability of the Chosŏn government to enforce these laws. Also, I Kkotme places the official beginning of the institutionalization of vaccination in Korea at the reforms of the *kabo* year, i.e., in 1894, and only briefly mention the system for vaccination that existed before.

Therefore, my research paper tends to re-question the institutional initiatives set up for smallpox vaccination by the Chosŏn government between 1876 and 1894. More precisely, my article pursues to bring two new approaches to the already existing analysis of smallpox vaccination’s institutionalization in Korea at the end of the 19<sup>th</sup>.

First, this paper seeks to re-evaluate the role of Chosŏn government’s initiatives

before the *kabo* reforms (甲午改革, 1894) in shaping regional smallpox vaccination systems. The official start of the institutionalization of vaccination in Korea is commonly situated to the 1894's reforms when the first laws for vaccination were enacted by the Korean government. However, the systems and regulations put in place before 1894 in the various regional administrations whose main goal was to vaccinate the local population, as well as to train physician-vaccinators, can be regarded as a first step, or at least a preliminary step, of the institutionalization of vaccination in Korea.

Secondly, this paper seeks to highlight the efforts and contributions of the Chosŏn government to propagate and institutionalize this method of vaccination in the Korean peninsula at the end of the 19th century. Indeed, all these institutional approaches seem to have been greatly undervalued, or interpreted in previous studies as failures, in the sense that all the institutions created for vaccination by the Chosŏn's government did not succeed in vaccinating many individuals. This perception is often emphasized by the fact that we still have very few statistical sources on the number of people vaccinated before the annexation of the Korean peninsula. However, it seems that the lack of statistical sources should not disqualify or diminish the efforts of the governments of Chosŏn and those of the Empire of Korea to institutionalize vaccination.

My paper will focus on the timeline from 1876 to 1894. The year 1876 conventionally marks the official opening of the Korean peninsula to western powers, and by extension, the development of larger diplomatic and commercial trades. On February 26, 1876, Chosŏn signed with the Empire of Japan the Treaty of Kanghwa Island' (江華島條約), or also called the 'Treaty of Friendship and Commerce' (朝日修好通商條規, 'Cho-il suho tongsang chokyu'). This treaty forced Chosŏn to open its ports of Pusan (釜山) to trade with Japan, but also, to grant various commercial and tax advantages to Japanese citizens in Korea.<sup>v</sup> Later, the Chosŏn's dynasty signed similar treaties with the United States in 1882<sup>vi</sup>, the United Kingdom in 1883<sup>vii</sup>, Italia in 1885<sup>viii</sup>, and France in 1886.<sup>ix</sup>

The *kabo* reform corresponds to the so-called ‘modernization’ reforms which started in 1894 in the aftermath of the Tonghak Revolution (東學農民革命, January 1894-December 1895) and during the First Sino-Japanese War (July 1894 - April 1895, 清日戰爭). These *kabo* reforms lead to major changes in the administrative structures of Chosŏn but also in the social organization of Korean society of that time. In the medical field, the *kabo* reforms are considered as the genesis of modern public health in Korea since several regulations for epidemics controls, medical professionalization and hospitals’ creation were enacted. This period is also signed as the official beginning of the institutionalization of smallpox vaccination in Korea as the first laws for smallpox vaccination were promulgated in October 1895 (種痘規則, Chongdu kyuch'ik).

After briefly explaining the political and social context of Korea in the 1880’s, I will examine the system of vaccination agencies created in the different regions of the Korean peninsula between 1876 and 1894. Then, I will investigate the difficulties encountered by this first smallpox vaccination system before 1894.

1. The turning point of the 1880s and the *chosa sich'altan* delegation

With the signing of the Kanghwa Treaty on February 22, 1876, Japan acquired numerous economic and political benefits throughout the Korean peninsula. In addition to access to the port of Pusan, soon followed by the ports of Wŏnsan in 1880, and Inch'ŏn in 1883, Japan also obtained for its citizens the right of extraterritoriality - which conferred on them diplomatic immunity as well as reduced customs tax rates for all their products. Japan also demanded the establishment of a permanent diplomatic representation in Hansŏng, ancient name of Seoul and the dispatch of diplomatic delegations to the Japanese archipelago. The first delegation was sent to the Empire of Japan from April to the end of June 1876. The officials sent in this first delegation showed, however, only a very mitigated interest in the reforms undertaken in Japan since the Meiji Revolution.<sup>x</sup>

In the beginning of 1880s, after the end of Prince Taewŏn (興宣大院君, 1820-1898)'s regency, Chosŏn's position lightly started to change. King Kojong (高宗, reign: 1864-1907)<sup>xi</sup> adopted an attitude that we could be described as more favorable towards foreign powers. One of the many political factors that can explained this change of attitude is the recommendations of the Chinese general Lǐ Hóngzhāng (李鴻章, 1823-1901).<sup>xii</sup>

General Lǐ Hóngzhāng was rather favorable to the introduction of Western knowledge and techniques, only if it was carried out with respect for Chinese traditions and customs. This political philosophy was summed up by the famous sentence: 'Chinese knowledge as body, Western knowledge as application' (中學為體西學為用, 'zhōngxué wèi tǐ xīxué wèi yòng' in Chinese).<sup>xiii</sup> In Korea, the equivalent of this political thought was expressed by the saying 'Eastern way, Western machines' (東道西器, 'tongdo sŏgi' in Korean).<sup>xiv</sup> General Lǐ Hóngzhāng advised Chosŏn to quickly establish diplomatic and commercial relations with Western powers.

Therefore, Chosŏn's government attempted some reforms to modernize, or at least to change, the kingdom in the beginning of the 1880's. These beginnings of modernization passed somehow by the sending of delegations to Meiji Japan and to Qing China to observe the reforms adopted in these neighboring countries.

The *chosa sich'altan* delegation (朝士視察團, 1881) was sent to Japan from April to July 1881 and had for mission to investigate the new political organization of Japan since Meiji's restoration.<sup>xv</sup> In retrospective, this delegation has often been compared with the Japanese mission *iwakura* (岩倉使節團, 1871-1873), where Japanese high officials and students were sent to Europe to observe the political, military and economic situation of several of these countries – mainly France, the United Kingdom and Germany.

Composed of a total of 64 people - 12 officials, 27 assistants, 12 interpreters and 13 servants, the *chosa sich'altan* delegation stayed in Japan from April 11, 1881 to July 2, 1881.<sup>xvi</sup> During this stay, each Korean official had to investigate the organization of one of the Japan's ministries.<sup>xvii</sup> For example, Cho Chunyǒng (趙準永, 1833-1886) was charged to observe the Ministry of Education and Science (文部省), Pak Chǒngyang (朴定陽, 1841-1905) the Ministry of the Interior (内務省), and Shim Sanghak (沈相學, 1845-unknown) the Ministry of Foreign Affairs (外務部), etc.<sup>xviii</sup>

The Japanese Ministry of the Interior was itself divided into 6 departments, nicknamed *kyoku* in Japanese (局): the *shinshi* office (紳士局), responsible for supervising the territory; the *keihō* office (警報局), responsible for supervising police stations; the *shakai* office (社会局), responsible for supervising social policies and society; responsible for supervising hygiene and health; the *chihō* office (地方局), responsible for supervising regional policies, and finally, the *doboku* office (土木局), responsible for supervising public works. Smallpox vaccination was organized by the *eisei* office.<sup>xix</sup>

This *chosa sich'altan* delegation brought back information on several aspects of Japanese society and administration. Among this information, elements related to hygiene measures, prevention of epidemics, selection of doctors, distribution of medicine, or the organization of hospitals have been reported. Pak Chǒngyang is said to have brought back the 'Shutōi kisoku' regulations (種痘醫規則, 'Chongduūi kyuchik' in Korean), which were seven articles on smallpox vaccination<sup>xx</sup>

It is difficult to assume the exact influence of these observations on Chosŏn's policies, but one year later, in 1882, a new administrative office named *t'ongli kyosōb*



*tongsang samu amun* (統理交涉通商事務衙門日記) – or abbreviated *t'ongli amun*, was officially established. Interestingly, Pak Chōngyang was appointed from 1883 *kun'guk samu ch'amūi* (軍國事務參議), a military affairs adviser, and held several official positions in this administration until in 1887.<sup>xxi</sup>

The *t'ongli amun* was an administrative office responsible for supervising diplomatic affairs and commercial relations with Qing China, Meiji Japan, and Western powers. This administration was inspired by the Chinese administration of the same name *zōnglǐ gèguó shìwù yámén* (總理各國事務衙門) which was created in 1861 after the Beijing Convention (北京條約, October 18, 1860).<sup>xxii</sup> Before, there was strictly speaking no administrative institution specifically responsible for foreign affairs in Korea. Indeed, all activities related to the granting of tributes, the reception or sending of foreign delegations and ambassadors – mainly from China, were included in the responsibilities of the Ministry of Rites (禮曹).

Although the establishment of this new administration demonstrates to a certain extent King Kojong's efforts to adapt to the new international order, in reality, the *t'ongli amun* administration oversaw more the internal affairs of the country than the foreign ones.<sup>xxiii</sup> Nevertheless, within the registers of *t'ongli amun*, or more commonly known by the name *T'ongsŏ ilgi*, some passages which mention the opening of agencies specializing in smallpox vaccination and the appointment of physician-vaccinators and physician-instructors in the regions were found, and thus allow us to study with more attention the systems for smallpox vaccination existing before 1894.

## 2. The smallpox vaccination agencies created in the regions

From the beginning of the 1880s, and more definitely from 1885, vaccination offices named *udu kuk* (牛痘局, literally meaning 'cowpox, vaccination government agency'),

supervised by the *t'ongli amun* administration, started to be established in the different regions of the Korean peninsula.

According to a Japanese article from the *Iji shinbun* (醫事新聞), dated June 15, 1882, Pak Yŏnggho (朴泳教, 1849-1884), who had been appointed *amhaeng ōsa* (暗行御史) in Chŏlla-do (全羅道), invited Chi Sŏkyŏng (池錫永, 1855-1935)<sup>xxiv</sup> to open a vaccination office in Chŏnju (全州).<sup>xxv</sup> Except for this article, no other information related to the establishment of a vaccination agency in Chŏnju in 1882 has been identified so far. The only indication found informs that Pak Yŏnggho had been sent as an official *amhaeng ōsa* in Chŏlla-do, but in 1883.<sup>xxvi</sup>

In 1883, Yi Yongho (李容鎬, unknown), an official who had been sent to Ch'ungch'ŏng-do (忠清道) provided other valuable information on the possible opening of a vaccination agency in this region:

“(...) The method of vaccination comes from Western medicine and even if this technique is tested a hundred times, it is effective a hundred times (.) There has not been a single failure in ten thousand. With 2,900 *nyang* (兩), from the *sachingchŏn* (查徵錢) – that is, the money embezzled by corruption of officials – we could establish a vaccination agency in the administrative capital of Ch'ungch'ŏng; we can ask medical personnel in Kyŏngsang-do to teach this vaccination technique; we could also ask the *nae ūiwŏn* (內醫院) to provide us the necessary equipment.

Each time this method (of vaccination) is used, there are only positive results. Even if we first do not recommend this method, we end up accepting it. If a vaccination agency is set up and the smallpox vaccination technique is taught there, only positive results can be

expected. Therefore, could you give the necessary orders in each administration – yǒng (營) and each district – ŭp (邑) (...)”<sup>xxvii</sup>

This passage, taken from Yi Yongho's reports, informs us that the vaccination method managed to convince the people most opposed to this method thanks to its effective results. This passage also brings interesting information on the financial means envisaged to establish this vaccination agency: the money requisitioned following the corruptions and frauds of civil servants in service could be used to finance this vaccination agency. Yi Yongho also explains that the smallpox vaccination method can be learned with the help of medical personnel from Kyōngsang-do, implying that people practicing vaccination already existed in this region. As for the tools required for vaccination, Yi Yongho proposed to request the *nae ūiwōn*, one of the three largest medical institutions of the royal court, to provide them with the necessary materials. This passage testifies to Yi Yongho's strong desire to quickly establish a vaccination agency in Ch'ungch'ōng. However, we do not have any further information on this agency.

From 1885 to 1890, we find more reliable information on the opening of vaccination agencies. Several administrative notices mentioning the appointment of physician-vaccinator instructors and the opening of vaccination agencies were found in the *T'ongsǒ ilgi* (統署日記, Official records of the *t'ongli amun*) from 1885.

According to the *T'ongsǒ ilgi*, Chi Sōkyōng, who at that time was *pusakwa* (副司果), was appointed physician-vaccinator instructor in Ch'ungch'ōng-do in 1885.<sup>xxviii</sup> This passage specifies that Chi Sōkyōng would be in charge of selecting young people to whom to teach smallpox vaccination and to propagate this medical method. An article from the 8th day of the 1st month of the 23rd year of Kojong's reign (1886) mentioned the appointment of smallpox physician-vaccinator instructors in Pyōngan-do.<sup>xxix</sup> Then, in an article dating from the 25th day of the 2nd month of 1886, it mentioned the appointment of smallpox vaccinators doctors in Kyōnggi-do.

During 1888, two requests for the establishment of vaccination agencies were identified: one in Kangwŏn-do on the 25th day of the 5th month of the 25th year of King Kojong's reign (1888),<sup>xxx</sup> and one in Chŏlla-do on the 24th day of the 7th month of the same year.<sup>xxxii</sup> Administrative documents related to the establishment of a vaccination agency were also found in the notice from the 17<sup>th</sup> day of the 2nd month of the 26th year of King Kojong's reign (1889) in Kyŏngsang-do.<sup>xxxiii</sup> It is interesting to notice that I Chaeha (李在夏, unknown), the author of the *Cheyŏng shinp'yŏn* (濟嬰新編, 1889), was the one to request the opening of this vaccination agency in Kyŏngsang-do. On the 26th day of the 8th month of the year 1889, another notice for the establishment of a vaccination agency in Hwanghae-do was also noted.<sup>xxxiiii</sup> The last mention of this vaccination agency dates from the 15th day of the 1st month of the 27th year of Kojong's reign (1890) and indicates that a vaccination agency was opened on Cheju Island.<sup>xxxv</sup>

Between 1885 and 1890, many vaccination agencies were opened all over the Korean peninsula, and physician-vaccinator instructors were also assigned to the various regions to teach vaccination to young people. These elements can testify to the existence of a public system being institutionalized relatively quickly. Although the sources currently available are limited or even partial, the collection of these documents demonstrates the efforts of the Chŏson government to create a nationwide system for smallpox vaccination. It also demonstrates the will of the Chŏson government to protect its people from the calamities of smallpox, and thus to establish a national medical system for the prevention of smallpox epidemics.

### 3. *The organization of the first vaccination systems*

Concerning the organization of this system for vaccination established by the Chŏson government in the 1880s, the *Udu chŏlmok* treatise provides us with a lot of important information on the characteristics of these first institutions for vaccination. The *Udu chŏlmok*

is an administrative treatise of about twenty pages composed of several articles related to the organization of vaccination systems in Ch'ungch'ōng-do. Although no source makes it possible to verify the exact date of compilation of this treatise, Sin Dongwon (1996) placed the date of publication of this treatise around 1885.<sup>xxxv</sup> Other treatises like the *Udu chōlmok* must have been compiled in the other regions of Korea where vaccination agencies, *udu kuk*, were opened. But up to now, the *Udu chōlmok* is the only treatise of this type found in Korea.

During the period 1876-1894, smallpox vaccination was supervised by agencies called *udu kuk* (牛痘局) in each *do* (道, region) and, by sub-agencies called *udu bun'kuk* (牛痘分局) in each *myōn* (邑, district). These offices were supervised by the *t'ongli amun*. More precisely, the *t'ongli amun* was responsible for the supply of medicines and vaccine lymph, for the appointment of regional physician-vaccinators, for the dispatch of vaccination materials to each region and for the collection of taxes from regional physician-vaccinators.<sup>xxxvi</sup> However, no additional information is given about the manufacture of lymph vaccination in this treatise.

When a new instructor, nicknamed *udu kyosu kwan* (牛痘教授官), was appointed to one region, local officials of that region received a letter, called *pongwan ch'ajōp* (本官差帖), from the Chōson's government to inform them of this official nomination. The *udu kyosu kwan* was supposed to train and supervise the future physician-vaccinators, titled *udu ūisa* (牛痘醫士). The *udu ūisa* were the ones who directly vaccinate the population.<sup>xxxvii</sup>

Each regional governor, titled *kwanch'alsa* (觀察使), had to ensure the proper functioning of this system for vaccination in the region for which he was responsible. The village or district chiefs, named *ūp suryōng* (邑受領), were responsible for sanctioning individuals who prevented the activities of the physician-vaccinators, but also for supervising the physician-vaccinators and the officers of the neighborhood or district.<sup>xxxviii</sup>

The neighborhood or district officers, called *chondong im* (尊洞任) or *myōnim* (面任), were responsible for drawing up a list of all the children who did not have contracted smallpox yet. This list permitted to determine the children who should be vaccinated. This list also served to exempt children whose parents were unable to afford for vaccination fees.

Smallpox vaccination cost indeed 5 *nyang* (兩) per person.<sup>xxxix</sup> Vaccination fees were paid when the vaccination results were verified by the physician-vaccinator. The price included the transport costs of the physician-vaccinator, as well as the cost of the materials and tools necessary to carry out the smallpox vaccination. To avoid any conflicts, the payment had to be collected, about a week after the vaccination, by one of the *chondong im* or *myōnim*.

As for those affected by vaccination, these were young children – since smallpox is a contagious childhood disease, the people most affected were mainly babies and young children. All children over 70 days old had to be vaccinated using the Jennerian method and parents had one year to have their children vaccinated. If, after this time, the children were still unvaccinated and had contracted smallpox, or, if they had been inoculated with the variolisation method (人痘法), a fine of 27 *nyang* was foreseen.<sup>xl</sup>

If the physician-vaccinator did not carry out the vaccination correctly and caused, for example, the beginnings of a smallpox epidemic, the latter should be immediately reported to the local administration on which he depended, to be punished severely. In this situation, the vaccination costs collected had to be reimbursed to the individuals concerned.<sup>xli</sup> Furthermore, the physician-vaccinators who charged the parents of children normally exempted from vaccination fees also had to be reported to the local administration.

One of the major characteristics of this vaccination system established in Ch'ungch'öng-do – and, probably in other regions of the Korean peninsula – was the authority granted to the *udu ũisa*. After training with an instructor for an undetermined period, students received a graduation certificate from their instructor, titled *choröp chang* (卒業章). This certificate granted special authorization to carry out smallpox vaccination on Korean territory. This certificate differentiates *udu ũisa* from *chongdu ũisa* (種痘醫士), physicians who practiced variolisation and who were not officially recognized by the Chöson's government. The issuance of this certificate can mark the beginning of what we called today 'medical professionalization'.

However, physician-vaccinator had to pay different types of taxes to the local and central authorities, which thwart in some ways their autonomy. The most substantial tax was named *udu se* (牛痘稅). This tax corresponded to a tax that must be paid to the central administration each year, precisely on the 12th month of each year. The exact amount of the tax to be paid was calculated according to the number of vaccinations carried out by the physician-vaccinator, but also according to the area and density of the region concerned.

In the last pages of the *Udu chölmok*, a list with the amount of taxes *udu se* that each *udu ũisa* had to pay was drawn up.<sup>xliii</sup>

This list informs that 39 *udu ũisa* practiced smallpox vaccination in the 37 *ŭp* (邑), sub-divisions of Ch'ungch'öng-do. The amount of these taxes varies greatly from one to another: ranging from 500 *nyang* to 50 *nyang* per individual. For instance, the *udu ũisa* named Pak Sangmyön (朴相冕, unknown) from the city of Kongju (公州), i.e. the regional capital of Ch'ungch'öng-do, had to pay 500 *nyang* ; the *udu ũisa* Chi Suyöng (地洙永, unknown) of the Puyö district (扶餘) had to pay 132 *nyang* ; the *udu ũisa* Kim Chinnam (金振南, unknown) of P'yöng T'aek (平澤) had to pay 50 *nyang*... The total amount of these

taxes was 6021.50 *nyang*.

Given the lack of parameters on the area and density of Ch'ungch'ōng-do, the precise periodization as well as the proportion of vaccinated people exempted from payment, it is unfortunately impossible to deduce from these figures a reasonably reliable statistic of the number of people vaccinated during this time. However, this tax list demonstrates that physician-vaccinators recognized by the Chosŏn government, really carried out smallpox vaccination in a system supervised by both local and central administrations.

#### *4. Difficulties encountered in implementing this first vaccination system*

Although this system for vaccination established by the Chosŏn government between the 1880s and 1890s, to train future doctor-vaccinators and spread the technique of vaccination throughout the territory, seems at first glance to have been functional and effective, this system was confronted with discontent of the population from the 1890s.

The dissatisfaction of the Korean population with the smallpox vaccination was mostly linked to the inappropriate, or sometimes abusive, behavior of certain doctor-vaccinators in different regions. It was also linked to the financial burden constituted by the vaccination costs, and the mistrust towards techniques and knowledge of Western and Japanese origins. These difficulties severely compromised the early attempts of the Chosŏn's government to institutionalize smallpox vaccination on the Korean peninsula.

For instance, some complaints about the inappropriate behaviors of physician-vaccinators have been registered in the *T'ongsŏ ilgi*. On the 23rd day of the 2nd lunar month of the 27th year of King Kojong (1890) a notice reported that all the physician-vaccinators sent by the instructor Kim Saik (金思益, unknown) in Kyōnggi-do, threatened many civilians to extort them vaccination fees.<sup>xliii</sup> All these physician-vaccinators mentioned were to be quickly suspended. Also, in the notice dated from the 15th day of the 4th month of the 27th



year of King Kojong's reign, it was reported that an instructor named Kang Namhyung (姜南馨, unknown) in Chŏlla-do, allegedly falsified official documents.<sup>xliv</sup>

As they were not receiving a fixed salary from the central authorities, and, as their income was mainly based on the number of children vaccinated, some physician-vaccinators only sought to make maximum of profits. The mercantile attitude of certain physician-vaccinators who, instead of respecting parent's thoughts regarding vaccination, sought to vaccinate many children as possible to earn more, fueled the grievances against these policies. The fact that smallpox vaccination was not free, which added a burden to the Korean population at the time, could only generate more difficulties to the implementation of this system.

In addition, the Western origin of this new medical technique aroused skepticism and suspicion in the Korean population. Throughout the *imo* mutiny (壬午軍亂, 1882), rioters attacked several leaders of the royal court and the Japanese legation of Hansŏng, but they also ransacked the vaccination agency located near the Japanese legation.<sup>xlv</sup> Chi Sokyŏng who had learned smallpox vaccination from Japanese doctors and who was also known to have many Japanese ties, was forced into hiding for several months for fear of reprisals.

Subsequently, when Chi Sokyŏng was appointed in 1885 as a physician-vaccinator instructor in Ch'ungch'ŏng-do, he related that many rumors circulated about him and smallpox vaccination. Some rumors recounted that some mothers would rather hide in the mountains with their children than have their children vaccinated.<sup>xlvi</sup> Furthermore, Sŏ Haengpo (徐行輔, unknown), an administrative civil servant, strongly condemned Chi Sokyŏng in an official publication dated from the 4th month of the year 1887:

“Summary of the request of the *pusakwa* (副司果) Sŏ Haengpo (徐行輔, unknown),

Ah(!) When the vicious rebels of the *kapsin* year (1884) revolted, the one who wrote and presented the conspiracy order was Shin Kisŏn (申箕善, 1851-1909), when Pak Yŏngho (朴泳孝, 1849-1884) hatched this dreadful conspiracy, the one who secretly helped him in his treacherous scheme was none other than Chi Sokyŏng (!) When Pak Yŏngho was sent as *amhaeng ōsa*, the one who helped him to teach tyranny, despotism and cause harm to the people was Chi Sokyŏng (!)

However, Shin Kisŏn was only sent into exile for a fixed period and Chi Sokyŏng still has his name listed in the *chochŏk* records (朝籍), can we still say that there are laws in our country? The vicious Chi Sokyŏng takes the pretext of teaching smallpox vaccination to gather the population and we cannot know his real intentions. That's not all, his brother, Chi Unyŏng (池運永, unknown) went abroad on the pretext to buy a camera, and although it is stated that he was going to capture Kim Okkyun (金玉均, 1851-1894), he was found across the sea (in Japan) having secret dealings with traitors to sell his own country. Have Sin Kisŏn, Chi Sokyŏng, and Chi Unyŏng be examined for their crimes (義禁府), and have the truth restored as soon as possible to correct the national law. (...)"

This extract shows very clearly the suspicions aroused by smallpox vaccination. Because of its foreign origin, and the supposed proximity of Chi Sokyŏng with Japanese and radical reformists, the Jennerian vaccination method came to be perceived as a propaganda tool for foreigners in their imperialist designs over the Korean Peninsula. In a political context particularly marked by the rise of Japanese and Western influences, global anxiety led to hostility towards all knowledge and techniques coming from abroad - including smallpox vaccination.

According to Sin Dongwon (1996), this popular dissatisfaction with smallpox

vaccination was also relayed by the women shamans, *munyŏ* (巫女), and the physician-inoculators (種痘醫士), who felt wronged in the new system established by the Chosŏn's government. With the establishment of official certificates issued by the local authorities, which recognize only physician-vaccinators, shamans and physician-inoculators could no longer practice rituals or inoculation as freely as before. They were now seen as disruptive elements in the smallpox vaccination system established by the Chosŏn government. As their monopoly has been severely shaken, it is possible that they could have spread rumors to discredit this new method of vaccination within the Korean population.

Due to the hostility of the Korean population towards the institutions established for smallpox vaccination, as well as the increased distrust of all Western techniques and knowledge, the Chosŏn government eventually decided to temporarily put an end to the regional system for vaccination in the early 1890s. On the 18th day of the 5th month of the 27th year of Kojong's reign (1890), the Chosŏn government published an official notice on the abolition of the system of vaccination offices in the different regions.<sup>xlvii</sup>

Although the Chosŏn government officially interrupted its intervention in the creation of vaccination offices and withdrew the official certificates of the physician-vaccinators, it is important to point out that from the year 1892, some administrative notices are requesting authorization to re-open vaccination agencies. The system for vaccination has, more or less, continued in certain regions of the peninsula under the initiative of private individuals.

For example, in a notice dated from the 9th day of the 10th month of the 29th year of King Kojong's reign (1892), some civil officials asked the central administration if they could establish again a vaccination office in Kyŏngsang-do.<sup>xlviii</sup> The request was then approved on the 28<sup>th</sup> day of the 10th month of the same year, and Kim Inche (金仁濟, date unknown), the author of the *Udu shinp'yŏn* (牛痘新編, 1892) treatise, and Chŏng Ukon (鄭宇坤, date unknown) were assigned there as vaccinators instructors.<sup>xlix</sup> However, even though an

agency for vaccination has again been established in Kyōngsang-do, it seems that this office for vaccination has always faced grievances from the population.<sup>1</sup>

Conclusion:

During the period from 1876 to the mid-1890s, sources provide details of the systems and institutions that were put in place by the Chosŏn government to disseminate smallpox vaccination in the Korean peninsula. Although these sources appear fragmentary or scattered, their historical values are precious since they demonstrate that before the enactment of the first laws on vaccination, in October 1895, institutions and systems intended for vaccination already did exist in Korea.

The very existence of these sources makes it possible to question the postulate according to which the reforms of the *kabo* year mark the official beginning of the institutionalization of vaccination in Korea. Moreover, these elements question the assumption often retained in the history of Korea according to which the reforms of the *kabo* year mark the official beginning of the “modern period” of Korea. Indeed, this process of modernization, whether on the political, economic, social level, seems to have been initiated well before the reforms of 1894 and seems to stem from an older and more complex process.

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<sup>i</sup> See: Kim Tuchong. “Uri naraŭi tuch'angŭi yuhaenggwa chongdubŏbŭi shilsi” [The Smallpox Epidemics in Korea and Vaccination Laws]. *Sŏul taehakkyo*, no. 4 (1956): 34-41. / Baker Donald. “Sirhak Medicine: Measles, Smallpox, and Chŏng Tasan.” *Journal of Korean Studies*, vol.14 (1990): 135-166. / KIM Ho. “Ŭisunmyŏng'ŭi kil: Tasan Chŏng Yagyong'ŭi chongdubŏp yŏngu” [The Path of “Ŭisunmyŏng”: a Centered Study on Chŏng Yakyong's Method of Vaccination]. *Koryŏ Taehakkyo*, no.72 (2016) :56-89. / Cho Jŏng'ŭn. “Ŭihak chisik ŭi suyong kwa pyŏnyong- Chongdubŏp ŭi chŏllae wa hanmun udusŏ rŭl chungsim ŭro” [Reception and Transformation of Medical Knowledge – Study Focusing on the Smallpox Vaccination Method in China and Japan]. *Myŏngch'ŏng sahakhoe*, no.49 (2018): 340-372. / Shin Kyuhwan, 2022. “Han'guk chongdubŏbŭi palchŏn'gwa ŭihak kisurŭi munje: indubŏbesŏ udubŏbŭro chŏnhwan'gwa ŭihak chishikkwa kisurŭi kan'gŭk” [The Development of the Vaccination and Medical Technology in Korea: Transition from Variolation to Cowpox Vaccine and Gap between Medical Knowledge and Technology]. *Kyŏnghŭi taehakkyo ŭiryoyŏksa yŏn'guhoe*, no. 10 (2022): 59-83.

<sup>ii</sup> See: Sin Dongwon. “Han'guk udubŏbŭi chŏngch'ihak - kyemongdoen kŭndaein-ga 'Kŭndaeui ' Kyemong ' In-ga” [Vaccination Policies in Korea: is it Enlightened Modernity or Modern enlightenment?]. *Han'guk kwahaksa hak'oeji*, (2000) :149-169. / Ch'oe Kyuchin. “Chongdujŏngch'aekŭl t'onghae pon ilcheŭi shingmin t'ongch'i chosŏn'gwa taemanŭl chungshimŭro” [Japanese Colonial Rule Through the Policies of Vaccination – Through the Chŏson and Taiwan study]. PhD diss., Seoul National University, 2014.

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<sup>iv</sup> LEW I. Young. “Korean Japanese Politics behind the Kabo-Ŭlmi Reform Movement, 1894 to 1896”. *The Journal of Korean Studies*, vol. 3 (1981): 39-81.

<sup>v</sup> *Kojong shillok*, 13th volume, 3rd day of the 2nd month, 13th year of the reign of Kojong (1876). (朝日修好通商條規).

<sup>vi</sup> *Kojong shillok*, 19th, tome, 6th, day of the 4th month, 19th, year of Kojong's reign (1882): ‘Cho-mi choyak’ (朝美條約)

<sup>vii</sup> *Kojong shillok*, 20th, tome, 27th day of the 10th month, 20th year of Kojong's reign (1883): ‘Cho-yŏng suho choyak’ (朝英修好條約)

<sup>viii</sup> *Kojong shillok*, 23rd, 3rd day of the 5th month, 23rd year of Kojong's reign (1886): ‘Cho-pŏp suho choyak’ (朝法條約)

<sup>ix</sup> *Kojong shillok* 23rd volume, 3rd day of the 5th month, 23rd year of the reign of Kojong (1886): ‘Cho-pŏp suho choyak’ (朝法條約)

<sup>x</sup> YI C., “Che ilch'a susinsa Kim Kisuga kyŏnghŏmhan kŭndae ilbonŭi oegyoyŭryewa yŏnhoe”, 173.

<sup>xi</sup> King Kojong was only twelve years old when he was crowned in 1863. Queen Shinchŏng (神貞王后, 1809-1890) served as nominal regent during Kojong's minority between 1864–1873, but de facto she left all power to the King's real father, the Prince Taewŏn (興宣大院君, 1820-1898). During Prince Taewŏn's regency, the Chosŏn dynasty opposed the opening to Western powers and rejected all foreign expeditions.

<sup>xii</sup> Responsible for the diplomatic and commercial affairs of Qing China, Lǐ Hóngzhāng was one of the most recognized Chinese generals of that time – mainly thanked to his major contributions to subduing the rebel uprising of the Taiping Revolt (太平天國, 1851-1864).

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- <sup>xiii</sup> Guex S., *Au pays du matin calme : nouvelle histoire de la Corée*, 209.
- <sup>xiv</sup> DELISSEN Alain, 1999. 167.
- <sup>xv</sup> The same year, in 1881, another delegation, the *yōngsōn* (領選使) delegation, led by the reformist Kim Yunsik (金允植, 1835-1922) was sent to China to observe the political situation and the reforms done in Qing dynasty China since the opening to Western powers. Composed mainly of students and craftsmen, this delegation was sent to learn more about Western techniques.
- <sup>xvi</sup> Yi H., “1881nyōn chosa shich'altan suhaengwōn Kang Chinyōng-ūi 『Ildonglok』 yōn'gu,” 165.
- <sup>xvii</sup> SIMS R., *Japanese Political History Since the Meiji Renovation 1868-2000*, 6-21. After the Meiji Reforms (1868), the administrative structures of the Japanese government were radically reformed through Western influences. In August 1869, the new Japanese government created eight ministries: the Ministry of Civil Affairs, then called the Ministry of the Interior (內務省), the Ministry of Foreign Affairs (外務部), the Ministry of Treasury (大藏省), the Ministry of Army (陸軍省), Ministry of Navy (海軍省), Ministry of Education and Science (文部省), Ministry of Public Works (工部省), Ministry of Justice (法務省), and finally, the Imperial Agency (宮內省).
- <sup>xviii</sup> Yi H., “1881nyōn chosa shich'altan suhaengwōn Kang Chinyōng-ūi 『Ildonglok』 yōn'gu,” 163
- <sup>xix</sup> SIMS R., *Japanese Political History Since the Meiji Renovation 1868-2000*.
- <sup>xx</sup> SIN D., “Han'guk kūndae pogōnūiryoch'ejeūi hyōngsōng”, 44 ; *Nihon naimushou jutsusei kyoku kaku kisoku* (日本內務省衛生局各規則), 439-440.
- <sup>xxi</sup> *Kojong shilhok*, 20th volume, 17th day 1st month 20th year of reign of Kojong (1883).
- <sup>xxii</sup> The Beijing Convention (北京條約) is an unequal treaty that was signed on October 18, 1860 between the Qing Dynasty and the United Kingdom, France and Russia. This convention put an end to the Second Opium War.
- <sup>xxiii</sup> Yu P., “Kyorinesō ogyoro: t'ongni kyosōp t'ongsang samu amun ogyoūi kukchebōpchōkkwōnnūnggwa han'gye”, 9.
- <sup>xxiv</sup> The Jennerian vaccination was presumably introduced for the first time by Chi Sōkyōng in 1879 when he went to Pusan to learn smallpox vaccination directly from Japanese doctors. Before, Chi Sōkyōng received in 1876 from his friend and colleague, Pak Yōngsōn (朴永善, unknown), a Japanese book on vaccination entitled *Shutō kikan* (種痘龜鑑, 1871). In Korean history, Chi Sōkyōng is often considered the main actor in the introduction of vaccination in Korea in the 19th century.
- <sup>xxv</sup> SIN D., “Han'guk kūndae pogōnūiryoch'ejeūi hyōngsōng”, 44 ; Reference to *lji shinbun* (醫事新聞), volume 88, 1882.06.15. p.23-25.
- <sup>xxvi</sup> *Kojong shillok*, 20th volume, Kojong 20<sup>th</sup> year, 6<sup>th</sup> month, 22<sup>nd</sup> day.
- <sup>xxvii</sup> *Kojong shillok*, 20e book, 23.09.1883: ‘(...) 其一, 牛痘之法, 創自西醫, 百試百驗, 萬無一失。故以查徵二千九百餘兩, 設置牛痘局於錦營營底, 使嶺醫教其術, 所用器械、諸般應備, 皆有料理措劃。亟令內醫院行關該道, 期圖善終之效'事也。有試輒驗, 不勸自應。且既設局教術, 矧觀來效, 先自營邑隨宜勉飭。 (...)’
- <sup>xxviii</sup> *T'ongsō ilgi*, Kojong 22nd year, 9th month, 30th day, volume 7, p.60b.
- <sup>xxix</sup> *T'ongsō ilgi*, Kojong 23rd year, 1st month, 8th day, volume 9, p.5a
- <sup>xxx</sup> *T'ongsō ilgi*, Kojong 25th year, 5th month 25th day, volume 16, p. 65a.
- <sup>xxxi</sup> *T'ongsō ilgi*, Kojong 25th year, 7th month 24th day, volume 17, p.23b
- <sup>xxxii</sup> *T'ongsō ilgi*, Kojong 26th year, 2nd month 17th day, volume 19, p. 50b
- <sup>xxxiii</sup> *T'ongsō ilgi*, Kojong 26th year, 8th month 26th day, volume 21, p. 97a
- <sup>xxxiv</sup> *T'ongsō ilgi*, Kojong 27th year, 1st month 15th day, volume 23, p.15b
- <sup>xxxv</sup> SIN D., “Han'guk kūndae pogōnūiryoch'ejeūi hyōngsōng”, 85.
- <sup>xxxvi</sup> *Udu chōlmok*, p.2.
- <sup>xxxvii</sup> *Udu chōlmok*, p.3.



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<sup>xxxviii</sup> *Udu chōlmok*, p.6.

<sup>xxxix</sup> *Udu chōlmok*, p.7.

<sup>xl</sup> *Udu chōlmok*, p.11.

<sup>xli</sup> *Udu chōlmok*, p.6.

<sup>xlii</sup> *Udu chōlmok*, p.19-20. See annex.

<sup>xliii</sup> *Tongsō ilgi*, Kojong 27th year, 2<sup>nd</sup> lunar month, 23<sup>rd</sup> day.

<sup>xliv</sup> SIN D., "Han'guk kūndae pogōnūiryoch'ejeūi hyōngsōng", 82 ; reference to *Tongsō ilgi*, Kojong 27th year, 4th month 15th day, volume 24, p. 13a and b.

<sup>xlv</sup> I K., "Han'gugūi udubōp toipkwa shilshie kwanhan yōn'gu: 1876nyōnesō 1910nyōnkkajirūl chungshimūro" 36. Reference to the article of the Japanese newspaper *Chūgai nippō* (中外日報) 23.10. 1929.

<sup>xlvi</sup> SIN D., "Han'guk kūndae pogōnūiryoch'ejeūi hyōngsōng", 82.

<sup>xlvii</sup> SIN, "Han'guk kūndae pogōnūiryoch'ejeūi hyōngsōng", 83. Reference to *Kudo odo kwanch'o* (九道五道官), 18th day, 5th month, 1890, 126.

“(…) 우두 신법은 관허하여 局을 세운 것은 오로지 어린아이를 보호하고 植民하는 일에 힘을 쓸 일 때문이었다. 牛痘業을 官勅으로 인정하고 의사를 파견하여 貴管에 부임토록 하여 감영에 局을 배풀도록 하였다. 지금 각 邑 分局 의사배(醫士輩)들에 대하여 들 으니 관허를 빙자하여 폐단이 많다 한다. 아예 우두약을 놓지도 않은 채 보수(접종비)를 챙겨서, 일반 백성들이 왕왕 어린 아기를 품 에 안고 깊은 산골짜기에 몸을 숨길 정도입니다. 이와 같은 聽聞이 낭자하니 특히 통탄스럽다. 이에 관칙을 내리니 도착하는 즉시 해당 우두국은 본국이나 분국을 막론하고 일체 철폐하며 자격증은 일일이 거두어들이고 해당 의사들을 신속히 압송하여 계속 잔 류하면서 폐를 끼치지 못하도록 하며, 우두국에서 가지고 있는 우두 傳種 一款은 均應 해당 백성들이 스스로 상의하여 의사를 불러 들여 편의대로 試藥하여 힘써 款에 부합되도록 하고 의사 배들에 엄칙하여 다시 이전과 같이 거짓말하고 토색질하지 못하도록 하 라 (…)”

<sup>xlviii</sup> *T'ongsō ilgi*, Kojong 29th year, 10th month, 9th day

<sup>xlix</sup> *T'ongsō ilgi*, Kojong 29th year, 10th month, 28th day.

<sup>1</sup> *T'ongsō ilgi*, Kojong 30th year, 12th month, 15th day.