論文の内容の要旨

The Rise and the Development of Leprosy Institutions in British Malaya from 1860 -1957
(英領マラヤにおけるハンセン病療養施設の誕生と発展　1860-1957)

林 永隆 （リム　ヨンロン）

The main intention of this dissertation is to construct a historiography of the development of leprosy institutions in British Malaya. The thesis suggests there are three phases of the developments of leprosy institutions in British Malaya from 1821 to 1957, which are phase one from 1821 to 1880, phase two from phase two from 1881 to 1922 and phase three from 1922 to 1955.These evolutions have been greatly influenced and shaped by the emerging of modern science, the changing political backgrounds, the sentiment of racism, the rise the idea of socio-welfare at the end of 19th century to the early 20th century. These changes also have reflected in the changing characters and names of leprosy institutions in British Malaya from a temporary "leper shed," a hospital-alike "leper asylum" to a few hundred-acre "leper settlement." This dissertation shows that the typology of leprosy institution has deviated itself from an almost typical medical institution into a leprosarium, an own class typology of medical institution, in 1920-30s. Sungai Buloh leper settlement, constructed in 1930 in the Federated Malay States, is used to explain this transformation, which has shown the influence of social welfare in British Malaya rather than the influence of nationalism such as in Japan and Brazil.

Introduction

Leprosy has long been considered as one of the least infectious ancient diseases. The disease has long been recorded in Bible, Indian and Chinese ancient texts thousand years ago. The great expansion of Western powers in 19th century had reintroduction the issue of leprosy in their colonized territories, particularly in tropic regions. It was possibly due to the "reinterpretation of the disease" by Western colonials who agitated by the feeling of insecurity and unfamiliarity of the native environments and communities in their new colonized territories. The stigma towards the disease was reached its peak during the period of emerging of modern science and the introduction of germ theory at the end of 19th century. Particularly after Gerhard Henrik Armauer Hansen, a Norwegian physician, who discovered the causality of the disease in 1873 claiming the disease was highly contagious and danger to its surroundings. Under the name of "modern science", curing leprosy, an "ancient" disease, became a "metaphor of modernity" for many colonial governments during the coming decades. Since then, leper segregation policies were enacted and leprosaria have been created and extended in many countries.

Phase One, 1821 to 1880: From Pauper Sheds to the Rise of Leper Hospital

In the early period of British colonization in British Malaya, lepers were treated as other paupers where they were housed in pauper sheds with other paupers. These buildings were built by temporary materials which were easily perished and unable to use for a long period of time. The idea of separation between lepers and paupers was firstly conceived in 1828 in Penang where Jerejak Island was suggested to be used as a leper hospital to separate those lepers segregated in a pauper hospital. The purpose was to prevent the disease from lepers affected to other paupers. The same separation idea was also expressed by Melaka and Singapore in 1830. G.D. Coleman, a civil architect in Singapore, brought the idea of separation into the planning of new pauper hospital in Singapore. The hospital was completed in 1834 and has two

separated wards, one for destitute paupers and another for diseased paupers. The hospital was surrounded by a high-wall to prevent patients escaped from the hospital. Coleman, who was also the superintendent of Singapore's convict jail, certainly had better idea and method on the separation. The idea of "separation" between classes and races indeed was responding in the early town plan of Singapore advised by Coleman. The separation was the British's typical planning method to achieve their political agenda and preservation of health by implying physical and social borders through geographical barriers and urban regulations. The purposes were to prevent political cooperation between these communities and to preserve the health of the colonials by containing the poorest group of native in certain enclaves.

1850s saw the desire of separating paupers and lepers was greater. The main reason was the uncontrolled influxes of diseased paupers and lepers from surrounding regions provoking the local elite community to pressure the government to confine them. An anti-dumping law and a vagrancy act were approved in 1850 and 18655 in attempt to alleviate the situation. Subsequently the first leper hospital on an island was firstly approved in Melaka in 1850 and completed in 1860 on Serimbun Island. Undoubtedly, island segregation was the most desire method to segregate lepers to prevent escape cases. The success of Serimbun Island has encouraged Penang to develop the same scheme on Jerejak Island. The leper hospital on Jerejak Island was completed in 1867 and the first batch of lepers was admitted to the island in 1871. In 1873, the island segregation was reaffirmed by the Select Committee was the best method to confine lepers in the Straits Settlements.

Phase Two, 1881 to 1922: The Development Leper Wards, Hospitals and Asylums

1881-1900s were the periods of massive expansions of leprosy institutions. These periods also saw the rise of Federated Malay State's leper hospitals and race based segregation policies. At the end of 19th century also evidenced the discourse of contagious overrode heredity theory justifying the compulsory segregation was the right method to control the disease. The first expansion of Jerejak Island leper hospital was in 1880s after the Straits Settlements decided to send all Singapore's and Melaka's male lepers to Jerejak Island. By centralizing all lepers on the island, it would ease the medication to be provided and reduce escape cases and more importantly to reduce the cost of operation. After transferring started in 1881, Serimbun Island in Melaka was closed down and the function of Singapore's leper hospital was transformed to a collection center for lepers. In 1886, in order to legalize the confinement of lepers, leprosy was added in the list of dangerous contagious disease under the Quarantine and Disease Prevention Law. The inclusion allowed the government to retain any lepers under the threat of contagious disease, such as small pox. This result the numbers of lepers have been greatly increased in later years. This forced Jerejak, again, increased its capacity by adding extra wards in 1886. From 1881 to 1917, after Jerejak became the collection center, there have been very limited developments occurred in the leprosy institutions in Singapore and Melaka.

Only in 1882, a female leper ward was built to receipt female lepers behind Tan Tock Seng pauper hospital in Singapore. This also allowed female lepers from other settlements and Malay States sent to Singapore's female leper hospital for retention. Before that, the lesser number female lepers were segregated in separated wards at pauper hospitals. In 1897, the ground of the female leper ward was enlarged to receive more female lepers. The expansion making the female leper hospital became the main collection center of female lepers from Singapore, Melaka and other Malay States, Johor and Perak in the later periods.

In 1890s, the death of Father Damien owing to leprosy in 1889 has accelerated the racism sentiment against the Asian races, particularly Chinese, around the world. In Perak, the implementations of leprosy control policies from 1890-95were only targeted on the Chinese immigrants and non-Malays, Malay lepers were excluded. The earliest leprosy institution, Taiping leper ward, in Perak was also largely carter

for the Chinese lepers. Since 1890, Perak's Chinese lepers have been sent to Jerejak Island for segregation to prevent escape cases, following by Selangor in the same year. In 1898, Perak was aware that leprosy among Malays was prevalence too. In 1904, Pangkor Laut Island leper hospital was established to refuge Malay lepers only.

Phase Three, 1922 to 1955: The Forming of Leper Settlements and Leprosaria

1910s saw leprosy medications have been progressively improved to control the disease. However its application was interrupted by the WW1. Only in 1920s, leprologists around the world started urging local governments to change their method of controlling the disease by encouraging lepers to receive the improvement treatments voluntarily through leprosy institutions. These changes were responded positively in British Malaya. In 1922, Dr. Travers introduced his liberation policy which later brought major reformation to the entire leprosy landscapes in British Malaya. During this period, the typology of leprosy institutions have been deviated itself from a prison-like medical institution to its own class of leper "settlements." Hospital wards were no longer as main features of leprosy institutions but detached houses to house inmates. Besides the improvement of the surrounding area of the leprosy institutions, works and employments were introduced for lepers, socio-cultural activities, and educations were provided as part of patients' daily life and rehabilitation process. In 1928, the government decided to name leprosy institutions as leper "settlement" rather than "leprosaria" to portray its character and function as a human settlement rather than a long-term sanatorium or a hospital. However, in contrast, some of the countries have responded oppositely by strengthening and intensifying the segregation laws in order to acquire more lepers to receive the improvement medication.

The completion of Sungai Buloh in 1930 has provided scholars a better scheme of leprosy institution to be analysis. Sungai Buloh leper settlement was built to relocate Kuala Lumpur Leper Settlement which had been faced serious overcrowding problem as well as the issue of urban expansion in Kuala Lumpur. The planning of Sungai Buloh leper settlement has imitated the modern planning ideology of Garden City. The dominant part of the scheme is the housing area where there were more than 150 inmate houses planned in few housing zones. Observing from the street eyes view, the randomly arranged houses created strong surveillance networks and the whole atmosphere is like an organic grown village rather than a planned institution. The planning of Sungai Buloh makes it exceptionally unique compares to other leprosy institutions, especially those large leprosy institutions in Japan and Brazil, where buildings and inmates' houses were planned in the regimented ways for easy control. In leprosy settlement, the limited social interaction and the segregated environment created leprosy settlement has to be self-sustained and self-supported in the most of the time. This make leprosy settlement as a unique human settlement in the history of built environment.

Phases	Periods	Diagrammatic Evolution	Reasons	Leprosy Institutions
One	Before 1836-60		Most of early lepers were refuge together with paupers in the temporary pauper sheds. No specific leper sheds were developed during these periods.	Pauper sheds in Singapore and Penang before 1860.
	1860-80		Lepers were separated from paupers. Most leper wards were built on Islands in Penang and Melaka to prevent escapes. Singapore no suitable island was found for the purpose. Lepers remained segregated at leper wards.	Serimbun Island Leper Hospital, 1860 Jerejak Island Leper Hospital, 1867 Leper wards, Singapore, 1860
T	1880-1900s		Leper wards were extended linearly as the typical hospital. Pavilion wards were serviced by linear corridors. The periods	Jerejak Island Leper Hospital, 1880-1900s

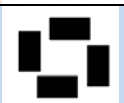
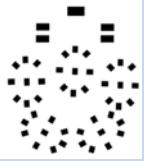
			where leprosy institutions were firstly centralized. Jerejak and KL Leper Hospitals became the center of collection for the Straits Settlements and the Federated Malay States.	Kuala Lumpur Leper Hospital, 1892-1900s
	1904		The typology of detached house or traditional village house was introduced to attract Malay lepers living in leprosy institutions.	Pangkor Laut Leper Hospital, 1904
	1908-1922		Detached houses were allowed to be built in the compound of existing leprosy institutions as part of extensions.	Kuala Lumpur Leper Hospital, 1908
Three	1924-26		Central compound and cluster planning were introduced. The planning of leprosy institutions started get rid of the linear planning of typical hospital wards	Singapore Female Leper Asylum, 1926
	1926		The proportion of detached houses started nominated the planning of leprosy institutions. The character of the leprosy institution had shifted from medical institution to human settlement.	Jerejak, Camp E, 1926
	1929		Distinct zoning between administration zone, medical zone, inmates' houses and agriculture zone was introduced.	Tampoi Leper Settlement, 1929
	1930		A more distinct character leprosy institution was developed at Sungai Buloh. The settlement has clear zonings with housing zone, agriculture zone, administration zone, medical zone and social zone. Inmates' houses dominated the entire settlement. The settlement was planned as a self-supporting and partly self-sustainability settlement.	Sungai Buloh Leper Settlement, 1930

Table 1: The evolution of leprosy institutions in British Malaya (Diagrammatic plans)

After the WW2, the formation of the Federation of Malaya in 1950 left Singapore a sole colony of the British in Peninsula Malaya. The changes of the political landscape made Singapore has to keep its own leprosy patients instead of continue transferring them to the Federation's leprosy institutions. From 1950-56, major works have been done by Singapore to extend its leprosy settlements. These extensions showed the principal of "human settlement" has been adopted where inmates' houses were planned in the form of detached houses arranged randomly such as those at Sungai Buloh leper settlement.

Although the liberal policies implemented in British Malaya were less compulsion and punishment compared to those policies implemented in Japan and Brazil. However, the main purpose was the same, which was to acquire lepers as many as possible for the concentration treatments. The gigantic size of Sungai Buloh leper settlement, which was claimed as one of the biggest leprosaria in the world, proofed that the enthusiasm of British to acquire lepers in British Malaya was not less compared to other countries. As Edmond suggested that segregation was not primarily a humanitarian endeavor validated by medical science…. "*but (an) overly political enterprise designed to subdue and control*." The segregation policies have not only affected the freedom of sufferers but also entirely life and identity.

Undoubtedly, leprosarium is a unique typology of medical institution developed in 20th century. However, today many leprosaria have been demolished owing to the disease could be cured since 1980s and the original purpose of leprosaria to house lepers became redundant. So far, this category of public health property is extremely under-represented in the national and world heritage lists. Leprosarium is not only the final synthesis of hundred-year evolutions of leprosy institutions but also evidence of how millions of unfortunate leprosy patients were mistreated and retracted their freedom and identity to fulfill the craving of modern science and political agendas.