Thesis MA60 East Asian Studies, Leiden University

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2016 July, 15th

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Medicine in Edo Japan

Views from different angles on the history of Japanese medicine

Contents

Introduction **1**
1 Historical overview and today's misconceptions **3**
1.1 Fujikawa Yū 3
1.2 Historical overview of medicine in Japan according to Fujikawa Yū 4
1.3 Today's misconceptions about medicine in Edo Japan 7
2 Fujikawa Yū's view on the history of medicine in Edo Japan **9**
2.1 Introduction 9
2.2 Incorporation of the useful parts of kanpō and ranpō 9
2.3 Surgery in Edo Japan 12
2.4 Ranpō and surgery in Japan 14
2.5 External and internal medicine and surgery 15
3 Today's view on the history of medicine in Edo Japan **17**
3.1 Introduction 17
3.2 Incorporation of kanpō and ranpō 17
3.3 From traditional Chinese medicine (TCM) to kanpō 18
3.4 The establishment of ranpō 22
3.5 Surgery in Edo Japan 26
3.6 Acupuncture as an external medicine 29
4 The view on the history of medicine in Japan through modern and early modern eyes **33**
4.1 Introduction 33
4.2 The establishment of kanpō and ranpō, and their incorporation 33
4.3 The perception on surgery 35
4.4 Acupuncture, external and internal medicine 35
4.5 Today's literature's Meiji focus and Western centric approach 36
Conclusion **41**
Bibliography **43**

Introduction

Throughout history, the Japanese people have adopted several aspects of traditional Chinese medicine (hereinafter referred to as TCM) into their own medical system. However, the Japanese also began to actively study Western medicine as a result of their encounters with Western nations during the Edo period (1616CE-1867CE). The Dutch and the Portuguese missionaries for example were particularly influential. Instead of adopting Western medicine in its entirety, the Japanese integrated parts of Western medicine in their existing system. This development resulted in the genesis of the Japanese medical system which therefore can neither be called Chinese nor Western.

The early modern physician and medical scientist Fujikawa Yū[1] had specialized in the history of Japanese medicine and he devoted several books to the history of Japanese medicine. Even though his works were well-regarded in his time, he has largely been forgotten by modern scholarship.

Much research has been done by today's scholars about the history of medicine in the Edo period. It seems that Japan has had a particular way of implementing parts of different medical studies into its own medical system throughout its history. However, it has recently been suggested that the views of today's scholars, both Western and Japanese, are clouded by certain misconceptions about the Edo period. In addition, it has been argued that some of these scholars have a typical Western centric approach and therefore might draw wrong conclusions about Japan based on their Western line of thought.

It is therefore both interesting and relevant to compare Fujikawa's view on the history of medicine in Japan to that of today's scholars'. This can help to get a more accurate perception on the development of medicine in Japan. Having an accurate perception is important for future references about Japan because the identification of misconceptions about Japan in general can change the outlook on medical studies, as well as the outlook on other study fields.

[1] Japanese names will be given with the family name first. Western names will be given with the family name last. When an author is referred to, the family name is used in all instances.

Therefore, I will discuss in what way the early modern scholar Fujikawa's view can be relevant and influential in today's (modern) literature on the history of medicine in Edo Japan by drawing a comparison between their views. Thus, the research question is as follows:

To what extent is Fujikawa's approach on the history of Japanese medicine different compared to and still relevant in today's academic outlook on the history of Japanese medicine during the Edo period?

In chapter one, an historical overview of medicine in Japan according to Fujikawa will be given. Fujikawa's view will be the topic of chapter two and chapter three will discuss the view of today's scholars. In chapter four an analysis will be made of and a comparison will be drawn between Fujikawa's and today's scholars' view. Finally, the results from this study will be presented in a concluding paragraph where the research question will be answered.

1 Historical overview and today's misconceptions

1.1 Fujikawa Yū

Fujikawa Yū (1865-1940) was an early modern physician and medical scientist who lived in the Meiji period (1868CE-1912CE) and whose education in Western medicine was based on the German medical tradition. In 1881, at the age of 16, Fujikawa entered a medical school that was established within a hospital in Hiroshima. Shortly after his graduation in 1887, he moved to the capital Tokyo where he became a life insurance doctor. He then joined a news company that concerned itself with publishing papers regarding medical practices at home and abroad. After acquiring his medical license, Fujikawa published in several medical journals and went to Germany to study medicine. After coming back to Japan in 1891, he started his research on the history of medicine by looking thoroughly into historical records. He researched the history of medicine in Japan from ancient times starting from approximately 13000BCE until the Meiji period. Fujikawa acquired his expert knowledge mainly from Western medical books that were translated into Japanese. Fujikawa published his first book about this topic titled *Nihon igakushi* in 1904.[2] It became his best-known work, even granting him an award from the Imperial Academy which was the most prestigious institute for the medical profession at the time. The literature that he used for his research, a total of 9,017 books, has been archived in the Fujikawa library which is affiliated with Kyoto University (Tsuchiya et al., 2012).

In the next paragraph, an overview and summary will be given on the development of medicine in Japan according to Fujikawa's findings as written in his book *Geschichte der Medizin in Japan*. This book is a summary of *Nihon igakushi* in which the development of medicine in Japan throughout the history is described per Japanese time period.

[2] EN: History of Japanese medicine.

1.2 Historical overview of medicine in Japan according to Fujikawa Yū

The period of time before history, people in Japan were as occupied with the study and practice of medicine as people are nowadays. There are three essential literary works in which Gods are mentioned. It was believed that Gods could not only heal illness but also create diseases in the form of demons and evil spirits. According to Fujikawa, this ancient literature even tells us that alcohol was used as an important tool in health care (Fujikawa, 1911:1-3).

Just before the Nara period (710CE-794CE) from 97BCE until 709CE, trade relations between Japan and China expanded and much Chinese literature regarding medical studies was brought to Kyūshū for the first time.[3] Doctors and pharmacists from the Korean peninsula visited and settled in Japan between 97BCE and 709CE. Together with the Chinese Emperor and his staff of several doctors, the doctors and pharmacists from the Korean peninsula had great influence over the development of medical studies in Japan. Relations with China and the Korean peninsula promoted the practice of Buddhism in Japan which changed the life and mindset of the Japanese. People were sent from Japan to China to learn more about medicine. This meant, however, that the indirect inflow of medicinal knowledge shared by Korean doctors was essentially brought to a halt. In the Nara period, it were mainly Chinese priests and European monarchs who spread knowledge about medicine in Japan (Fujikawa, 1911:4-11).

The inflow of medical knowledge from China to Japan increased in the Heian period (784CE-1186CE) as a result of Chinese doctors travelling to Japan. The knowledge of these Chinese doctors was mainly retrieved from literature from the Sui dynasty (581CE-618CE) and the Tang dynasty (618CE-907CE). Although much of the important Japanese literature on medicine was published in the Heian period, most of the literature has since been lost and the authenticity of later published literature under the same name remains questionable (Fujikawa, 1911:12-22).

In the Kamakura period (1187CE-1333CE), the Japanese Emperor decided not to send any more people to China to study medicine. However, Buddhism was still of great influence on

[3] Kyūshū is one of the four main islands situated in South West Japan.

medical studies because Chinese priests still came to Japan and shared their knowledge. Although there was a significant use of Chinese literature from the Song dynasty (960CE-1279CE) to write Japanese literature on medicine, Chinese literature was subject to heavy criticism and amendments by Japanese authors (Fujikawa, 1911:23-25).

In the Muromachi period (1334CE-1568CE), much of the literature on medicine was destroyed as a result of the war between the Northern and Southern regimes in Japan. Even though studying medicine was not a priority during the time of the war, Japanese people did develop a deepened affinity for Confucianism and health care that was based on literature from the Ming dynasty (1368CE-1644CE) (Fujikawa, 1911:26-29).

Japanese medical studies in the Azuchi-Momoyama period (1569CE-1615CE) were based on several works of Chinese literature from the Jin dynasty (1115CE-1234CE) and Yuan dynasty (1271CE-1368CE). Japan's first encounter with the Portuguese was in the 1530s but not until the second half of the 16th century did medical studies become influenced by Portuguese doctors and Christian priests. Even though Christians, and therefore also the Portuguese, were banned from Japan at some point in the 1600s, the schools that taught the European surgical methods as introduced by the Portuguese were preserved. The preservation of these schools led not only to European medical studies becoming widespread in Japan but also to the fact that much of the new literature was based upon this European knowledge (Fujikawa, 1911:30-40).

In the Edo period (1616CE-1867CE), literature written by Chinese philosophers and Confucians of the Song dynasty played a very important role in the development of medical studies in Japan. Both the introduction of a new Confucianism and the return of a primal Confucianism influenced literature on medicine in Japan. In Japan, several medical schools that were based on this literature were established. Reading European literature, however, remained forbidden during most of the Edo period. Tokugawa Tsunayoshi, the shogun ruling at the end of the 17th century, acknowledged the Dutch's progressive developments in science and allowed Dutch literature to be

brought into Japan through Dejima[4]. In the second half of the 17th century, Dutch translations of French literature on surgery were donated to the Tokyo University and were translated into Japanese. With the help of these works, the study of surgery was able to develop in Japan and several surgical schools were established. In addition, many Dutch translations of German literature on human anatomy were used during this period. Before being published in Japanese, this literature was revised and edited by Japanese scholars, interpreters (*tsuuji*) and doctors with their own observations (Fujikawa, 1911:41-86).

By the time the Meiji period (1868CE-1912CE) had begun, mainly English medicine was being taught at the academy of Edo. The rectors of the academy wanted German medicine to be taught because this was believed to be the best in the world. Therefore, German army doctors were summoned to teach German medicine. This also led to interest in expanding the knowledge of Germanic and Latin languages, mathematics, geometry and natural sciences such as botany, zoology and mineralogy in Japan (Fujikawa, 1911:87-93).

From the foregoing, it can be concluded that Fujikawa viewed the Chinese system for medicine as being the main influence on the Japanese history of medicine. Even though the Chinese system for medicine was never put aside, a European system for medicine gradually gained influence over the development of medical studies in Japan. The Dutch in particular had great influence from the second half of the 17th century until the first half of the 18th century. Although European literature was banned and destroyed at that time, knowledge was still brought into Japan through Dejima.

As mentioned in the introduction, Fujikawa's view on the development of medicine in Edo Japan, as expressed in his work *Nihon igakushi*, will be compared to the view in today's literature. Accordingly, in the next paragraph it will be explained why the Edo period in particular needs further attention.

[4] An island in Nagasaki which was the only trading post in the Edo period. This trading post was set up especially for the Dutch and their alleged staff, such as physicians.

1.3 Today's misconceptions about medicine in Edo Japan

According to Ellen Nakamura (2005:4), a present-day scholar whose interests lie in the social history of Edo Japan, there is a misconception among both Western and Japanese scholars about Japan being secluded from other nations during the Edo period. Japan being secluded from other nations would mean that there was no interaction with other countries. However, according to Nakamura (2005:4) and Ronald Toby (1991:xiv), a present-day scholar, historian and Japanologist, the opposite is true. Japan had always been open, in particular for trade, with China, Siam and the Korean peninsula. Chinese and Korean doctors who had studied Chinese medicine went back and forth to Japan to spread their knowledge about medicine.

In addition, Toby argues that Japan began to interact with Europe and in particular with Portuguese missionaries in the 16th century. To ban the Catholicism the Portuguese had brought to Japan and to control foreign (trade) relations, strict limitations were placed on traveling abroad and the anchoring of foreign ships. As an exception, the Dutch were the only Western nationals to be granted permission to maintain their position as a trade partner of Japan. According to Toby, it is because of these strict limitations that today's scholars believe that Edo Japan was not open to trade and therefore could only have been influenced by Western knowledge through the Dutch (Toby, 1991:xiii-xiv). In the following chapters it will become clear to what extent Japan in the Edo period was influenced by Western knowledge of medical studies.

Another misconception that often occurs, is the difference in meaning of the words '*rangaku*' and '*ranpō*'. '*Rangaku*' is often used to refer to "Dutch learning" or "Dutch studies" in Edo Japan. '*Ranpō*' is often used to refer to "Dutch style" medicine used in Edo Japan. One of the reasons why one would choose these translations is because of the Chinese character compound that stands for "Holland[5]" (*ran*) in both words and "learning" (*gaku*) and "style/way" (*pō*). *Rangaku* and

[5] (The kingdom of) The Netherlands had gone through many changes in name and territory during the Edo period. For most of the Edo period the Netherlands was known as the Dutch Republic. However, the word for the Dutch Republic, *oranda* in Japanese originates from the Portuguese *Hollanda*. It is because of this that I decided to refer to the Netherlands as "Holland" in this thesis (also see the bibliography).

ranpō are often used interchangeably as one evolved out of the other. *Ranpō* medicine was established through *rangaku* and *rangaku* was in practice a form of 'Dutch style' education. However, in contemporary Edo *rangaku* and *ranpō* contained a far wider scope of knowledge such as German and French medical studies. Therefore, using the definition "Western learning" for *rangaku* and "Western style" for *ranpō* reflects a more accurate meaning of these words. In this thesis, to "Western style medicine" will be referred to as '*ranpō*' instead of *ranpō* medicine. In other cases, the meaning will be specified by adding a noun, for example *ranpō* school or *ranpō* studies.

A second reason to translate *rangaku* as "Dutch learning" is related to the first misconception that only the Dutch were permitted to enter, or had trade relations with, Japan. Because one could think that the only knowledge that has had any influence in Japan would have been Dutch. However, as is mentioned in the introduction as well as in the following chapters, it will become clear that although the Dutch were the only Western nationals able to enter Japan, they also brought knowledge from other Western nations with them.

2 Fujikawa Yū's view on the history of medicine in Edo Japan

2.1 Introduction

In this chapter an overview will be given of Fujikawa's view on the development of medicine in Japan during the Edo period (1616CE-1867CE) as described in his book *Nihon igakushi*.

It can be derived from Fujikawa's writing style that he wrote this book to inform people about the best medical knowledge and treatments according to his opinion. He does this by extensively referring to works written by other Japanese and Western scholars. Fujikawa's *Nihon igakushi* seems to have been a manual mainly directed at physicians and prospect physicians in order for them to develop a decent basic knowledge of medical studies.

The book can also be used by historians to create an elaborate historical overview of the development of medicine in Japan. Additionally, the book contains a lot of detailed medical information which could be used by historians to compare the methods of treatment in that time to those in today's literature.

It has been suggested by today's scholars that, compared to developments in Western medicine, Japan's development in surgery was not only considered to be behind according to today's scholars but also according to Japanese doctors of that time. This is why Fujikawa's opinion regarding surgery in Edo Japan will be discussed.

In order to understand how surgery developed in the Edo period, Fujikawa's view on the incorporation of two different medical systems used in Japan, namely *kanpō* and *ranpō*, will be discussed. In the paragraphs after that, his comments on, respectively, surgery, its role in *ranpō*, and its role in internal and external medicine will be discussed.

2.2 Incorporation of the useful parts of kanpō and ranpō

It is notable that, according to Fujikawa, only the best parts of different medical studies that were fit for the Japanese society were used. It seems more than likely that any other nation would only use parts of or a modified form of foreign medicine studies to fit their own culture and society. However, it might be part of a point Fujikawa seems to make in *Nihon igakushi* that Japan has a

particular cultural hierarchical tradition that is consistent with taking care of the whole community in order to flourish and stay alive. Another nation might just take on the Western way of thinking without further thought. Fujikawa however, demonstrates that there already was such an intellectual framework in place that even Western knowledge, that seemed so superior, was first taken apart by Japanese physicians, scholars and medical scientists.

At the beginning of the Edo period there was still a distinction between *kanpō* (漢方) and *ranpō* (蘭方). According to Fujikawa this was because the Japanese doubted the Western way of thinking. "*Kanpō*" is used to refer to TCM, which was adapted to fit the needs of Japanese society. *Kanpō* was used in Japan since before the Nara period (710CE-794CE). "*Ranpō*" on the other hand is used to refer to Western medicine practices that were used in Japan only since the Azuchi-Momoyama period (1569CE-1615CE) and was obtained through Portuguese doctors, Christian priests and Western literature written in Dutch (Fujikawa, 1904:439-440).

Fujikawa states that later on, when the Japanese started using Western medical treatments, they realized that these treatments were even more useful than they thought. They therefore started reading literature that was written in other languages such as German and French. As will be discussed in the following paragraphs, according to Fujikawa many physicians in Japan reconsidered the medical methods they had been using so far due to the success of this new Western knowledge. They tried to find a middle ground between the knowledge they already had – mainly *kanpō* – and the (new) knowledge, *ranpō* (Fujikawa, 1904:439-440).

Fujikawa demonstrates that in order to find that middle ground between *kanpō* and *ranpō*, books about these two subjects were thoroughly put together and revised. During this time in the Edo period, almost every physician in Japan studied and followed the Chinese medicine school *Kōhōka* (古方家) which taught the old way of medicine *koihō* (古医方). The students and staff of the school were engaged in forming their own theories about medical studies by doing experiments to verify both *kanpō* and *ranpō*. According to Fujikawa, this is how gynecology, surgery, ophthalmology and many more fields of medicine were revamped (Fujikawa, 1904:439-440).

As was mentioned earlier, according to Fujikawa the Japanese started to doubt the Western way of thinking after they had already been using Western medicine for over a century. The Chinese way of thinking was supposedly also doubted. This was, according to Fujikawa, because the *Kōhōka* physician Yamawaki Tōyō (1705-1762) began to doubt everything that was written in books about *kanpō* and *ranpō*. Yamawaki therefore decided to comparatively study as much literature as possible in order to find the most accurate information which could be used for practice in Japan. This was when *koihō*, which was based on TCM studies, began to transform into a combination of the good parts of *kanpō* and *ranpō* that were selected by Yamawaki. He incorporated TCM and Western medicine into a new style creating the *kanransecchū* trend or Chinese-Western incorporation (Fujikawa, 1904:439-440).

An example of *kanransecchū* is the increasing use of *ranpō* for obstetrics at the end of the Edo period. Kagawa Genetsu, an obstetrician who lived in the middle of the Edo period, already discussed *ranpō* for obstetrics in that time. However, it was not until the end of the Edo period that *ranpō* actually became the main practice for obstetrics. According to Fujikawa, this change in preference of *ranpō* over *kanpō* occurred because Kagawa's successors supported his views on *ranpō* and began implementing it themselves (Fujikawa, 1904:440).

Ogino Gengai (1737-1806) for example was an Imperial Court physician who used the Japanese-Western style. He learned how to use a needle for stitching and how to perform dissections (Fujikawa, 1904:439-440).

Another example is the physician and pioneer for Western ophthalmic medicine, Yunoki Taijun (1762-1803), who agreed with Yamawaki's point of view that the methods of *kanpō* and *ranpō* needed to be verified and concentrated on the dissection of the heart. Later on, he began to discuss eye diseases and treatments for these diseases according to *ranpō* (Fujikawa, 1904:440).

According to Fujikawa, the surgeon Hanaoka Seishū (1760-1835) was responsible for the incorporation of *kanpō* and *ranpō* in the field of *geka* (surgery). Hanaoka also created different methods for internal medical procedures and external procedures but in particular procedures within

the field of *geka*. Hanaoka formed theories about living beings and the laws of nature. His successors discussed his theories and spread the knowledge through the publication of a book in which they made extensive references to *oranda ihō* (和蘭医方) which translates as *Dutch medical methods*. According to Fujikawa, because of Hanaoka's successors' extensive reports which supported Western methods, *kanransecchū*, putting together *kanpō* and *ranpō* was finally completed (Fujikawa, 1904:441).

2.3 Surgery in Edo Japan

Fujikawa discussed three different words that were associated with surgery namely *geka* (*外科*), *kinsōi* (*金創医*) and *shujutsu* (*手術*). According to Fujikawa, *geka* refers to the professional deductive reasoning skills of using the correct surgical treatment to treat disease or injury. *Kinsōi* on the other hand refers to a person who merely knows how to treat external wounds through stitching. *Shujutsu* refers to the actual operation of treating external and internal wounds or injuries. Therefore, Fujikawa argues that *shujutsu* is a part of *geka* but that *geka* encloses a far greater field. He even goes so far as to state that *geka* and *kinsōi* should not be in the same category nor should one even be considered to be part of the other. He sees *geka* as far more complicated than *kinsōi* because a *kinsōi* does not require any special or additional skill besides knowing how to make incisions and how to stitch. Therefore, he argues that *kinsōi* in fact should not be mentioned in books about *geka* at all (Fujikawa, 1904:299-301,441).

According to Fujikawa, the aforementioned words were used interchangeably by people in the Edo period. His ostensible aversion to *kinsōi* probably arose from this observation. Fujikawa also mentioned that people in the Edo period looked down upon people who practiced *geka*. However, people who practiced *geka* were actual surgeons in Fujikawa's eyes (Fujikawa 1904:299-300).

A possible reason for people in the Edo period looking down upon surgeons is the interchangeable usage of *geka*, *kinsōi* and *shujutsu* which made their meaning ambiguous.

According to Fujikawa (1904:299-300), many people with no education or medical background, including physicians from non-surgery specializations, began to practice surgical methods during the Edo period. This could be another reason why people looked down upon *geka* surgeons. In this thesis, to *geka* surgeons will be referred to as 'surgeons'.

Fujikawa argues that surgeons should not have had a lower social position than any other type of physician. He mentioned a couple of non-surgery specialized physicians who shared his opinion about surgery in Japan (Fujikawa 1904:299-300).

For example, the family physician Furubayashi Kengi (1579-1657) wrote the book *geka tanpō* (*外科単方*) in which several diseases and injuries are being discussed over forty segments. These forty segments were cited from books written by other Japanese physicians. Based on these citations, Furubayashi argued in his book that surgery studies and internal medical studies were not all that different (Fujikawa, 1904:299-300).

Another example is Nagoya Geni (1628-1696), a family physician who posited several theories to explain the symptoms and causes of diseases he mentioned in his book, *ihō monyo* (*医方問余*). Nagoya also gave public demonstrations of his methods of treatment (Fujikawa, 1904:299-300).

Fujikawa states in his book *Nihon igakushi* that, in order to understand the methods of surgery, one should read a series of books he listed.[6] One of these books is called *geka shōkei zokusho* (外科捷徑俗書). Fujikawa recommended the use of the medical treatments in this book which featured detailed descriptions of how to cure or treat different diseases and injuries according to what was written in the 3rd through 6th volumes. *Geka shōkei zokusho* was written by Ōmura Juan (大村寿庵) from whom no other biographical records could be found (Fujikawa, 1904:300-301).

[6] *geka shōkei zokusho* (*外科捷徑俗書*), *geka hiyō* (*外科秘要*), *geka shūhō kiku* (*外科衆方規矩*) and *geka zokusen* (*外科俗詮*) (Fujikawa, 1904:300).

2.4 Ranpō and surgery in Japan

Western surgery was introduced in Japan by Portuguese missionaries in 1543. Despite this early introduction, according to Fujikawa, surgeons were only treating wounds or sword cuts and had never attended occurrences such as childbirth up until the middle of the Edo period. It was not, however, until the introduction of *ranpō* by certain persons that surgery began to actually be practiced in Japan (Fujikawa, 1904:299). A short overview of the people Fujikawa thought to be of great influence when it came to the introduction of *ranpō* surgery practices during the Edo period will be given.

For example, Yoshio Kōgyū (1724-1800) was an interpreter for Dutch physicians who practiced medicine in Japan during the Edo period. He used Dutch medical books to learn about surgical operations which used needles. The use of a needle had not been common practice before and this was Japan's first encounter with this kind of medical treatment (Fujikawa, 1904:545-546).

Sugita Genpaku (1733-1817), a physician who specialized in Western medical studies, contributed greatly to the spread and use of *ranpō* in Japan. Sugita found the knowledge he had of medical studies to be insufficient and began to complement his knowledge of *ranpō* with the knowledge he had gained from various Chinese medicine schools. Fujikawa argues that in order to learn more about *geka*, one should read a book written by Sugita called *yōka taisei* (*瘍家大成*). Sugita listed various types of *geka* in this book in order for the *ranpō* that was used to become truly lasting (Fujikawa, 1904:441).

However, Sugita's contribution to *ranpō* did not stop with the publication of *yōka taisei*. He borrowed a book about surgery from Yoshio which had been written by the German surgeon Lorenz Heister (1683-1758) and translated it into Japanese. He was only able to completely translate Heister's section on *kinsō* (金創), incisions and stitches, and died just after he finished this translation (Fujikawa, 1904:546).

Ōtsuki Gentaku (1757-1827) studied Dutch and learned about *ranpō* from his teacher Sugita succeeding Sugita's work on the subject. This time, however, it was done at the command of the

Japanese government. Ōtsuki was able to translate all of Heister's work[7] which were Dutch translations from German. Ōtsuki's student Sasaki Chūtaku was taught Dutch by Ōtsuki and in his turn published a book in which he wrote in detail how to use tools for stitching which were mentioned in Ōtsuki's work (Fujikawa, 1904:546).

Fujikawa himself focused on different tumor diseases, in particular a list of tumors that were cited in medical books written by an Austrian physician named Joseph Jacob Plenk (1735-1807). Fujikawa stated that it was thanks to Plenk's books that he was able to learn more about Western surgery and suggested the use of these books in medical practice (Fujikawa 1904:546-550).

2.5 External and internal medicine and surgery

Fujikawa's interest in external and internal medicine was inspired by TCM. Opposed to Furubayashi's point of view as mentioned in paragraph 2.2 in which he suggests that surgery and internal medical studies were not that different, Fujikawa argued that internal medicine was radically different from *geka*. However, Fujikawa considered it to be important to use internal medical studies in combination with *geka* (Fujikawa, 1904:441-442).

For example, a physician in the middle of the Edo period named Aoki Kantan (?-1782) published his book *geka satsuyō* (*外科撮要*) in which he described how to treat and cure various diseases and injuries with herbal medicine. According to Fujikawa, treatments such as those described in *geka satsuyō* were merely prescriptive and should not be called actual *shujutsu* (surgical operations). He did however recommend the use of *geka satsuyō* in combination with *geka* (Fujikawa, 1904:441).

Besides the books mentioned before, Fujikawa suggested the use of work written by Nakagawa Shūtei (1771/1773-1850),[8] a physician active at the end of the Edo period. Nakagawa wrote books about how to cure diseases from outside of the body. According to Fujikawa,

[7] Among Ōtsuki's works are *yōi shinsho* (*瘍医新書*) and *hasshi seiyō* (*八刺精要*).
[8] According to the following source it is unclear in which year Nakagawa Shūtei is born. These descriptions suggest that they are about one and the same person.
https://kotobank.jp/word/%E4%B8%AD%E5%B7%9D%E4%BF%AE%E4%BA%AD-1096251

Nakagawa's curing methods could in fact not be called *shujutsu* but should be named acupuncture and moxibustion, which he regarded as external medicine (Fujikawa, 1904:441). Fujikawa's promotion of the use of literature about acupuncture and moxibustion suggests that he saw these types of medical treatments as an alternative to other medical treatments.

A part of Western medicine was *orandaryū geka*[9] (*和蘭流外科*) or Western surgery. Fujikawa argued however that because these treatments were still mainly limited to temporary care, they could not be called *geka*. Among these treatments were herbal medicine care, acupuncture and moxibustion and incisions and stitching (Fujikawa 1904:441-442).

Among the *orandaryū* physicians was the surgeon Hanaoka who used a great variety of Japanese-Western medical treatments and is known today as the first person that was able to produce and demonstrate anesthetics in the history of surgical medical studies. According to Fujikawa, the invention of anesthetics was the first moment it became clear that the Japanese did have surgical skills (Fujikawa 1904:442).

The structure of Fujikawa's work *Nihon igakushi* was as follows. He usually began each chapter with a short overview of the subject he wanted to focus on. After that, he mainly discussed which Japanese physicians were important in the development of that subject in Japan. Depending on the subject, he gave an elaborate explanation on treatments and techniques he suggested should be used for diseases and which he thinks are most effective or useful.

In the next chapter, today's scholars' view on medicine in Edo Japan will be discussed and analyzed by giving an in-depth overview of the subjects discussed in this chapter.

[9] Literally translated: Dutch surgery.

3 Today's view on the history of medicine in Edo Japan

3.1 Introduction

The topic of this chapter is whether the view of today's scholars differs from Fujikawa's view on the development of medicine in Japan during the Edo period. To determine this, the subjects that were discussed in chapter two will be elaborated upon. In the first paragraph, today's literature on the incorporation of *kanpō* and *ranpō* will be discussed. In order to give a clearer view on the incorporation of *kanpō* and *ranpō*, in the second and third paragraph today's literature on the establishment of *kanpō* and *ranpō* will be the subject of research. Furthermore, the view of today's literature on surgery and acupuncture is discussed in the fourth and fifth paragraph respectively. Finally, the chapter will be concluded with the analysis of the differences between today's literature on the history of medicine in Edo Japan and Fujikawa's findings as written in *Nihon igakushi*.

3.2 Incorporation of kanpō and ranpō

The incorporation of *kanpō* and *ranpō* into the existing Japanese medical system, also referred to as *kanransecchū*, is translated by Nakamura as "Chinese-Dutch eclectic" (Nakamura, 2005:13). However, it is arguable that "Chinese-Western eclectic" is a more appropriate translation because the medical knowledge that was introduced by the Dutch was a mixture of various medical studies, German and French in particular. Therefore, "Chinese-Western incorporation" will be used to describe the phenomenon of *kanransecchū*, as was done in chapter 2.

According to Nakamura, a scholar whose interests lie in the social history of Edo Japan, there was a medical school in Japan called *koihō* which taught the old way of medicine derived from TCM. This school was divided into two streams at some point in the Edo period because of their differences in approach towards medical studies. One school was established by the physician Yamawaki Tōyō who stressed the importance of basic medicine. The other school was centered on Yoshimasu Tōdō's (1702-1773) clinical experimentation. Nakamura points out that in particular Yamawaki and his successors distanced themselves from the Confucian thought. They began to introduce elements of Western medicine into their practice in order to achieve a new anatomical

understanding of the body in which dissection played an important role. They introduced Western elements particularly in the areas of surgery, bloodletting and obstetrics (Nakamura, 2005:11,13).

According to Kobayashi Akiko, a medical scientist at Morinomiya College of Medical Arts and Sciences in Osaka, the Japanese interest in Western medicine during the Edo period grew as a result of contact with Holland. Many Western medical books that were written in Dutch were translated into Japanese in this time. Japanese physicians who supported Western medicine caused a widely spread acceptance of Western medicine. However, in contrast with the position of the contemporary physician Yamawaki towards Confucian thought, Kobayashi argues that many physicians accepted Western medicine while not abandoning the ideas of Chinese medicine (Kobayashi, 2010:362).

3.3 From traditional Chinese medicine (TCM) to kanpō

Kobayashi states that Chinese ideology and Chinese medicine have been a large part of the knowledge exchange between China and Japan since ancient times. Among the medical knowledge that was exchanged were herbal medicine, acupuncture, moxibustion, tao-yin and massage (Kobayashi, 2010:359).

In addition to this Yu, a medical scientist at Kanazawa Medical University, states that TCM is one of the oldest ways of practicing medicine and that it has been adopted by Japan where it was used in a modified form (Yu et al., 2006:231-232). However, Kobayashi argues that the first import of medicine was in 414CE from the Korean peninsula that was known as Silla in that time. It has been deduced that this medicine was mainly herbal. However, the rest of the nature of this medicine remains unclear (Kobayashi, 2010:360).

Kobayashi demonstrated that the first medical literature known to be introduced in Japan was introduced in 562CE by the Chinese. She on the other hand argues that Chinese medicine were imported through Korea first. By the time more literature was imported from China, the Japanese learned more about herbal medicine and acupuncture. From that time on Chinese medicine had a great influence on the development of medical studies in Japan (Kobayashi, 2010:360).

Kitajima demonstrates that until Japan's first encounter with Western medicine, Japanese physicians mainly used *kanpō*. He describes *kanpō* as an herbal medicine method based on TCM but modified to fit Japanese culture to treat internal diseases (Kitajima et al., 2010:57). However, Yu argues that the word '*kanpō*' initially referred to the medical system used in China that was developed during the Han dynasty (206BCE-220CE).[10] In addition, Yu argues that *kanpō* nowadays can be characterized as a simplified, positivistic and pragmatic version of TCM (Yu et al., 2006:231-232).

To illustrate the difference between TCM and *kanpō*, Yu argues that TCM includes mainly herbal medicine but also acupuncture, moxibustion and massage and that traditional Japanese medicine for that matter included *kanpō*, acupuncture and acupressure (s*hiatsu*) until the Meiji period (Yu et al., 2006:231-232).

To demonstrate how Chinese literature was used for medicine studies in Japan, Kobayashi gives the example of Manase Dōsan. Manase was a physician in the Azuchi-Momoyama period (1569CE-1615CE) who established the basics of traditional Japanese medicine. He based his work on a book about acupuncture called *Shi si jing fa hui*[11] in Chinese or *Jūshikei hakki* in Japanese. Even today, medical books that are used at colleges in Japan are based on this book. Manase opened a medical school where teachings were emphasized on herbal medicine. However, acupuncture and moxibustion were also taught in this school (Kobayashi, 2010:361).

As demonstrated by Nakamura, *kanpō* was formed through Chinese medicine in Japan by the time the Edo period started. These Chinese medicine had developed to varying degrees into a Japanese version. These Japanese versions of Chinese medicine, although based on TCM, were something quite different from TCM (Nakamura, 2005:10). In addition, Yu argues that even though Chinese literature was used, a unified theory on traditional Japanese medicine in Japan has not been established. He argues that *kanpō* is said to be simpler and more informal than TCM and its

[10] There are different records about the beginning and end date of this period. The given timeline is according to Yu's findings.
[11] EN: Expression of the Fourteen Meridians

emphasis lies with practice while, a theory on TCM was unified in China and it emphasizes theory rather than practice (Yu et al., 2006:235).

However, Yu states that the Japanese did establish a ready-to-use formula in *kanpō* while in TCM a large number of formulae is used and the treatment is individualized (per patient). Besides that, the Japanese mainly used formulae from a book called *Shang han za bing lun*[12] in Chinese or *Sho kan ron* in Japanese. The Chinese on the other hand used a broader range of sources, including medical manuscripts, in order to create the right formula per disease and per patient (Yu et al., 2006:235).

Yu argues that despite these differences between TCM and *kanpō*, their basic theories and the methods of diagnosis and treatments were patient-based diagnosis emphasized throughout history. This differed considerably from the disease-based diagnosis emphasized Western medicine (Yu et al., 2006:232).

Furthermore, Margaret Lock, a cultural anthropologist who is specialized in medical history and biomedical technology, demonstrates what factors have influenced the establishment of *kanpō*. She states that to master TCM, one would theoretically expect that physicians who practice TCM have knowledge of all its therapeutic techniques. However, on the contrary she argues that in Japan there had been a long precedent for the use of a reduced form of medical practice. According to her, one of the explanations for a reduced form of medical practice was that many practitioners did not have access to medical literature or to medical supplies. Another explanation she gives is that it was common for practitioners to travel around the country in order to administer treatment. In both cases the use of a reduced form of medical practices was naturally enhanced (Lock, 1980:246).

Nakamura argues that the most fundamental change in medical studies in Japan in the Edo period was the understanding of medicine being based on empirical evidence rather than on Confucian theories or Confucian philosophy (Nakamura, 2005:10).

[12] EN: Treatise on Cold Diseases and Miscellaneous Diseases

According to Yu, the Japanese government decided to actually adopt the Western medical system since the Meiji period. As a result, traditional Japanese medicine was repressed and divided into three parts: herbal medicine (*kanpō*); acupuncture and acupressure (*shiatsu*). Nevertheless, *kanpō* did strongly influence the West. Yu argues that there are four reasons why the use of TCM in the West has been strongly influenced by *kanpō*. Firstly, *kanpō* was introduced to the West during the period of seclusion and before the licensing of acupuncture could be established. Secondly, *kanpō* makes use of a ready-to-use formula as treatment. Thirdly, *kanpō* is easier to master than TCM. Finally, *kanpō* with its evidence-based medicine is easier for the West to accept because research models and methods used in Japan for studying *kanpō* are entirely Western. Yu argues that it is considerably more difficult for the West to accept TCM because of its use of a diversity of formulae and the individualization of treatment in which Western research models cannot be applied. Furthermore, Yu states that today *kanpō* is used to describe a unique medical system of Japanese herbal medicine and recently TCM is used in the West as a complement to Western medicine. (Yu et al., 2006:231-232, 234, 237-238)

In addition to what Yu argues, Lock argues that not only traditional Japanese medicine was divided as a result of the official adoption of the Western medical system but also that a reorganization of the medical world had taken place. She explains that physicians who had practiced *kanpō* were degraded from a prestigious social position to a level in which their corporate group was abolished. One of the main reasons for the abolishment of corporate groups for *kanpō* physicians was, Lock argues, that they formed a potential threat to the new Western medical system. Since the Meiji period, *kanpō* physicians were required to get a license as a Medical Doctor before being able to practice *kanpō* (Lock, 1980:247).

It can be concluded that *kanpō* was initially a derivative of TCM and was modified to the needs of the Japanese. However, it is modified to the extent that *kanpō* is nowadays considered to be a separate medical practice opposed to both TCM and Western medical practices.

3.4 The establishment of ranpō

As mentioned before in the introduction and stated by Nakamura and Toby, during the Edo period Japan did not completely seclude itself from other nations. Kitajima states that the policy of seclusion and prohibited contact with foreign nations was officially issued in 1639. However, Dejima was declared the official and only Dutch trading post shortly after this policy was implemented (Kitajima et al., 2010:57).

Also mentioned in the first chapter and according to Fujikawa, Chinese medicine studies, among other things, had changed the Japanese's mindset. However, Nakamura argues in turn that the introduction of Western medicine had also changed the Japanese's mindset (Nakamura, 2005:9).

As an example, Nakamura demonstrates the works of Sugita Genpaku and his successors in which theories were based on empirical observations rather than theories of Confucian medicine. Additionally, she argues that even though dissection was initially not conducted in Edo Japan, its introduction has contributed greatly to the change in point of view on Western medicine. Sugita and his successors were not only able to confirm old theories but they also became open to new perceptions that were offered in Western works (Nakamura, 2005:9).

Nakamura argues the following:

> "If the acceptance of new knowledge by a society is measured by its ultimate domestication and permeation into everyday life, then ordinary provincial scholars cannot be left out of the picture." (Nakamura, 2005:27)

Therefore, Nakamura thoroughly studied the life of Takano Chōei (1804-1850), an early Japanese scholar and physician. Takano and many other scholars had specialized in *ranpō* and put in enormous effort to acquire Western knowledge. According to Nakamura, this was not only for the sake of their own intellectual curiosity but also for the benefit of the Japanese society as a whole (Nakamura, 2005:27).

Takano was a student of the German physician Philipp Franz von Siebold (1796–1866) and used Western knowledge to practice medicine. According to Nakamura, it is not important to which

extent Takano understood Western knowledge on his own but it is important what he did with that knowledge. Takano put medical concepts into a form in which they could readily be accepted and understood by other Japanese physicians. Altering medical concepts was not too difficult because some Japanese versions of Chinese medicine, particularly *koihō*, had a basic compatibility with Western medicine. Therefore, Nakamura states that the study of Western knowledge in Japan did not fail but was creatively and practically adapted. She suggests that Takano's contribution to the study of Western medicine makes it easier to understand why knowledge was interpreted in certain ways in Japan (Nakamura, 2005:23).

Nakamura has many remarks on scholars who wrote about the history of Japan from a point of view in which the West influenced Japanese medical studies. However, she seemingly considers Takano Chōei as an ordinary provincial scholar. It can be argued that Takano does not come across as an ordinary provincial scholar because Takano came in contact with Western physicians. For example, Takano studied under the Western physician Siebold just like many other Japanese physicians who worked with Western physicians. Nakamura did not make clear how Takano's work could be distinguished from other *ranpō* scholars' work at that time. However, she argues that Takano was able to contribute to the spread of Western medicine in Japan. The latter could not be assumed for all *ranpō* scholars in that time.

Spreading Western medical knowledge was not that easy. According to Kitajima, in order to be able to study the latest Western medicine, Japanese physicians had to learn Dutch. This was because all the books that were brought into Japan during the period of seclusion were written in Dutch (Kitajima et al., 2010:59).

Furthermore, Kitajima argues that because all Western culture and literature that were brought to Japan by the Dutch, the Japanese could not imagine that most of the Dutch literature on medicine was translated from German literature. This was despite the fact that there were German physicians who accompanied the Dutch as alleged Dutch physicians. Some of these German physicians claimed to be actually Dutch (Kitajima et al., 2010:57-59).

Some particularly known Germans who claimed to be Dutch were a surgeon named Casper Schamberger and a physician named Engelbert Kaempfer who is known for his many publications on Japan at that time (Kitajima et al., 2010:57-59). Warren Boling Jr., a present-day neurosurgeon and medical scientist, argues that these and some other German physicians[13] who entered Japan as alleged Dutch physicians were able to influence Japanese medicine and natural sciences. Besides that, he argues that these physicians have played an important role in the introduction of Japan to the West by smuggling maps, literature and specimens of plants and animals out of Japan. Among the literature on Japan that has been published by these physicians is *materia medica*, *Amoenitatum Exoticarum*, *History of Japan*, *Nippon*, *Fauna Japonica* and *Flora Japonica* (Boling, 2010:186-187).

The Dutch books *Anatomische Tabellen*[14] which were written by Johann Kulmus (1689–1745) and *Chirurgie*[15] that was written by Lorenz Heister (1683–1758) were translations from German books. Sugita, a contemporary physician, translated these books into Japanese and published them so Japanese physicians were able to understand Western medicine (Kitajima et al., 2010:59).

Siebold accompanied the Dutch as an alleged Dutch physician and was later identified as a German. According to Kobayashi, the ideas of Western medicine had great influence on the upcoming Japanese medical system through Siebold's work (Kobayashi, 2010:363).

At some point in the Edo period when Siebold's skills were recognized by the Japanese government, he was permitted to establish a hospital and a medical school. Over 60 students within the age range of 15 to 60 years old were accepted. Among these students were many who were responsible for the spread and promotion of Western medicine. Siebold's daughter, Kusumoto Ine, was the first Japanese female physician to study Western medicine (Kitajima et al., 2010:60).

[13] Among others, Caspar Schamberger (1623–1706), Andreas Cleyer (1634–1697), Engelbert Kaempfer (1651–1716), and Philipp Franz von Siebold (1796–1866) (Boling, 2010:186)
[14] EN: Anatomical Tables
[15] EN: Surgery

Kitajima demonstrates that nowadays Siebold is the best-known foreign physician from the Edo period. Siebold introduced several medical appliances to the Japanese such as appliances for dental, ophthalmological, obstetric and gynecological, orthopedic, and surgical treatments. During his stay in Dejima, Siebold gained a high reputation for his effective treatments. He gave a surgical demonstration on a 12-year-old boy by using the French surgeon Ambroise Paré's (1510–1590) surgical methods (Kitajima et al., 2010:59-60).

According to Kitajima, several Japanese physicians have contributed to the spread of Western medical knowledge into the Japanese society and the idea of Western medicine being more advanced than Japanese medicine. They did so by studying *ranpō* and founding medical schools all over the country (Kitajima et al., 2010:57).

However, according to Nakamura some of these physicians were involved in the establishment of two schools which focused upon the search for the historical significance of *ranpō*. One school focused upon the theory that *ranpō* had a role in reinforcing the feudal system and ideology in Japan. The other school focused upon *ranpō* as being opposed to the feudal system and its spread helped to overthrow the feudal system (Nakamura, 2005:15).

It is not certain if Nakamura's statement as mentioned above has a connection to what Lock argues. Lock argues that *ranpō* studies had caused social changes during the Edo period. Additionally, she argues that these social changes would eventually have lead towards the establishment of a corporate group of physicians but they were absorbed by the nationally supported Western-style system during the Meiji Restoration in 1868 (Lock, 1980:246). It seems that Lock's argument refers to the two groups Nakamura mentioned above. To give a conclusive answer about this assumption, further research is necessary.

It can be concluded that the concept of *ranpō* was initiated through contact with Holland in the 17th century during Japan's period of seclusion from other nations. In particular, the introduction of Western medicine by the Dutch had changed the Japanese's point of view on medicine studies in general. Therefore, I agree with Kobayashi (2010:359) who argues that Western medicine that was

imported from Holland had a strong impact on Japanese medicine. On the other hand, Nakamura (2005:9) made a valid point when arguing that *ranpō* was practiced in Japan as Western medicine but that *ranpō* was in nature still a blend of Chinese and Western medicine methods.

3.5 Surgery in Edo Japan

As mentioned earlier, according to Fujikawa Japan's first encounter with Western medicine was in the 1530s. However, according to Kitajima Masaki (2010:57), a present-day surgeon and medical scientist, Japan's first encounter with Western surgery was not until 1543 when Portuguese missionaries began to visit Japan. Additionally, Kitajima argues that the development of surgery in Japan was considered to be behind compared to the West that of Japanese doctors of that time. Many schools in Japan were founded by these doctors who were prompting the development of Western surgery. This was just about the time when Ambroise Paré began to perform surgical operations in France (Kitajima et al., 2010:57-58).

Fujikawa stated that Chinese medicine studies were doubted by several physicians in the Edo period. Uematsu Sumio (1990:163), a present-day neurosurgeon and medical scientist, confirms this by stating that some Japanese scholars started to question the accuracy of ancient anatomic information that had been gained from Chinese medicine studies over the years. Therefore, these scholars sought knowledge by other means (Uematsu, 1990:163).

In addition, Toby (1991:xiv) argues that in Western scholarship it is often argued that Japan's period of seclusion has caused its development to fall centuries behind when compared to the West. Toby disagrees that Japan has fallen behind the West at all.

However, Uematsu brings a new light to the discussion why the development of surgery practices had supposedly fallen behind compared to the West. He argues that autopsy and dissection of humans and animals were prohibited since 552CE because of the Japanese's predominant religious belief in Buddhism. According to Uematsu, Japanese scholars found a way to keep themselves informed about medical progress in the West despite the Japanese's predominant religious beliefs. It was a capital crime to attempt to leave Japan during the period of seclusion.

Therefore, Japanese scholars were compelled to gain anatomic information through, although also restricted by the government, exchanging goods and culture with Dutch physicians who entered Japan during this period (Uematsu, 1990:163).

One of the exchanged goods was a book about surgery that was written by the French surgeon Paré. Narabayashi Eikyu[16] (1643-1711) translated a Dutch version of Paré's book into a Japanese version. This translation was published in 1706 as *geka soden* (Uematsu, 1990:163).

Yamawaki Tōyō was the first one to carry out a government-authorized autopsy in Kyoto in 1754. Sugita Genpaku was inspired by Yamawaki's findings and decided to study and revise traditional teachings. He attended one of the rare occasions in 1771 when a body was dissected. According to Uematsu, these dissections have led to the introduction of new, more accurate anatomy books in Japan. Even though dissection was still controlled by the government for another 80 years, there was a revolutionary change that was caused by the scientific methods that described facts based on observation instead of Confucian theories (Uematsu, 1990:163).

According to Sano Keiji, a neurosurgeon and medical scientist, the Japanese surgeon Hanaoka Seishū was influenced by old Chinese and Indian surgical methods. Hanaoka carried out an operation under general anesthesia called *Datura* (jimson weed) and aconite. He succeeded in removing a breast cancer (Sano, 2002:861). Hanaoka's use of general anesthesia was approximately 40 years earlier than the first performance of an operation under ether anesthesia in the West in 1846 (Kitajima et al., 2010:60).

According to Uematsu, one of the reasons for adopting Western medicine was that Japan was afraid of armed ships appearing in the Japanese Sea. When a US navy ship forcefully entered Japan in 1853, the Japanese government asked the Dutch for help in adopting Western medicine. In response the Dutch sent a military physician called Johannes Lydius Catherinus Pompe van Meerdervoort. He advised the Japanese on their medical system. Together with a Japanese

[16] Full name: Narabayashi Eikyu Chinzan

government appointed physician, van Meerdervoort was given the assignment to set up a 5-year plan for medical studies and training of physicians and surgeons (Uematsu, 1990:164).

Van Meerdervoort insisted on using cadavers for human dissection in anatomy courses. However, the Japanese government and the civilians, including his students, were strongly opposed to the use of cadavers. It was only two years after his request for cadavers that the government finally decided to give him a corpse. Even though the government approved of this, public demonstrations were still feared and van Meerdervoort's postmortem examination was guarded by 150 samurai (Uematsu, 1990:164).

Despite the strong public antagonism that was believed to prevail, there were many physicians who wanted to attend this examination. In total 21 medical students and 24 physicians were present at the examination. The students who helped dissecting were so enthusiastic that they continued the dissection for two days. At the end, the cadaver was buried by a Buddhist priest with a traditional funeral ritual (Uematsu, 1990:164).

According to the German surgeon Mohnike (1814-1887), the Japanese surgical instruments were of high quality but the surgical procedures for opening the human body remained underdeveloped when compared to the West. Japanese surgeons had so far concentrated on debriding, closing and bandaging wounds rather than exposing diseased organs. It was not until the late 19th century that the brain was untouchable to surgeons in Japan (Uematsu, 1990:164).

Uematsu demonstrates that the Meiji restoration was a major step in Japan's transition to a modern state because from this time on the Emperor allowed autopsies provided that the next of kin gave permission (Uematsu, 1990:164).

Based on the foregoing, it can be concluded that the development of surgery took some time because of the Japanese's longstanding religious beliefs. However, the introduction of Western medicine practices, in particular dissection, caused for surgery in Japan to improve and grow exponentially.

3.6 Acupuncture as an external medicine

In this paragraph, the way the development of acupuncture in Edo Japan is discussed in today's literature will be the subject of research. It seems that the West was strongly influenced by Japanese acupuncture rather than acupuncture from China. Fujikawa promoted literature about acupuncture in *Nihon igakushi* and saw acupuncture as an alternative to other medical treatments. Therefore, the development of acupuncture in Japan will be discussed separately from the previously mentioned subjects *kanpō*, *ranpō* and surgery.

Kobayashi argues that there are different perspectives on how Japanese acupuncture developed through history. She mentions that acupuncture in Japan often includes moxibustion as well (Kobayashi, 2010:359-360). Hereinafter, to both terms will be referred as one, namely 'acupuncture'.

A law was enacted in 701CE in which acupuncture was administered under the authorization of the national government. According to Kobayashi, the law directed that any kind of medical student had the obligation to study acupuncture because it was regarded to be important within medical studies (Kobayashi, 2010:360).

At some point in the middle of the 17th century, blind people were able to get an education in and license for acupuncture and massage. However, it has been argued by Lock that the training of blind people to become acupuncturists caused the fall of the prestige accorded to the practice of acupuncture. Additionally, she argues that this was the result of blind people having a generally low social position (Lock, 1980:246).

However, it was the blind acupuncturist Sugiyama Waichi (1614-1694) who invented a technique to make the insertion of needles easier. This was in particular very useful for blind people. The technique was to insert a needle into a thin tube in order to insert the needle painlessly into the body. After the introduction of this tube, thinner needles were used for acupuncture in Japan. According to Kobayashi, the invention of the tube-needle insertion technique in acupuncture is one of the characteristic developments in medical studies unique to Japan (Kobayashi, 2010:361).

According to Kobayashi, in the Meiji period the Japanese medical system was denied in Japan. This included acupuncture and Western medicine was accepted in place. In addition, she argues that even though acupuncture was studied and perhaps used in the West since 1676, this was the end for acupuncturists' social position in Japan. Acupuncturists' social position had been the same as other physicians for almost 1200 years until the Meiji period (Kobayashi, 2010:363).

Kobayashi's statement about acupuncturists' social position until the Meiji period suggests that acupuncturist did have a prestigious position during the Edo period. However, Lock (1980:247) argues that acupuncturists were able to keep their status as a corporate group in the Meiji period but that their power and social position were still restricted because of the remaining hierarchical medical system. Lock's statement suggests that the social position of acupuncturists was already deteriorating during the Edo period. Her statement could be based upon her argument that the medical practice of acupuncture in the Edo period by blind people, who had a socially low position to start with, was permitted.

Nakamura on the other hand argues that the social position was to some extent related to the type of medicine practiced by Japanese physicians. Physicians practicing *kanpō* were considered to be true doctors and had a higher social position than other types of physicians such as surgeons and acupuncturists. Surgeons and acupuncturists were considered to be technicians rather than theorists or scholars (Nakamura, 2005:54). Nakamura's argument suggests that surgeons and acupuncturist did not have a high social position or an important role in the Japanese medical system at all throughout Japan's history.

Additionally, Nakamura states that according to Fujikawa the social position of unsalaried physicians in the Edo period was roughly equivalent to that of peasants. This view tends to be confirmed by the same low wages the two had in that time. Nakamura demonstrates that practicing medicine was not the main source of income for many physicians in the Edo period. They had to either teach medicine or have other occupations besides being a physician in order to supply in their basic needs. According to Nakamura, the willingness of Japanese physicians to help people, even

though they were poor, refers back to the Japanese's moral satisfaction and responsibility that was believed to be gained from helping one's own community (Nakamura, 2005:67).

In addition to what Nakamura argues, Lock argues that hierarchy has been important in Japan throughout its whole history up to the present. Loyalty between superiors and subordinates is seen as an active service and performance towards a collective goal. This means that one works for one's group in order to become successful. According to Lock, this is the way a prestigious position was often obtained within the medical world in Japan (Lock, 1980:245). The latter corresponds with Nakamura's argument that one works for both their own intellectual curiosity as well as for the benefit of Japanese society as a whole.

Even though, the preservation of hierarchal positions has also been important in Japan. According to Nakamura, there were some significant social changes within the medical world during the Edo period. Nakamura gives at least two examples of people who were able to rise to advisory positions regardless of their hereditary rank (Nakamura, 2005:48,67).

The first example is Takano Chōei, and others who desired a scholastic career, who chose to distance himself from his middle-ranking warrior class he had from birth and pursued his ambition to become a scholar (Nakamura, 2005:67).

The second example is Hanaoka Seishū who was merely a surgeon in the eyes of the people who lived in the Edo period. He was able to establish one of the largest medical schools in Japan at that time. He was also awarded a certificate in which many references were made to secret teachings his students had received. However, according to Nakamura it has been suggested that due to social changes, the secrecy of medical teachings in order to protect one's social group started to break down by the middle of the Edo period. This change had important implications. For example, when the exchange of medical ideas between teachers began to grow, new medical theories were developed (Nakamura, 2005:48).

As discussed before, according to Lock and Nakamura hierarchy has always played a significant role in the Japanese's social system. Therefore, it can be argued that Lock has a good

argument when arguing that the social position of acupuncturists was already deteriorating in the Edo period because of blind people being permitted to practice acupuncture. If blind people have been subordinate to physicians throughout history, it does not seem likely that a blind physician is elevated to the social position of a regular physician.

On the other hand, according to Nakamura's demonstrations about Takano and Hanaoka, abandoning one's social position that was inherited by birth and pursuing another (higher) one does not seem impossible. This subject clearly needs further research in order to be able to give a conclusive answer.

It has been shown in this paragraph that there are different opinions about the practice of acupuncture and the social position of acupuncturists in the Japanese society in both the Edo period and the Meiji period. Today's scholars suggest that acupuncture became less important in Edo Japan because it was prevailed over by Western medicine and its practice was not useful. However, it can be argued that, according to the terminology used to categorize acupuncture today, acupuncture is used as an alternative for conventional medicine. Terminology that is used to categorize acupuncture is for example nonconventional medicine, alternative form of healing, alternative medicine and alternative treatments.

4 The view on the history of medicine in Japan through modern and early modern eyes

4.1 Introduction

In this chapter the different views of Fujikawa and today's scholars' on the history of medicine in Japan, according to the findings described in previous paragraphs, will be compared and analyzed. This will give a clearer view of how the early modern scholar Fujikawa's view is different from today's scholars' and it will also give a clearer view on how the view on history has changed over time.

4.2 The establishment of kanpō and ranpō, and their incorporation

In Japan, throughout its history Chinese medicine studies and Western medicine studies were modified to fit the needs of the Japanese society. Even after Western medicine was introduced, every physician studied the old way of medicine *koihō* in combination with Western medicine.

Fujikawa argues that the Japanese doubted Western thinking and that they wanted to verify Chinese medicine that was used until that moment in Japanese history. Therefore, experiments were done by the Chinese medicine school *Kōhōka* to verify *kanpō* and *ranpō* during the Edo period.

Today's scholar Nakamura stated that the contemporary physician Yamawaki conducted clinical experiments. However, she stated this without arguing that the Japanese doubted Western medicine. She mentioned that Yamawaki conducted these experiments because he thought that Western medicine practices would give a better understanding of new anatomical knowledge of the body. In other words, Yamawaki saw Western medicine as an additional feature to Chinese medicine studies.

According to Fujikawa, the Japanese found a middle ground between *kanpō* and *ranpō* by revising books about *kanpō* and *ranpō*. As a result, many medicine fields were revamped and the *kanransecchū* trend was created. From that time on, a combination of Western and Chinese medicine (methods) was used. Fujikawa argues that *kanransecchū* was finally completed when Hanaoka Seishū added *ranpō* theories to *geka* thus creating a *kanransecchū* process specifically

within the field of *geka*.

Today's scholars and Fujikawa agree that Chinese ideology in medicine had a great role in knowledge exchange with Japan. Additionally, they argued that the knowledge exchange with the Dutch had caused for *ranpō* to be widely spread by supporters. However, according to Fujikawa over time *ranpō* was used more and more than *kanpō,* particularly within the field of *geka*.

There are different opinions among today's scholars about whether the Japanese way of thinking became more Western and less Chinese due to the introduction of Western medicine. According to Nakamura, Yamawaki and his followers were abandoning the Confucian thought. She argues that the most fundamental change in medical studies in Japan in the Edo period was the understanding of medicine based on empirical evidence rather than Confucian theories or Confucian philosophy.

However, Kobayashi argues that many physicians implemented elements of Western medicine in their practice without abandoning the ideas of Chinese medicine. By arguing that almost every physician in that time had to study the old way of medicine *koihō* first and Western medicine second, Fujikawa as well implies that medicine practices were still conducted without entirely abandoning *kanpō* or Confucian thinking.

On the other hand, Yu argues that *kanpō* became repressed in the Meiji period because the Western medical system was being adopted. Yu's statement about adopting the Western medical system suggests that no reduced form of Western medicine practice was used. Even though *kanpō* was repressed in Japan, Yu argues that it still influenced the West in that time.

Lock argues that there were significant social changes during the Edo period. However, Fujikawa does not mention or imply anything about social changes in his work *Nihon igakushi*. On the other hand, Nakamura demonstrates that the introduction of Western medicine gave rise to the formation of a great intellectual framework between physicians all over Japan. This argument is also seen in Fujikawa's work.

Nakamura argues that ordinary provincial scholars in Japan are underrepresented in (today's) literature. Additionally, she states that contemporary and present scholars speak of *ranpō* as Western

medicine but that it is still a blend of Chinese and Western medical methods.

4.3 The perception on surgery

Fujikawa and today's scholar Uematsu agree on Chinese surgery studies being doubted. However, Fujikawa stressed in his discussion about surgery that there were misinterpretations about what surgery actually incorporated during the Edo period. Because of these surgeons were regarded as having lower prestige. Therefore, Fujikawa supports his point of view by suggesting the use of certain Western and Japanese literature about surgery. While on the other hand today's literature often seems to be comparative and mainly focused on how the West influenced Japan.

It has been argued by Uematsu that because of the Japanese's predominant religious beliefs in Buddhism, the development of surgical practices in Japan slowed down. As mentioned before, according to Fujikawa the importance of surgeons in the Edo period was underestimated. It is arguable that this also has contributed to the sluggish development of surgical practices.

Fujikawa does recognize that Japan was influenced by Western physicians and literature. However, he mainly discusses the role of Japanese physicians and how they spread this (new) knowledge in different fields of medical studies.

4.4 Acupuncture, external and internal medicine

In his book *Nihon igakushi*, Fujikawa demonstrated his view on acupuncture, other external medicine and internal medicine whereas today's literature is mainly focused on the practice of acupuncture in Japan.

According to Fujikawa when Hanaoka succeeded in the invention of a general anesthesia, this was the first moment the Japanese's surgical skills became visible. Additionally, he argues that internal medicine is totally different from *geka*. However, he promotes the use of a combination of both.

According to Fujikawa acupuncture has always been important in Japan and is part of external medicine. Moreover, Kobayashi states that there are different perspectives on how Japanese

acupuncture developed through history. She suggests that acupuncture was regarded as an important medical practice from just before the Nara period on. This is unlike most of today's scholars who suggest that acupuncture was not important or became less important during the Edo period.

Kobayashi demonstrates that the blind acupuncturist Sugiyama Waichi invented the tube-needle insertion technique which is one of the characteristic developments in medical studies unique to Japan. Additionally, she argues that acupuncturists' social position began to deteriorate when the Meiji period started and that their position was the same as other physicians up to this period.

However, Lock states that from the middle of the 17th century blind people were allowed to practice acupuncture. She argues that because blind people had a low social status in that time it caused the fall of the prestige accorded to acupuncturists. Lock's argumentation suggests that acupuncturists' social position was already deteriorating during the Edo period.

In addition to Lock's argument as stated before, Nakamura argues that social position was to some extent related to the type of medicine practiced. She argues that *kanpō* practitioners were considered to be true doctors and had a high social position while physicians such as surgeons and acupuncturists were considered to be technicians instead of theorists or scholars and had a significant low social position compared to other types of physicians. Fujikawa's work does not suggest anything about the change of the social position of physicians in his work.

4.5 Today's literature's Meiji focus and Western centric approach

Nakamura argues that some works[17] on the medical history of Edo Japan have a typical Western centric approach. These works seem to be only paying attention to the experiences and successes of Western physicians in Japan and the Japanese physicians that worked with them. A present scholar named Goodman berates Japan for taking over Western technology without incorporating the

[17] *Edo jidai igakushi no kenkyū*; *Zusetsu Nihon no 'i' no rekishi*; *Western Medical Pioneers in Feudal Japan*; *When the Twain Meet*; *Japan: The Dutch Experience*; *Conceptual Changes in Japanese Medicine During the Tokugawa Period* (Nakamura, 2005:14).

Western ideology. Nakamura argues that even without these biases, scholars still tend to chart a history of conceptual progress from Chinese to Western medicine in Japan (Nakamura, 2005:14).

Furthermore, according to Nakamura (2005:27) it is often thought by Western scholars that knowledge, in particular Western knowledge which some of them see as an immutable entity, should be absorbed as a whole in order to be useful. In addition to this, Toby (1991:xiii) argues that most literature that has been written in the past century is based on a narrative of the past assuming Western supremacy.

Besides this, Nakamura (2005:27) argues that in the case of Japanese medical studies, although Japanese scholars did not absorb Western knowledge as a whole, it was still of significant impact. According to her, the latter was possible because of an advanced intellectual framework through which knowledge was spread during the Edo period. Parts of Western knowledge were creatively adapted to fit within this intellectual framework (Nakamura, 2005:27).

According to Nakamura, Western as well as Japanese scholars, in particular early Japanese scholars, tend to focus on biographical, bibliographical and technological histories of Western learning in Japan. By the time more general histories were written, Japanese scholars tried to explain the role of Marxist scholarship in defining how Western knowledge contributed to the process of modernization (Nakamura, 2005:15).

Nakamura has brought to our attention that some of today's literature on the history of medicine in Edo Japan shows signs of a typical Western centric approach. Additionally, it could be argued that the works of the authors that were mentioned in the previous paragraphs, even though written to be about the Edo period, reflect that the development of medical studies in the Meiji period is more important.

For example, despite Kitajima's findings about surgery as described in previous paragraphs, he thought it was surprising that papers on surgery were already submitted before by some Japanese surgeons in the early years of the Meiji period (Kitajima, 2010:57). It is almost as if Kitajima suggests that there were no significant changes in the Edo period when it comes to surgery.

However, according to Fujikawa and Uematsu's findings about surgery in Edo Japan described earlier, there was a great intellectual framework that concerned itself with the study of surgery.

Boling (2010:187) argues that since the growing movement of physicians for modernization in the Meiji period, a more advanced medical and scientific system was in demand. The medical and scientific system that Boling refers to is the Western system. By saying this, Boling suggests that the Western medical system was considered to be better than the Japanese medical system at that time. It is arguable whether the Western medical system was more advanced than the Japanese medical system. However, even if it was, that does not necessarily mean that it was better for the Japanese community. It can be deducted from previous paragraphs that the Japanese had been fine with using a reduced form of Western medicine practices up to the Meiji period.

According to Boling, three schools were unified after the implementation of new policies in the Meiji period in order to make Japan more open to foreign nations. When these schools for literature and Confucianism, European sciences and European medicine were unified, the Imperial University of Tokyo was established in 1897 (Boling, 2010:187). The unification of particularly these three schools seems to correspond with the idea of *kanransecchū* as described by Fujikawa and today's scholars earlier in this paper. Since the incorporation of *kanpō* and *ranpō* had already taken place in the Edo period, I do not see how this unification in particular could have contributed to making Japan more open to foreign nations.

According to Boling (2010:187), it was a Dutch Protestant missionary and teacher who recommended the Meiji government to adopt the German language and culture for future practices of medicine, because of the German's medical system's supremacy in Europe. In response, the Japanese employed a German surgeon[18] and a German internist.[19] These German physicians were responsible for the reformed medical education system and instituted the German approach to medicine (Boling, 2010:187).

[18] B.K.L. Müller (1824–1893)
[19] T. Hoffman (1837–?)

It is notable that Boling argues that it was in the Meiji period in which German medical studies was used as a substitution for *ranpō*. However, *ranpō* did already include German medical studies. In addition, Japan was, or might have been, actually introduced first hand to German medicine by Siebold in the Edo period. However, further research is required in order to determine to what extent German medical knowledge was used in the Edo period compared to the German medical knowledge used in the Meiji period.

According to Kitajima, in the Meiji period the Emperor issued an Oath stating that "knowledge shall be sought all over the world". Japanese people were sent off by the Emperor to discover Western systems and learning which would change Japan for the better (Kitajima et al., 2010:61). This Oath suggests that Japan did not search all over the world for opportunities to acquire knowledge. However, I would like to argue that Japan was looking for opportunities but instead of going and looking for knowledge themselves, the Japanese let the knowledge to be brought to them. Perhaps unintentionally, but the Japanese did obtain knowledge from the West and not only from Holland. The period of seclusion was a necessary evil in order to create a stable society that was free from Catholicism. Therefore, I would like to argue that it is possible that Japan did not intend to seclude themselves from knowledge from all over the world.

It is noticeable that the majority of today's scholars do not discuss Japanese medical history in the timeline of Japanese periods, like Fujikawa does in his work. Today's scholars usually start their discussion from the time when the West entered Japan or when interaction with the West had influenced Japan. Of today's scholars mentioned in this chapter, Kobayashi did categorize the development of medicine in Japan per period. However, she did not go into details about medical procedures, something Fujikawa did do in his work.

The examples stated before do reflect that some of today's literature on the history of medicine in Edo Japan is more focused on the development of medicine in the Meiji period compared to Fujikawa's work. As we can see this focus is often combined with a Western (medicine) centric approach.

Additionally, based on the findings from the previous paragraphs we can conclude that the writing-style and focus of today's scholars is different from Fujikawa's writing-style and focus as was described in chapter two. Today's scholars tend to focus more on giving a general historical overview about who influenced the study of medicine in Japan than Fujikawa did. In doing so, their main focus is on Western influence on medicine in Japan. Fujikawa's work *Nihon igakushi* could function both as a history book and a medical book in which he is suggesting which treatments should be used.

Conclusion

In this research was aimed to answer the following question:

To what extent is Fujikawa's approach on the history of Japanese medicine different compared to and still relevant in today's academic outlook on the history of Japanese medicine during the Edo period?

In order to answer this question, I have studied the early modern scholar Fujikawa's work *Nihon igakushi.* In this book he elaborately described his findings about medicine in Japan from the start until the Meiji period and for which he had received an award in the Meiji period.

When making a comparison between Fujikawa's view and that of today's scholars', I found that most of today's scholars tend to argue that *ranpō* was taking over *kanpō* since the introduction of Western medicine in the 16th century. However, present-day scholars such as Kobayashi and Nakamura demonstrate like Fujikawa that since the introduction of Western medical studies, *ranpō* and *kanpō* have coexisted and have even been used in combination with each other. For example, in the case of *kanransecchū*.

It has been argued by many of today's scholars that either the period of seclusion or the restrictions on autopsy by the Japanese government delayed the development of medicine studies, in particular surgical studies, in Japan until the Meiji period. In addition, it is suggested that the Japanese could not have developed their medical studies without influence from the West. However, Today's scholars Kitajima and Toby demonstrate, like Fujikawa, that the period of seclusion was not an obstacle for the Japanese to obtain (new) medical knowledge. Moreover, they suggest that, for example because the Japanese were the first to perform an operation under general anesthesia, they had not fallen behind the West and that the Japanese had shown their potential to develop on their own without outside influences.

Opinions are split among today's scholars on the significance of the use of acupuncture in the Edo period. Fujikawa and Kobayashi argue that the use of acupuncture has always been very important in Japanese medicine. Additionally, Fujikawa considered acupuncture to be an alternative

to other medical treatments. Other scholars, such as Lock and Nakamura, argue that its practice declined and the medical position of acupuncturists began to deteriorate in the Edo period due to the introduction of Western medicine and social changes within the Japanese society. In addition, in today's literature it is often argued whether or not the practice of acupuncture in the Edo period was considered to be of prestige, and therefore useful or not, compared to other fields of medical studies. However, the practice of acupuncture today in the West is seen more often as an alternative to Western medicine.

To answer the research question of this paper, we can conclude from the foregoing that Fujikawa's view on the history is different than most of today's scholars'. Recently, some scholars began to approach some aspects of the history of medicine in Edo Japan the same as Fujikawa does and thereby shifting their view away from a Western centric point of view. Therefore, I would like to argue that Fujikawa's view on the history of medicine in Edo Japan is still relevant to consider in today's scholarship.

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