The Routledge Handbook of Translation and Health

Sebnem Susam-Saraeva, Eva Spišiaková

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Publication details
https://www.routledgehandbooks.com/doi/10.4324/9781003167983-4
Ji-Hae Kang
Published online on: 10 May 2021

How to cite :- Ji-Hae Kang. 10 May 2021, Translations of Western medical texts in East Asia in the second half of the 19th and early 20th centuries from: The Routledge Handbook of Translation and Health Routledge
Accessed on: 05 Dec 2023
https://www.routledgehandbooks.com/doi/10.4324/9781003167983-4

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Translators of Western medical texts in East Asia in the second half of the 19th and early 20th centuries

Ji-Hae Kang

1 Introduction

This chapter provides an overview of key issues concerning translations of Western medical texts in East Asia in the second half of the 19th and early 20th centuries. Increased scholarly interest in the history of medicine in Asia and other regions in the last few decades has enhanced our understanding of the ways in which Western medicine has been perceived and disseminated in different geographical contexts (Lewis and Macpherson 2008; Worboys 1997; Kiple 1993; Pols, Thompson and Warner 2017; Bowers 1980). Despite the critical role translation plays in the transmission of thoughts and ideas across national and cultural borders, there has been a notable absence of discussions concerning the intricate connections between translation and the production and circulation of Western medical knowledge in East Asia. The few isolated studies that have touched on this topic (e.g. Hong and Wang 2014; van Hoof 1998) have failed to lead to a sustained engagement. Against this background, this chapter outlines some of the main points and issues central to a discussion on how Western medicine was introduced, adopted, and used by countries in East Asia via translation in the second half of the 19th and early 20th centuries.

In the present chapter, the term ‘Western medicine’ is used instead of ‘biomedicine’, ‘modern medicine’, or ‘cosmopolitan medicine’, all of which commonly refer to the structured health beliefs and institutionalised therapeutic practices with roots in the ‘Western’ tradition (cf. Kleinman 1993: 16; Chakrabarti 2013: xiv). It is employed here as a label that encompasses the different terms used to denote the dominant system of medical knowledge in East Asia since the latter half of the 19th century, and highlights the geographical ‘starting point’ of the medical knowledge that has spread to most parts of the world. It was first in Europe, and then in North America, that this system of medical knowledge developed before it was disseminated to other parts of the world, thereby becoming the overriding system of medical knowledge globally. It should be noted, however, that ‘Western medicine’ is far from a homogenous category and has changed significantly over time (Andrews 2014). The discussion in this chapter will hopefully make it
clear that ‘Western medicine’ is neither a single entity nor necessarily a system of knowledge that can be unproblematically connected to ‘the West’ in the transnational knowledge transmission trajectory.

In this contribution, the geographical region at the centre of inquiry is East Asia, with the focus placed on China, Japan and Korea, where the translation of Western medical knowledge was intricately connected to nationalism and beliefs about and desires towards progress and power. Despite centuries of intraregional exchange within the historical context of Sinocentric world order, where ideas and knowledge were generally transmitted from China to Japan, often via Korea, Japan emerged in the early 20th century as the only non-Western imperialist power with colonies in Asia. Although the three countries all strove to respond to Western intrusions, China found itself in a particularly difficult situation clashing with Western powers, including the Opium Wars (1839–1842, 1856–1860) and other armed conflicts, while it tried to forge its own political direction amid complicated internal power struggles. Meanwhile, Korea was colonised by Japan in 1910 and experienced 35 years of Japanese rule until its independence in 1945. Although by the end of the 20th century the political, economic and cultural circumstances of the three countries changed dramatically, with China emerging as a political superpower, Japan as one of the richest nations in the world, and South Korea as the twelfth global economic power, in the early 20th century the three countries were facing different and extensive internal and external challenges.

The emphasis of this chapter is placed on translations and translators of Western medical knowledge in China, Japan and Korea during this period and their connection to the changing political, social and cultural dynamics in the region. The following sections will shed light upon the translation of Western medicine in terms of the historical, sociopolitical and cultural factors that motivated the translation projects; actors involved in the translation of Western medical knowledge; texts and languages selected for translation; and, the impact of translation on the relevant cultures and societies.2

2 Setting the scene

During the second half of the 19th century, intellectuals in East Asia engaged in cultural debates about differences between East and West. Their discourses were dominated by a binary view of the division, shown in such phrases as Tōyō dōtoku seiyō geijutsu (Eastern ethics, Western technology) created by the Japanese scholar Satzuma Shozan (1811–1864), Zhongxue weiti, xixue weiyong (Chinese learning as essence, Western learning for practical use) devised by the Qing official Zhang Zhidong (1837–1909), and Tongdosedong (Eastern ways, Western machines) coined by 19th-century Korean reformers espousing kaehwa, the ‘enlightenment’ mind in Korean (Fogel 1996; Kang 2017). East-West dichotomy was used in different ways by politicians and elite groups to instigate nationalist sentiments, but with time, this binary view became much more complicated. Respective countries, and different factions within these countries, adopted positions that best served their interests, as shown in Japan’s eventual embracing of the idea of inherent racial differences among Asians, mainly to rationalise its imperialist expansion in Asia. Although there were voices resisting uncritical admiration of a supposedly coherent ‘West’ (e.g. Chinese writer and translator Lu Xun, 1881–1936), East Asians generally accepted Western material supremacy and the role of Western science in enabling material development from the second half of the 19th century.
The level of interest in Western medicine varied among the three countries during this period, depending on the discourses in circulation concerning Western medicine’s role in enabling national development (see the section on ‘The translators’ below for more details), the reputation of traditional medicine in each country, the levels of hygiene, and the political, religious, and cultural agendas of the actors. Before the transmission of Western medicine, different theories and practices of healing coexisted in the region. Chinese medicine had an extensive influence, despite the existence of a plurality of healing conventions, not all of which could be identified as traditional Chinese medicine. In the case of Korea and Japan, for example, folk remedies, linked to religious rituals, coexisted with Chinese medicine (Motoo, Seki and Tsutani 2011; Kozai 2009).

Initial exposure to Western medicine differed among China, Japan, and Korea. In the case of China, the introduction of Western medicine is mainly related to the activities of the Jesuits who brought European medical knowledge to China in the 17th and 18th centuries (Hanson 2007). However, the number of texts on Western medicine that had been translated by Jesuits at the time was small, especially when compared to their translation of mathematical and Christian texts. The Chinese translation of the French surgeon Ambroise Paré’s *Anatomie universelle du corps humain* (Universal Anatomy of the Human Body) by Giacomo Rho, Niccolo Longobardo, and Johann Terrenz Schreck around 1636 is an example of a translated text. Other examples are translations carried out by the French Jesuits Joachim Bouvet and Dominique Parrenin into Manchu, one of the official languages of the Qing dynasty (1636–1911) of China. They include translations of *L’Anatomie de l’homme: suivant la circulation du sang. Et les dernières découvertes, démontrée au Jardin-Royal* (The Anatomy of a Man: Following the Circulation of the Blood and the Latest Discoveries, Demonstrated at the Jardin-Royal; 1690), written by Pierre Dionis, and *Anatome Quartum Renovata* (Anatomy, 4th Edition; 1677), written by Thomas Bartholin (Golvers 2011). These translated texts had limited impact on the spread of Western medicine in China, as their function was largely confined to offering Western anatomical views of the body and Western-style drawing techniques to the Chinese emperors and related officials at the court.

With regard to Korea’s first encounter with Western medical knowledge, the texts on Western medicine translated into Chinese by the Jesuits working in China during the 17th and 18th centuries played an important role in shaping Koreans’ initial exposure. As Literary Sinitic was commonly used for reading and writing among Korean intellectuals, imported Chinese translations were read without any serious issues in language access (see the section on ‘The translations’ below for more details on the historical use of Chinese characters in East Asia.). One such example is *Zhuzhi Qunzheng* (Evidence of Divine Providence, 1636), a Chinese translation of *De providentia numinis et animi immortalitate libri duo adversus Atheos et Politicos* (Divine Providence and the Immortality of the Soul against Atheists and Politicians, 1613), originally written by the Jesuit scholar Leonardus Lessius (1554–1623) and translated by the German Jesuit missionary Johann Adam Schall von Bell (1591–1666) (Yeo 2012). The book, which argues the existence of God through natural phenomena, including the human anatomy, influenced such distinguished Korean scholars as Yi Ik (1681–1763) and Yi Kyu-Kyŏng (1788–1856). Yi Ik, for instance, provides a discussion of *Zhuzhi Qunzheng* in an article entitled *Sŏgugŭi* (Medicine in Western countries) released around 1720 (Shin 2009). As the ideas contained in the *Zhuzhi Qunzheng* were significantly different from the existing knowledge of physiology in circulation in Korea, they posed a challenge to the Neo-Confucian view of the body and a traditional understanding of medicine (Yeo 2008). Yet, this initial interest in the concepts and ideas
on Western medicine, as well as those on other areas of Western science and Christianity, appeared during the early- and mid-eighteenth century when the country was relatively open to Western knowledge, compared to the period that followed (1790–1876), when Catholicism was officially labelled as an evil religion and banned. During the period of relative openness, Western medicine is mentioned by a small number of Korean thinkers (Shin 2009). Using Literary Sinitic in their writing, scholars such as Yi Ik, Shin Hoo-Dam (1701–1762), Pak Ji-Won (1737–1805), Pak Jae-Ga (1737–1805), An Jeong-Bok (1712–1791), and Yi Ui-Hyeon (1669–1745) discuss their views on the field, albeit based on a partial understanding. A more extensive knowledge of Western medicine appears decades later in the writings of Choe Han-Ki (1803–1877), but the period of initial encounter with Western medicine, which was based on direct readings of Chinese translations as part of sohak (Western Learning), did not lead to substantial changes in the approaches to or understanding of healing behaviour in Korea at the time.

In the case of Japan, Western medicine was initially introduced under different circumstances compared to China and Korea. The Japanese were exposed to Western medicine within the context of rangaku (‘Dutch learning’, by extension ‘Western learning’) during the Edo period (1603–1868). During the 250 years of isolationist foreign policy prior to the official opening of the ports, the Dutch were the only Europeans allowed to enter Japan for commerce, and the Japanese were exposed to scientific developments through texts provided by the Dutch. Western medicine, particularly anatomy, was the focus of interest at the time, and although the translations were limited in number, they functioned as a basis for translation activities that followed in the Meiji era (1868–1912). The first translators of Western works during the Edo period were Nagasaki-based interpreters, who in their official capacity as government officials were responsible for enabling communication between the Japanese and the Dutch, but in their personal capacity, carried out translations from Dutch and related activities that led to the spread of rangaku in Japan.

The most widely known translator of Western medicine during this period is Sugita Genpaku, a practitioner of Chinese medicine whose translation of Ontleedkundige Tafelen (Dissecting Tables, 1734), a Dutch translation of Anatomische Tabellen (Anatomical Tables, 1722), a medical text written by the German physician and anatomist Johann Adam Kulmus (1689–1745), became the most representative translation of this period. Convinced that human anatomy was more precisely described in this book than in traditional texts of Chinese medicine, Sugita started the study of Rampō (Dutch medicine) and translated Ontleedkundige Tafelen into Japanese, publishing in 1774 what is known today as Kaitai shinsho (A New Treatise on Anatomy). The translation work was collaborative, and Sugita and his collaborators carried out the translation with a knowledge of only about 600 Dutch words amongst them (Cunningham 2016).

Translation projects within the rangaku scholarship laid the groundwork for Japan’s modernisation, enabling the creation of preliminary works that functioned as a framework for Japan’s acceptance of Western ideas and knowledge in the following years. Despite the suspicion with which Europe was viewed, Western medical knowledge at the time contributed to casting doubts on the accuracy of Chinese medicine. This was the case even though Chinese medicine still held a crucial position in Japan. Other examples of Japanese translations of Western medical texts within the context of rangaku include: a 1706 translation by Narabayashi Chinzan (1643–1711) of a 1649 Dutch translation of the French surgeon Ambroise Paré’s work La methode curative des playes, et fractures de la testes humaine (Treatment Method for Wounds and Fractures of the Human Head,
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1561); Udagawa Genzui’s (1755–1797) translation of Johannes de Gorter’s *Gezuiverde Geneeskonst* (1744), which appeared for the first time under the title *Naika sen-yo* (Digest of Internal Medicine); and the 1772 Japanese translation, entitled *Yo-I-shin-shô*, from Lorenz Heister’s book on surgery in German, carried out by Ôtsuki Gentaku, who in 1811 would take up the position of the director of the Nagasaki Office for the Translation of Foreign Books. During the first half of the 19th century, an increasing number of Japanese physicians studied Dutch medicine under Dutch and German physicians who taught in Nagasaki. As shown in Figure 2.1, translations on Western medicine far outnumbered those in other areas of Western knowledge.

Although the three countries’ first contacts with Western medicine have historical significance, these contacts were intermittent and small in scale, compared to the period following the official opening of their ports to Western/foreign powers. Translation during the initial contact phase also occurred irregularly. It was only after the official, and forceful, opening of the ports during the mid- and late-19th century that a consistent, systematic and large-scale transmission of Western medical knowledge took place in East Asia. For China, the official opening of the ports came as a result of the Treaty of Nanking (1842) at the end of the First Opium War against the British, although the port of Macau had been open to Portuguese traders since 1557. Japan’s ports were opened by the Treaty of Kanagawa (1853) after American Commodore Matthew Perry led his squadron of US Navy ships into the harbour at Edo Bay (today’s Tokyo Bay) and demanded regular trade with Japan. Japan used a similar method to open Korean ports, which involved ‘gunboat diplomacy’ and led to the Treaty of Ganghwa (1876). Therefore, when Western medicine was practised in the region following the opening of the ports, there was a certain level of

![Figure 2.1](https://example.com/f21.png) Japanese translation of Western works by subjects over time (Clements 2015: 152)
ambivalence among many East Asian intellectuals, as they regarded it as a crucial component of Western/foreign power and as neither ‘politically neutral science’ nor benign welfare (Worboys 1997: 260). However, as it will be shown in the following sections, despite some common aspects in experience among the three counties in relation to external threats and internal conflicts, Western medical knowledge was approached, translated and embraced in different ways during this period.

3 The translators

In the second half of the 19th and early 20th centuries, texts on Western medicine were translated into East Asian languages by both Asians and Westerners. As mentioned in the preceding discussion, the translation of Western medicine before the 19th century was mainly carried out by Japanese translators in Japan and Jesuit translators in China, albeit haphazardly and on a small scale. Chinese translations were read directly in Korea and functioned as the main source of knowledge on Western medicine. Following the opening of the ports, many medical texts were translated in institutional contexts, including missionary hospitals and government bodies. Out of these different sites of institutional translation (Kang 2019), missionary hospitals and medical schools operated by missionaries played a vital role in the transmission of Western medical knowledge, especially in China and Korea, and individuals (doctors, teachers and students) associated with these institutions became crucial actors in translation activities.

The extent to which medical missionaries contributed to the introduction, training, and institutionalisation of Western medicine differed among the three countries. In Japan, for example, the suppression of Christianity beginning in the late 1500s, followed by the expulsion of first the Portuguese, then the Spanish mission from Japan and the exile of Japanese Christians in 1639, led to a situation in which Japan virtually severed its connections with the West and its missionaries. This situation had a negative impact on missionaries’ translation activities in the years that followed. Furthermore, there was a growing number of Japanese nationals who had received training in Western medicine and were emerging as medical practitioners and policy makers. Japan had found in Germany a model in which medicine and medical specialists would play a central role in making a nation strong and powerful (Lei 2014). According to one figure, one-fifth of all the Japanese doctors in 1865 were physicians trained in Western medicine, compared with less than 1% of all doctors in China as late as 1921 (Zhao 1991). Thus, Japan was not dependent on missionaries to follow Western medicine, as it had its own doctors being trained within its system or returning from medical training institutions overseas (Nakamura 2013).

In China, Protestant medical missionaries played a key role in carrying out translation activities in the second half of the nineteenth century. Although advocates of China’s Self-Strengthening Movement (Ziqiang yundong, 1861–1995) focused on adopting Western science, industry, weaponry, and communication, Western medicine was not given as much attention as other branches of science (Lei 2014). Under such conditions, missionaries took up the task of transmitting Western medical knowledge. Out of the eight training institutions teaching Western medicine at the time, seven were run by European or American missionary societies, and only one, the Tianjin Medical School, founded in 1893, was state-run (its predecessor had also been a hospital run by the London Missionary Society). By 1887, a total of 150 medical missionaries had come to China (Choa 1990).
Amongst them, Benjamin Hobson (1816–1873) was a medical missionary who made a major contribution to the practice and teaching of Western medicine in China. As a member of the London Missionary Society during the late Qing dynasty, Hobson published *Quanti xinlun* (A New Treatise on Anatomy) in Guangzhou in 1851, the first text on Western anatomy in Chinese. This book, which he wrote collaboratively with Chen Xiutang, is not a translation of a single source text; instead, it draws on multiple sources, as was often the case for texts on Western medicine originally written in Chinese and Japanese at the time. Hobson also translated *Xiyi lielun* (First Lines of the Practice of Surgery in the West, 1857), *Neike xinshuo* (Practice of Medicine and Materia Medica, 1858), and *Fuying xinshuo* (Treatise on Midwifery and Diseases of Children, 1858) (Hong and Wang 2014). In the preface of *Neike xinshuo*, Hobson explains that ‘[m]ethods for disease diagnosis and drug treatments discussed in this book were taken from European medical books. Key points of them were picked up and translated into Chinese’ (cited in Hong and Wang 2014: 278). Other medical missionaries such as John Glasgow Kerr also published medical texts in Chinese. In addition to providing medical training to students at a hospital in Canton during the 1860s and founding the Chinese Medical Missionary Association in 1886, Kerr published 34 volumes on Western medicine over a period of 30 years (Reardon-Anderson 1991).

Although missionaries’ translation projects were carried out for medical training purposes, their activities did not necessarily lead to an increase in the number of Chinese practitioners of Western medicine. Medical education was viewed by Chinese as aiming at creating a pool of assistants to the missionary doctors, and it was only after the 1890s, when the Chinese government began to send young men to Japan to have them acquire ‘advanced’ Western medical knowledge, that the number of Chinese nationals trained in Western medicine increased (Gao 2014). Medical missionaries translated about 103 books and pamphlets on Western medicine in the second half of the 19th century, but their activities and contributions to the spread of Western medicine have received mixed evaluations (Cheng 2014).

Meanwhile, medical missionaries to Korea and their translation activities have been viewed somewhat differently by the Koreans compared to the Japanese and Chinese. From the late 19th to early 20th centuries, the two groups that led Western medical practice in Korea were medical practitioners from Japan and the Protestant medical missionaries. Japanese military doctors trained in Western medicine began practising in modern hospitals they had built in port cities such as Pusan, Incheon and Wonsan, and eventually in Seoul. The hospitals provided medical treatment for mostly Japanese nationals, especially Japanese military and government officials who lived in these cities, as well as a small number of Koreans (Kim 2013). In the latter half of the nineteenth century, missionary doctors, many of whom came from the United States and Canada, arrived in Korea. Direct proselytising was illegal at the time, so providing medical care to the traditional Korean elite groups and the general population served as an indirect means of evangelisation. As the activities of medical missionaries mostly took place at a time when Japan was the key aggressor on the Korean peninsula, the relationship between ‘colonial medicine’ and ‘missionary medicine’ was complex; these two entities competed against each other, were even confrontational at certain times, but they also enjoyed a harmonious relationship at other times. It is noteworthy that many Korean Christians who had been trained by missionaries came to play a central role in the nationalist movement against Japan (Lee 2000). Some missionaries also became advocates of Korean rights, speaking out against Japanese brutality, such as the Canadian medical missionary Frank W. Schofield who
played a crucial role in the 1919 March First Movement, an anti-Japanese independence movement. Thus, Christianity became compatible with a nationalist identity in the case of Korea, whereas in China and Japan, ‘nationalist rituals generated patriotic identities by attacking Christianity’ (Kane and Park 2009: 365).

One example of a medical missionary translator in Korea is Oliver R. Avison (1860–1959), the fourth director of Chejungwon (Hospital of Universal Helpfulness), a Western hospital founded in 1885. After his arrival in Korea in 1893, Avison embarked on translation projects with his Korean ‘helpers’, and more than 30 translations of Western medical texts were produced in Chejungwon (later renamed Sebūransū Ùihakkyyo, meaning ‘Severance Medical School’) from 1899 to 1910. Avison participated in many of these projects as a translator or revisor, including Korean translations of *Yangmurhak sanggwŏn mugijil* (Materia Medica and Therapeutics Vol. 1 Inorganic Substances, 1905) and *Haebuhak* (Anatomy of the Human Body, 1906) (Kang 2017). His three Korean collaborators, Kim Pil-Soon (1878–1919), Hong Suk-Hoo (1883–1940), and Hong Jong-Eun (?–1910), all of whom were his students, worked with him in the initial stage but eventually translated independently under their own names. These Korean translators/medical students, along with four other Korean medical students, graduated from Sebūransū Ùihakkyyo (formerly Chejungwon) in 1908 and became the first recipients of official licences in Korean history (Yeo 2009; Park and Park 2011). Chejungwon translators mostly used Korean script in their texts, using Chinese characters in combination only when necessary, although many translations and non-translations produced in Korea at the time used only Chinese characters or mixed script (a system of using both Chinese characters and Korean alphabet; see the following section on ‘The translators’ for more details on the connection between writing systems and translation.). This is a salient aspect of these translations, as the extensive use of the Korean script made the translations more accessible to Koreans from all walks of life.

Among the Chejungwon translators, Kim Pil-Soon’s translations include *Haebuhak* (Anatomy of the Human Body, revised by Avison, 1906), *Yangmurhak sanggwŏn mugijil* (Materia Medica and Therapeutics Vol. 1 Inorganic Substances, co-translated with Avison, 1905), *Sinp’yŏn hwahakkyogwasŏ yugijil* (New Organic Chemistry Textbook, revised by Avison, 1906), and *Naegwa* (Practice of Medicine, 1906). Hong Suk-Hoo’s works include *Sinp’yŏn saengnigyogwasŏ chŏn* (New Physiology Textbook, Vol. 1, revised by Avison, 1906), *Chindanhak kwŏn 1* (Physical Examination Vol. 1, revised by Avison, 1906) and *Chindanhak kwŏn 2* (Physical Examination Vol. 2, revised by Avison, 1907). Hong Jong-Eun’s translations include *P’ibubyŏngjindan* (Skin Examination, 1907) and *Mussisan’gwahak* (Obstetrics by Mu, 1908). Kim Pil-Soon was hired to teach medicine at his alma mater upon graduation in 1908; however, he left academia when Korea was annexed by Japan two years afterwards. Working as a medical practitioner, Kim became an important figure in the nationalist movement and was eventually poisoned to death by an assassin believed to have been hired by the Japanese government. In fact, out of the seven graduates who became the first licensed doctors in Korea, five became active members of the anti-Japanese nationalist movement.

With the passage of time, an increasing number of Asians trained in Western medicine became translators of medical texts. Many of them had already received training in or were in the process of learning Western medicine at the time of translation. Those translators who initially collaborated with Western translators as associates later became renowned translators in their own right, as well as medical specialists, educators, government officials or activists, as shown in the examples of Kim Pil-Soon, Hong Jong-Eun and Hong Suk-Hoo. Another well-known example is Sun Yat-sen (1866–1925), the founding
father of the Chinese Republic, who was a pupil of and assistant in translation for John Glasgow Kerr for a year in 1886, before he went on to study Western medicine at the newly opened Hong Kong College of Medicine for Chinese, the first teaching institution in Hong Kong to fully adopt Western medical practices (Fu 2018).

As the initial ambivalence towards Western medicine gradually waned in the late nineteenth and early twentieth centuries, East Asian countries began to send their brightest minds to the United States, Britain, Germany, and, in the case of China and Korea, to Japan, in order to acquire up-to-date medical knowledge and experience an advanced training system. The returnees were often employed as faculty members in the medical colleges or as government officials, and many of them participated in translating and authoring books on Western medicine. Those teaching and learning Western medicine in medical schools at the time were all involved in the process of translation, as the very act of making Western medical concepts comprehensible in respective languages in a learning environment implicated a process of translation (including self-translation). For Ikeda Kensai (1841–1918), one of the first nine Japanese to be awarded the Japanese government’s scholarship to study abroad in 1870 and eventually the first dean of the Medical Faculty of Tokyo Imperial University, the medical school in Tokyo during the 1860s ‘functioned primarily as a school for translation’ (Kim 2014: 34). Students’ learning involved reading out passages of medical texts and drawing out any meaning they could grasp. According to Ikeda, students ‘prepared two or three lines of translations using grammar books’ and if the text presented any challenges in comprehension, ‘the class quickly turned into a form of discussion’ (Kim 2014: 34), as they were asked by the instructor to identify gender, case, prepositions, conjunctions, and semantic meaning.

In China, numerous medical periodicals began to be published from the 1900s, which contained translations from diverse sources. The publications were dedicated to introducing Western medical concepts and treatments, pharmacological theories and policies, medical history, and general health information (Cheng 2014). In 1906, a medical student named Qian Ye organised the China Medicine Society and served as the editor for Yiyao xuebao (医药学报, Journal of Medicine). In 1907, Jin Ze, another medical student, established the Chinese Citizens’ Health Society and published Weisheng shijie (卫生世界, Health World). In 1908, Wang Zixin, who had studied in Japan, established the Medical World Society and edited, compiled and distributed the journal Yixue shijie (医学世界, Medical World), containing articles on medical case reports, questions and answers on medical issues and short stories. Several translators who had studied in Japan worked for this journal, including the prominent translator Ding Fubao (1868–1941), who translated more than 68 Japanese medical texts (Gao 2014). His translations, which include articles in Zhongxi yixue bao (中西医学报, The Journal of Sino-Western Medicine) were central in introducing Western medical knowledge to the Chinese people.

4 The translations

The subjects covered in translated texts ranged from basic sciences to medical specialities, including anatomy, pathology, pharmacology, physiology, chemistry, biology, physics, immunology, internal medicine, surgery, obstetrics, ophthalmology, dermatology and psychology. The languages of the source texts were diverse, including German, French, English, Japanese, and Chinese. One interesting aspect of the translation practice in East Asia at the time was the prevalence of indirect translation, i.e. translation based on a
source which is itself a translation. From a contemporary perspective, indirect translation is a choice made reluctantly and has a lower status than direct translation due to its second-hand nature, occurring mostly when a translation from less widely spoken languages is required. In East Asia, in the second half of the nineteenth and early twentieth centuries, however, indirect translation from Japanese or Chinese translations into another East Asian language filled an important gap in the production and dissemination of Western medical knowledge. At a time when knowledge of European languages and subject expertise were scarce, indirect translation played a significant role in facilitating the spread of Western medical knowledge.

This facilitation in itself was enabled by the historical sharing of Chinese characters in East Asia. The clear distinction in speech sounds and native words among the three languages makes Chinese, Japanese and Korean mutually unintelligible, but respective users of the three languages had been able to communicate to a certain degree through the use of Chinese characters. With regard to Japan, Chinese characters, called *kanji* in Japanese, have been used to write Sino-Japanese words, which constitute a high proportion of Japanese vocabulary and are a key component of the Japanese writing system to this day. In the case of Korea, Chinese characters, presently called *hanja* in Korean, were widely used to write the Korean language before the 1446 invention of the Korean script *Hangul*, a phonetic alphabet, by King Sejong. Although Hangul is now universally used in Korea, Chinese characters were used by the ruling class up until the late 19th and early 20th centuries, i.e. even after Hangul’s invention, due to their perceived prestigious status. This resulted in a high proportion of Sino-Korean words in the Korean vocabulary. When a European or American medical text translated into Chinese (using Chinese characters) or Japanese (using *kanji*) was used as source text for a subsequent translation into another East Asian language, the translation process was often facilitated by the ability of translators to retain words written in Chinese characters, and even to approximate the sound in respective languages (Wakabayashi 2016). Chinese characters are logographs that represent words or morphemes, as well as offering phonetic hints, and although they are phonetically actualised in different ways depending on the linguistic context, the historical sharing of Chinese characters often served to expedite the translation process in the three countries.

Numerous examples of indirect translations of Western medical texts and terms are found in East Asia. For example, Benjamin Hobson’s Chinese translations, which were circulated during the 1850s and 1860s in the treaty ports of China and Japan, were chosen for translation by the Meiji government of Japan (Elman 2006; Tsien 1954). Japanese translation of Hobson’s books on Western medicine include *Treatise on Physiology* (1851), *Natural Philosophy* (1855), *Fine Lines of the Practice of Surgery in the West* (1857), *Treatise on Midwifery and Diseases of Children* (1858) and *Practice of Medicine and Materia Medica* (1858). Meanwhile, many Korean translations of Western medical texts were based on Japanese translations. For example, translations by Kim Pil-Soon, Hong Suk-Hoo and Hong Jong-Eun were mostly based on Japanese translations of multiple source texts.

From the 1890s, the Chinese government actively adopted the Japanese model of Western medicine, translating Japanese medical texts into Chinese (Andrews 2014). This occurred in the wake of the defeat of the Qing dynasty in the Sino-Japanese War of 1894–1895, when both the Chinese court and the general public began to focus their attention on the ways in which Japan had modernised itself by adopting and adapting Western ideas, policies, and institutions. Based on similarities in political, social, and cultural conditions,
China decided that Japan would be an easy example to emulate. In 1896, the Qing government began sending students to Japan, and in 1902, when Yuan Shikai founded the Beiyang Military Medical College in Tianjin, a Japanese medical officer, Higara Seijirō, was hired to serve as its head instructor. According to Gao (2014), the hiring of Higara is significant in that it marks the beginning of the end of the era of European and American missionaries and the emergence of Japanese system-trained doctors as arbiters of Western medicine in China. One such doctor who became a key figure in the adoption of Western medicine was Ding Fubao, one of the most prolific translators of Western medicine in China. Mostly based on Japanese texts, his output was so prodigious that ‘with Ding’s translations and publications, Japan became the main source for modern medical terminology in China’ (Andrews 2015: 10).

During the Meiji era, Japan transformed into a modern, industrialised nation with unmatched military power in the region. Under the slogan ‘rich country, strong army’ (fukoku kyohei), Japan invaded neighbouring countries and acquired colonies in Taiwan, Korea and southern Manchuria by the end of the Meiji era. During the process, Japan not only adopted and institutionalised Western medicine, but also continued to dominate in other Western scientific disciplines within the region. Medicine accounted for 48 per cent of all the doctorates in science and technology between 1888 and 1920 in Japan and over a quarter of professorial chairs at imperial universities in 1905 (Bartholomew 1989).

The growing public recognition that translation and Western medicine were essential to the Japanese national interest played a crucial role in initiating translation projects and motivating translators. The translation projects were initiated by individuals and the government, and German and English medical literature continued to be important sources for translation. The University of Tokyo, the first modern institution of higher education in Japan established in 1877, and its Faculty of Medicine were central in Western medical research, practice, and education, as well as in serving national needs, shaping policy, and training government officials. The university was staffed by the young men who had returned from studying medicine in Europe, particularly in Germany. Between 1868 and 1914, as many as 1,200 Japanese medical students travelled to German cities such as Berlin, Munich, Heidelberg and Freiburg to obtain the most up-to-date medical knowledge from leading German scholars. Meanwhile, dozens of German physicians were invited to Japanese universities as instructors, to transform Japan’s medical institutions and education (Kim 2014).

Translators in East Asia used diverse methods to translate texts on Western medicine and often did not cite the source of their translations. In many cases, the title or the name of the author of the source text were not displayed on translation covers, although this information was sometimes provided in prefaces. In addition to the lack of bibliographic information concerning the source text, translators substantially intervened in the translation process. In the case of Japan, intervention by Meiji-era translators is mostly manifested in Japanese translators’ reliance on the method of using several related works in the process of translation and drawing on their own experiential learning to further improve their translations (Meade 2015). In China and Korea, translated texts also reveal considerable additions of information from other sources and extensive omissions of content compared to the source texts. One example of such deletion is found in Japanese translations of Benjamin Hobson’s works written in Chinese. In Japanese translations of Quanti xinlun, for instance, passages considered socially and culturally inappropriate were deleted. Hobson discusses gross anatomy from the perspective of fundamental equality among people and from the view that all human bodies share basic characteristics. As a
medical missionary, Hobson had incorporated in the text Christian beliefs about God’s creation of the human body, in order to convey the ‘theoretical foundations of the body itself’ (Bosmia et al. 2014: 159). Such passages were removed from Japanese translations of Quanti xinlun (Heinrich 2008). As translation was often accompanied by a process of bringing together several sources into a single translation, the boundary between a non-translation and translation was blurred in many instances.

With regard to methods used in translating medical texts and terms, a reliance, as mentioned above, on indirect translation from Japanese or Chinese enabled translators in East Asia to translate using the same Chinese characters that were read or pronounced differently depending on the country. However, when terms that had not been previously translated required translation, which was often the case, a range of methods were used by the translators in the three countries. In the case of China, for example, common methods used in the Translation Bureau of Jiangnan Arsenal were as follows (Alleton and Alleton 1966; Wright 1997):

1) not translating the term at all (i.e. leaving the source language expressions in their original forms)
2) transliterating the source word (i.e. transcribing the sound of the source language term in Chinese characters chosen for their phonetic values)
3) using existing Chinese terms
4) creating a new term by juxtaposing two or more existing characters
5) reviving an archaic character
6) creating a new Chinese character
7) using Japanese loanwords

These methods were used in the translation of texts on science and technology in general and are not necessarily restricted to medicine; nonetheless, they offer an overall understanding of how translators in China approached translation problems at the time. The most widely used method was creating new terms by juxtaposing two or more existing characters. This was a method that Benjamin Hobson also preferred, as exemplified by his Chinese translation of ‘oxygen’ into yangqi 養氣, derived from yang 養(nourish) and qi 氣(vapor, gas), describing oxygen as a gas that ‘nourishes’ or supports combustion. The use of Japanese loanwords as a translation method became prominent in China and Korea during the late 19th and early 20th centuries. In the case of China, this method was used after the 1890s when a large number of Chinese students who had gone to study medicine and other scientific fields in Japanese institutions returned to China.

5 Conclusion and future directions
This chapter has outlined the ways in which Western medical knowledge was translated during the second half of the nineteenth and early twentieth centuries in East Asia. This is a period in which Western medical knowledge was systematically introduced to the region, and China, Japan and Korea all experienced profound challenges related to imperialist encroachment, disintegrating traditional values, pressures for national development, and collapsing social and political order. The chapter has provided a comparative perspective on the transmission of Western medical knowledge in the region by focusing on the interconnections, as well as the different ways in which translations were carried out. It has
described the existing discussions on Western medicine’s connection to colonial/imperialist endeavours and national developments, but has also attempted to go beyond these discussions by using the lens of translation. Focusing on translation and translators, this chapter offered some insights into the specificities of the actors, processes and effects of the transnational production and circulation of Western medical knowledge in East Asia.

In the second half of the 19th and early 20th centuries, Western medicine was understood in China, Japan and Korea as a compelling tool for enabling the people to obtain health and prosperity. However, the pace of adopting this view, as well as undertaking translation activities under the goal of transmitting Western medical knowledge, differed among the three countries. Japan was the first to accommodate Western medicine in relation to national development, and the discourses circulated by its government that Western medicine enables the building of a prosperous and powerful nation led to the initiation of large governmental translation projects, creation of a pool of Japanese translators and establishment of institutions which offer Western medical training.

The situation was more complex in China, with competing views and discourses concerning Western knowledge and institutions. Medical missionaries initially played an important role as translators of Western medical knowledge. Following the defeat of the 1894–1895 Sino-Japanese War, however, Chinese nationals who had been sent to Japan to learn the Japanese system of Western medicine became crucial actors in the transmission of Western medical knowledge. Many Chinese versions of Japanese translations were produced, consequently making Japan the key source for Western medical terminology in China.

In the case of Korea, the transfer of Western medical knowledge during the late 19th and early 20th centuries was carried out by actors respectively related to Japanese colonial medicine and Protestant missionary medicine. Medical missionaries and Korean nationals affiliated with medical schools were the main actors in translation activities. Similar to the Chinese case, many Korean translation projects involved rendering Japanese translations into Korean, as Japan was deemed to possess more advanced medical institutions and training systems. At the same time, the identities of the translators and values related to translation were intertwined with articulations of a Korean national identity, revealing a tension between perceptions of Japan as a model of advancement and discourses of Korean national sovereignty.

The discussion in this chapter has shown that contrary to the lay view of translation as a one directional process from a source to target language, in which meanings contained in a source text are preserved intact in the target text, translation is a process of active renegotiation of meanings and values. In the great majority of cases, political and cultural values associated with health-seeking practices in the source text were recast and reconstituted in different ways in the process of translation. Furthermore, translation activities accompanied changes, and even conflicts, in the social identities and positions of the actors producing, mediating and circulating medical knowledge.

Although the number of historical studies of Western medicine in East Asia has been increasing in recent years, there is still much that needs to be unveiled regarding the identity of translators, the texts selected for translation, the discourses associated with translation of Western medicine, the translation processes and procedures, and the effects and consequences of translation activities. One topic that particularly requires further research is the identity of translators who participated in medical translation projects and the agency of these actors in the transnational medical knowledge production, mediation, and dissemination. Although recent research on the transmission
of Western medical knowledge within the context of the modernisation processes in the region has enhanced our understanding of the identity of translators, there is still more scope for research. For example, local translators who collaborated with high-profile European translators have not been visible in many instances, despite the key role they played in the translation process. Research on translators’ social status, educational background, ideological orientation, and their activities and life trajectories following their participation in translation work are some of the topics that will contribute to a more nuanced understanding of the processes and effects of the transmission of Western medicine.

Another topic that requires further research is tracing the complex textual interconnections established via translation among the three countries. The frequent use of indirect translation in the region brought the three countries into an intricate translational network of Western medical texts and terminologies. More research on the directionality of translations and the resulting connections among the terms and texts – as well as medical terminology standardisation movements and campaigns implemented from mid-20th century onwards calling for the elimination of foreign (especially Chinese or Japanese) influences on the respective countries’ (Western) medical terminologies – is needed in order to better understand the relation between translation and social change, as well as the role of translation in the transmission of Western ideas and the modernisation of the region.

Another important topic that needs to be further studied is the role of traditional medicines in enabling the understanding of Western medicine and the evolving relationship between traditional medicines and Western medicine. More research is needed to understand how traditional medical concepts were incorporated into the translation processes and used to make Western medical knowledge comprehensible. Furthermore, the systematic introduction and adoption of Western medicine in East Asia led to the suppression of traditional medicines, although this happened in different ways at different times (Park et al. 2012). At the same time, the adoption of Western medicine in the region created opportunities to modernise traditional medicines, as efforts were made to codify and standardise them, as well as to select drugs and practices that were more in line with modern ideas. These are just a few of the many issues that require further investigation.

This contribution has emphasised that translation is far from a detached transfer of knowledge between cultural groups equal in power and resources. The act of translation is a complex process that interacts with issues of power, the discourses in circulation, and the goals and agendas of actors and institutions involved in knowledge mediation. Translations of medical texts in the second half of the 19th and early 20th centuries in East Asia recast existing perceptions of healing practices and reshaped understanding of the human body. The key point the chapter intended to make is that in China, Japan, and Korea, as in many other places in the world where Western medicine was ‘introduced’, the conceptualisation of Western medicine, as well as its adoption, adaptation, and use, was approached differently by the actors (e.g. the court, intellectuals, ‘foreigners’, and the general public) and the translation activities were deeply politicised. The approaches and reactions to translational phenomena were often a reflection of a country’s or a group’s self-image. It is hoped that the overview in this chapter will encourage more scholars in translation studies, medical history and East Asian studies to further engage with the complexity of the connections between translation and the production and circulation of medical knowledge.
Notes

1 The reasons behind this situation are diverse, ranging from a general lack of interest in translation in academia (Dietz 2016) to language barriers in accessing research on transnational transfer of knowledge.

2 This chapter is mostly based on English and Korean sources. It was not possible to draw on the rich discussions in Chinese or Japanese publications.

3 Although Japan’s first encounter with the West began when a Portuguese ship drifted onto a Japanese island in 1543, it would be the Dutch and rangaku scholarship that would be the most significant in Japan’s early encounter with Western science and medicine.

4 In the introduction to Kaitai shinsho, Sugita explains the three methods used to translate Western medical concepts. The first was the adoption of corresponding terms already existing in Japanese (e.g. the Dutch word beeendered translated as hone, meaning ‘bone’). The second method was the coining of new terms for concepts that had no corresponding Japanese term (e.g. kraakbeen was translated as nankotsu, meaning ‘cartilage’). The third method was transliterating the source term by using Chinese characters to represent the sound (e.g. klier translated as kiriru, meaning ‘gland’). Although transliteration is now widely used in Japan, this was not a preferred method in Kaitai shinsho, which includes relatively few instances of their use. The translation work lasted for three years, and the writing system that was chosen for translation was Literary Sinitic. The chosen writing system signals that the translation not only targeted medical experts but also a general readership of educated samurai and other learned men, with the effect of igniting an interest in Dutch learning (Clements 2015).

5 Chejungwon was established as a Western hospital in 1885 by Emperor Gojong and Horace Allen, an American surgeon and a Protestant missionary sent to Korea by the Presbyterian Church in the United States. In 1894, when the First Sino-Japanese War erupted and the Gabo Reform began, the Korean government was no longer able to finance the operation of the hospital, and Chejungwon came under the full control of the church.

6 In addition to the Japanese model-based medical schools run by the government and the missionary-operated medical schools, there were also medical schools operated by foreign governments. Examples include the German government operated Tongji German Medical College, established in Shanghai in 1908, and the German Medical School, built in Qingdao in 1911, as well as the French Catholic Zhendan Medical School, which opened in Shanghai in 1909. These schools were respectively operated under the guiding principles of the educational systems of the countries affiliated with each of the institutions.

7 Some studies have pointed out the problems concerning the adoption of Western medicine in Japan, particularly after 1880, portraying the process as ‘internal colonization’ (Bay 2012: 6), which is used not only to refer to the process of the medical community slowly becoming dominated by the (largely foreign-educated) medical elite of the University of Tokyo, but also to problematise the nationalisation of medicine and the regulation of citizens’ bodies through legislation.

8 These passages were also removed from many Chinese reprints of Quanti xinlun.

9 However, Hobson’s approach raised questions about the adequacy of the translation method and fuelled discussions about the need to standardise scientific jargon in the Chinese language. John Fryer, Director of the Translation Bureau of Jiangnan Arsenal, stated in his An Account of the Department for the Translation of Foreign Books that the terms Hobson had used in his texts were rejected by many subsequent medical practitioners and translators. This incident made standardising medical and scientific terms an important goal of Jiangnan Arsenal (Elman 2006). Nevertheless, Hobson’s nomenclature is still partly used in medicine and science, e.g. the use of qingqi and danqi (diluting gas) to refer to hydrogen and nitrogen, respectively (Bosmia et al. 2014).

Further reading


This text on the history of medicine in modern China provides an interesting discussion on the ways in which medicine crossed national and cultural boundaries, leading to the creation of new medical terminologies and the selective use of pre-existing terms for different purposes.

Offering bibliographic information on Chinese translations of books on internal medicine originally written in English, this article pieces together an account of the development of Western medicine in China from 1850 to 1949 and the identities of translators who were influential actors in the production and dissemination of Western medical knowledge in China.


This book provides an insightful account of the historical context surrounding Meiji Japan’s translation of German medical science, concentrating on the origins, evolution and effects of its adoption of German medicine as an official model.


This is a useful overview of the broader historical context within which translation of Western medical knowledge took place in Korea, centring on the introduction and the development of the modern public-health system.

Related topics

Dissemination of Academic Medical Research Through Translation, Medical Translations from Greek Into Arabic and Hebrew, Medical Terminology and Discourse

References


Kim, H. (2014) *Doctors of Empire: Medical and Cultural Encounters Between Imperial Germany and Meiji Japan*. Toronto: University of Toronto Press.


