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THE ROOTS OF BILINGUAL EDUCATION FOR
MAJORITY-LANGUAGE STUDENTS IN
MAINLAND CHINA:
A HISTORICAL STUDY ON BILINGUAL
EDUCATION POLICIES AND PRACTICES IN
LATE QING DYNASTY (1840~1911)

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The Roots of Bilingual Education for Majority-
Language Students in Mainland China:
A Historical Study on Bilingual Education Policies
and Practices in Late Qing Dynasty (1840~1911)

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A thesis submitted in partial fulfillment of the requirements for the
degree of Doctor of Philosophy

July 2018

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Abstract

This study examines the nature, purposes, results and consequences of bilingual education in late imperial China between 1840 and 1911. In particular, it analyzes how and why the bilingual education policies and practices changed during the late Qing period, and examines the relationship between the bilingual education policies and the external sociopolitical contexts.

This study aims to provide a historical perspective to language policy and bilingual education research, to reconstruct the history of bilingual education in late imperial China, and to offer historical insights into current Chinese-English bilingual education. Based on a wide range of primary sources of archival data such as memorials to the throne, original archives of bilingual education practices, imperial edicts and news reports in the late Qing period, this study details the central policies and practices of bilingual education in late imperial China. The “conventional content analysis method” was adopted to derive themes and categories from the archival data.

There are three main findings emerged from the historical study. Firstly, the evidence suggests that the emergence of bilingual education in China did not result from western linguistic imperialism but satisfied China’s needs for strengthening and modernizing the country. Although the language education policy was tied to the western powers’ political and economic interests in China, the leadership of language education was still in the hands of China’s central government (the Qing government). Secondly, the findings suggest that the bilingual education gradually moved alongside the wider socio-political contexts over seven decades. The purposes of bilingual education changed from converting Chinese children to Christianity in mission schools to cultivating translators and professionals to bridge China’s communicative barriers with the West and strengthen China’s military power. The bilingual education later moved towards cultivating the intellectuals to acquire expertise in western politics and make contributions to the institutional reform in the early 20th century. Thirdly, the findings also reveal a tendency for increasing participation of the Qing government in educational affairs. During the first two decades of late imperial China, the Qing government granted autonomy to individual schools and headmasters to develop their bilingual education practices. By contrast, in the last decade of Qing Dynasty, the Qing government became the main provider of bilingual education, which was reflected in the establishment of the Guimao Education System as the first bilingual education system in China.

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A Short Timeline of History

- 1807 Robert Morrison, the first British missionary in China, arrived in Macao for his preaching work.
- 1838 Lin Zexu (林則徐) was commissioned to be an Imperial Commissioner of the Qing government (the imperial government) to handle the British opium trade in Canton, China.
- 1839 The Morrison Education Society School was established in Macao to commemorate the life and contributions of Robert Morrison on mission education. It was the first mission school in China.
- 1839 In March, Lin Zexu arrived in Canton to ban the British opium trade in China.
- 1839 On June 3, 1839, Lin Zexu started a campaign to destroy nearly 1.2 million kg of opium, which became a direct cause of the First Opium War.
- 1839 In order to gather military intelligence of the West, Lin Zexu carried out the “Translation Project” to translate books on western knowledge alongside the English newspapers and journals on the western military power.
- 1840 The British launched the First Opium War against China over the conflicting viewpoints on their diplomatic relations, the opium trade and the administration of justice in China.

- 1841 As a scapegoat to China's fiasco in the First Opium War, Lin Zexu was dismissed from office in the Qing government and exiled to Xin Jiang, northwest of China.
- 1842 The Morrison Education Society School moved to Morrison Hill in Hong Kong and became the first modern school in Hong Kong.
- 1842 Due to the defeat in the First Opium War, the Qing government was forced to sign the *Treaty of Nanking*, which stipulated that five treaty ports be open to western businesspersons and Protestant missionaries, and Hong Kong Island be ceded to the British Empire. It signaled the end of the First Opium War and the beginning of modern history in China.
- 1842 Wei Yuan's book *An Illustrated Gazetteer of Maritime Nations* was published. It was not only the first comprehensive Chinese book on world geography, but also the guidebook on China's coastal defense and modernization.
- 1843 Ying Wa College, an Anglo-Chinese college founded by Robert Morrison in Malacca in 1818, was moved to Hong Kong to teach Chinese students both Chinese and English.
- 1850 The Taiping Rebellion broke out in China. It was a massive civil war between the Qing government and the Christian millenarian movement of the Heavenly Kingdom of Peace.
- 1856 The Allied Army of Britain and France waged the Second Opium War against China to expand their privileges in China.

- 1858 After being defeated in the Second Opium War, China was forced to sign the *Treaty of Tientsin* with Britain and France. The treaty stipulated that another 11 ports in China should be open to foreign trade. It also permitted the foreign countries to have legations in China, and legalized the import of opium in China. The *Treaty of Tientsin* signaled the end of the first phase in the Second Opium War.
- 1860 As a result of the defeat in the Second Opium War, China was forced to sign the *Convention of Peking* on October 18th to cede Kowloon Peninsula to Britain and to permit the western missionaries the freedom of preaching in China. The *Convention of Peking* signaled the end of the Second Opium War.
- 1861 Feng Guifen (馮桂芬), a famous scholar-official in late imperial China, published two influential essays “On learning from the West” and “On making modern weapons”, in which the detailed plan of establishing a foreign language school and developing modern education in China was formulated.
- 1861 China launched the “Self-Strengthening Movement” to learn from advanced technology from the West.
- 1861 Zongli Yamen, the main bureau of foreign affairs in late imperial China, was founded in Peking, the capital of late imperial China. Yi Xin (奕訢), Prince of Gong (恭親王), was the head of Zongli Yamen and was in charge of foreign affairs in late imperial China.
- 1861 Emperor Xianfeng (鹹豐皇帝) passed away. The highest political power fell into the hand of Empress Dowager Cixi (慈禧太后) after the Xinyou Coup d'état.

- 1866 Zuo Zongtang (左宗棠), the General-governor of Fujian and Zhejiang Province, memorialized the throne to establish Chinese Navy Yard and a naval college in coastal China in order to strengthen China's coastal defense against the western attack and regenerate traditional Chinese industry and commerce.
- 1866 Empress Dowager Cixi approved of Zuo Zongtang's proposal of establishing a navy dockyard and a naval college. She ordered that a total number of 70,000 taels should be allocated to the shipbuilding and naval education project every month.
- 1866 Zuo Zongtang was transferred to be the Governor-general of Shaanxi and Gansu Province for putting down Nian rebels in northwestern China. Shen Baozhen (沈葆楨), the Prefect of Jiangxi Province, replaced Zuo Zongtang to be the administrator of the navy dockyard and the naval college.
- 1867 The Department of Astronomy and the Department of Modern Mathematics were founded at Peking Translation College. Foreign languages were used as the medium of instruction in the two newly founded departments. It was the earliest practice of bilingual education at government schools in China.
- 1867 With the founding of two departments of western knowledge at Peking Translation College, the source of students at the College expanded from the "Eight Banners" children to those with Han ethnicity. It signaled the dramatic expansion in the source of students at schools in late imperial China.

- 1867 Fujian Naval College was established in Fuzhou as the first modern technical school in China. A large number of British and French marine specialists and technicians were hired as teachers at the college and foreign languages were used as the medium of instruction in the education practices.
- 1868 After the joint efforts of both French and Chinese teachers at Fujian Naval College, the first French-Chinese dictionary *Terminologies at Fujian Naval College* was published in Fuzhou.
- 1871 18 students of Fujian Naval College steered the “Jianwei” Ship north via Zhejiang, Shanghai, Yantai, Tianjin and Niuzhuang Port, and went south to Amoy, Hong Kong, Singapore and Penang Island. The 75-day voyage was viewed as the “first oceangoing voyage of the “modern navy” in China.
- 1874 Empress Dowager Cixi approved of the plan of sending excellent students at Fujian Naval College to further their education in Europe.
- 1874 Tianjin Naval College was founded and was modeled on Fujian Naval College. Yan Fu (嚴複), a graduate of Fujian Naval College in 1874, was appointed the first headmaster of Tianjin Naval College.
- 1876 In order to achieve educational effectiveness within a short period, the administrators at Fujian Naval College decided to enroll some students from Hong Kong who had a solid foundation in foreign languages and were easy to adapt to the westernized curriculum at the College.

- 1877 The “Study Abroad” Project at Fujian Naval College was operated. It was the first time that the Qing government had decided to support students to study abroad with a goal of sharpening skills in shipbuilding and navigation.
- 1894 China started a naval war against Japan, primarily over the influence of Korea. The war was also called the Sino-Japanese Naval War.
- 1895 Having received a heavy blow during the Naval War, China was forced to sign the *Treaty of Shimonoseki* in order to sue for peace. According to the treaty, the Qing government was forced to recognize the total independence of Korea, cede the Liaodong Peninsula, Taiwan and the Penghu Islands to Japan.
- 1895 Peiyang University was established in Tianjin. It was the first government polytechnic university in late imperial China.
- 1897 On April 8, Nanyang College was established in Shanghai. It was the first modern institute in China that comprised a three-tier educational level including primary education, secondary education and tertiary education.
- 1898 In January, China sent an educational mission to Japan to inspect the modern education system and modern schools in Japan. In the next few years, China sent many educational missions to Japan in the final decade of Qing Dynasty.
- 1898 On May 2, 1898, thousands of patriotic imperial examination candidates signed a ten-thousand-word petition to the Emperor, calling for cancellation of the *Treaty*

of *Shimonoseki* and the implementation of institutional reforms in China. The petition was called “Gongche Shangshu Movement” (公車上書).

1898 On June 11, 1898, Kang Youwei (康有為), one of the radical reformists in the post-1895 period of China, was allowed to come into the imperial court and made his constructive suggestions for radical institutional reforms. The institutional reform was also called “Hundred Days’ Reform” because it only lasted for 103 days when Empress Dowager Cixi suppressed it.

1898 Zhang Zhidong (張之洞), an influential scholar-official in the Qing government, put forward his proposals for the educational reform in China. The central idea of his educational proposals was to “take Confucianism as the basis of country (Ti) and acquire western knowledge for practical use (Yong)” (‘中體西用’). The idea set the tone for the follow-up educational reform in the “New Policies” period.

1898 Imperial Peking University was founded in Peking. It was the first comprehensive modern university in China.

1899 The Boxer War between China and the Eight-Nation Alliance broke out.

1900 The educational practices of Imperial Peking University suspended in 1900 due to the Boxer War.

1901 Because of the military defeat in the Boxer War, the Qing government was forced to sign *The Boxer Protocol of 1901* with the Eight-Nation Alliance.

- 1901 The Qing government implemented an institutional reform called the “New Policies” Reform.
- 1902 Wu Rulun (吳汝綸), a famous educationalist in late imperial China, proposed to establish a three-tier education system in China to popularize and systematize modern education including bilingual education step by step.
- 1902 The “Renyin Education System” (壬寅學制) or called “Authorized School Regulations” was drawn up, which was the first modern education system in China.
- 1902 After the Boxer War, Imperial Peking University was reopened and divided into “Speed-up Educational School” and “Pre-university Schools” (預備科).
- 1902 Peking Translation College was incorporated into Imperial Peking University, being the affiliated School of Translation.
- 1903 For various reasons, the Renyin Education System was abolished.
- 1904 On January 13, the “Guimao Education System” (癸卯學制) or called “Presented School Regulations” was promulgated in China. It was the first nation-wide modern education system that was implemented in practice in China.
- 1905 The Imperial Examination (or called ‘keju’ 科舉) was abolished.
- 1905 The Ministry of Education was established as a central education agency in late imperial China.

- 1905 Nanyang College was renamed as “Shanghai Senior Industrial College attached to the Ministry of Business”.
- 1907 Nanyang College was renamed as “Shanghai Senior Industrial College attached to the Ministry of Post and Telecommunication”.
- 1909 On May 9, the Ministry of Education in late imperial China advocated a policy on the standardization of foreign language choices at pre-university schools.
- 1909 On September 14, the Ministry of Education in late imperial China promulgated a complementary policy on the choice of foreign languages and the medium of instruction at specialized colleges.
- 1910 On June 3, the Ministry of Education in late imperial China promulgated a policy on the choice of textbooks for bilingual education at specialized colleges.
- 1911 The Qing government was overthrown in Revolution of 1911.
- 1912 The Republican government of China was founded in Nanjing.

Chapter One

Introduction

This chapter introduces the central issues of the present historical study on bilingual education policies and practices in late imperial China from 1840 to 1911. The first section briefly describes the research background of the present historical study, that is, why I am particularly interested in the history of bilingual education in mainland China, why the late Qing period¹ is chosen as the focused historical period, and to what extent the present study will fill the gap in the existing research on language policy. The second section identifies the central research problems and the primary objectives to be achieved in the study. The third section gives a clear statement of specific research questions to be addressed and presents a summary of the main research methods applied in the present study. The fourth section briefly points out the significance of the study in bringing new scholarly contributions to the current academia in world Englishes and language policy research and providing historical insights into current bilingual education policymaking and practices in China. The fifth section gives the definitions of the key terminologies in the present study. The final section briefly introduces the organization of this thesis.

1.1 Background of research

1.1.1 The current dilemma of English education in mainland China

My motivation for investigating the history of bilingual education in late imperial China partly stems from my particular interest in the modern history of China and, more importantly, results from the current dilemma of English education in mainland China. At

¹ The late Qing period is also called “late Qing Dynasty” in some western literature. However, it is more accurate, according to the convention of Chinese historiography, to name it “the late Qing period” (晚清时期). For clarity and consistency, “the late Qing period”, being equivalent to “late imperial China”, is used in the thesis.

present, in China, English is widely acknowledged as an important medium for global commercial, technological and cultural communication (Adamson, 2001; Jin & Cortazzi, 2003; S. R. Wang, 2016) and for spreading Chinese culture to other countries (Guo, 2011). However, despite its benefits, English education in China has been severely criticized for being “time-consuming” and “inefficient” in improving students’ English proficiency (Cai, 2010; Dai, 2001; C. L. Wang, 2016). Huang and Pan (2011) maintain the most embarrassing phenomenon of English education in China is the so-called “dumb English” and “deaf English”, that is, many Chinese students still cannot hold simple conversations with native speakers after spending almost ten years learning English. Although China has invested much in English education, the English proficiency of Chinese students cannot satisfy the needs of economic and social development in China. Many official organizations and companies complain that most of the graduates’ English proficiency cannot reach their requirements for performing specific tasks in English (Ru, 2012).

Some scholars have identified a large number of pedagogical problems in English education in China to account for the low English proficiency of Chinese students. The main problems include teachers’ overemphasis on students’ grammar and translation skills (Jiang, 2014), teachers’ limited oral proficiency in English (Hong, 2007), separation of language and content (Yu & Xiao, 2013), examination-oriented culture in English education (Tan, 2015), unspecified language teaching objectives (Hu & Lei, 2014), and generally low motivation for learning English among students (Gu, 2009; Yu & Yuan, 2005). The low English proficiency among many learners in China and the serious problems identified in English education have undermined Chinese students’ confidence in learning English, which casts growing doubts in society on the necessity and utility of English education in China (Jin et al., 2014). As Liu (2007) argues, a fundamental question of English education in China is how English education can facilitate students’ further academic study and professional

development. How does English education satisfy the multiple needs of learners in China and, in a broader sense, facilitate China's international communication and cultural diffusion to the rest of the world?

1.1.2 The government policy directing the downward trend of English education in China

The unsatisfactory results of English education, coupled with the colossal government expenditure on English education in China, have led to harsh criticisms from Chinese educationalists on the status of English education in China. The critics call for curtailing government budgets for English education in China (Liu & Cui, 2008), and lowering the status of English in the national education system while in the meantime prioritizing the status of Chinese and other important Chinese-related subjects such as Chinese ethics and history (Cheng, 2016; D. L. Zhang, 2016).

The negative voices on English education from the educationalists have gained increasing grass roots support in China, which greatly affects the government attitudes towards English education. The last decade has witnessed a series of government or institutional policies (or proposals) on lowering the status of English in curriculums at various levels of education (Hao, 2012; Wu & Lu, 2015). The major policies include: removing English from the curriculum in Grade 1 and 2 at government-funded elementary schools (Li, Ai & Shi, 2013; Yan, 2016), reducing the weighting of English in the National College Entrance Examination from 20 % to 13 % (Cheng, 2014), expurgating English textbook content concerning western ideologies and values (Wang, 2017) and cutting down English courses at universities (Liu, 2014). The gradual change in government policies and attitudes towards English education in recent years may be interpreted from a political perspective as a step integrated into the national strategy of elevating the status of traditional Confucian culture

and spreading Chinese language and culture to foreign countries. Nevertheless, those unfavorable policies on English education in China were criticized as they overlooked the benefits of English education to both national development and individuals' social advancement. Tan (2015) argues that the promotion of Chinese language, culture and ideology does not necessitate a downgrade in the status of English in China's education system. Instead, as mentioned at the beginning of the section, English provides Chinese with a critical linguistic means to facilitate intercultural communication with foreign countries, to foster China's participation in international affairs, and to spread Chinese culture to the world (Hou, 2016).

In reality, the unsatisfactory English education results and the unsupportive English education policy initiatives in mainland China contrast sharply with the growing needs and high expectations for English education among Chinese (Deng, Peng & Zhou, 2011). Having recognized the utilitarian benefits of English education in individuals' future employment and felt disappointed at English education at government schools, an increasing number of parents prefer to send their children to private English-language training schools. They hold to the idea that early English immersion will lay a solid foundation in their children's English proficiency and provide their children with an invaluable access to social advancement (Liu, 2016). Many scholars argue that the current government policies on downgrading the status of English education stem from policymakers' irrational responses to the poor results of English education in China, and the policymakers overlook the negative impact of downgrading the status of English education on the society (Ye, 2015).

1.1.3 Possible solutions to the problems of English education in China

Confronted with the current dilemma of English education in China, a large number of education experts have proposed viable solutions to the problems of English education in China in order to increase its efficiency and effectiveness.

Yu (2008) maintains that the existing model of English education in China separates the acquisition of English from acquiring content knowledge. Thus, it cannot meet the need to cultivate intellectuals who excel in their professions and have a good command of English. As an “envisioned” alternative to solving pedagogical problems of English education in China, “Chinese-English Bilingual Education”² has attracted a growing interest among teacher researchers in China (Yu & Han, 2012; Zhao, Xia & Chang, 2014). Chinese-English bilingual education has dual explicit objectives: improve students’ English proficiency and impart content knowledge to students through the medium of English (e.g. Hu, 2005; Zhu & Yu, 2010). It contributes to the creation of more opportunities for people to use English in various professions and to train professionals with a good command of both English and the expertise in a certain field (Xu, 2015).

Since 2001, the ideologies of Chinese-English bilingual education have been institutionally supported by the national policy promulgated in the Ministry of Education’s directions “*Strengthening Undergraduate Teaching and Improving Teaching Quality at Universities*”:

“In order to meet the challenges of modernization, globalization and (technological innovation) in the future, tertiary education at an undergraduate level should create conditions to encourage English-medium instruction (EMI) in

² It has also been named as “Content-based English Instruction” (CBEI) (Yu, 2008) and shares a similar rationale as “content and language integrated learning” (CLIL) or “English-medium instruction” (EMI) (Cai, 2015).

public and specialized courses. In the next three years, great efforts should be made to offer 5 % to 10 % courses with foreign languages as the medium of instruction (MOI) at universities. In particular, English-medium courses should be offered in majors within the high tech field such as biological technology and information technology, and in the academic disciplines (such as finance and law) that are necessary for China's adaptation to the global economy after its entry into WTO.”³

(The Ministry of Education of the People's Republic of China, 2001, Archives No.4, p. 1)

(‘按照教育要面向現代化，面向世界，面向未來的要求，本科教育要創造條件使用英語等進行公共課和專業課的教學對高新技術領域的生物技術，資訊技術等專業以及為適應我國加入 WTO 後需要的金融，法律等專業更要先行一步，力爭 3 年內，外語教學課程達到所開課程的 5% - 10%。’)

The national policy of developing bilingual education at universities has led to the considerable growth in the number of English-medium courses at universities in mainland China. The number of English-medium courses becomes an important criterion for assessing the quality of education and even ranking the universities in China (Liu, 2017). The promotion of Chinese-English bilingual education is not restricted to tertiary education in China; it is also implemented at some experimental secondary schools or even primary schools in economically affluent cities like Shanghai, Qingdao and Suzhou, where students' English proficiency is viewed as being important to economic vibrancy. The policymakers and practitioners there are convinced of the benefits of bilingual education in improving

³ All the Chinese sources of data used in the thesis were translated into English by the author.

students' English proficiency, particularly in the aspects of listening and speaking (Wang, 2008; Yu, 2008).

Although the pedagogical benefits of Chinese-English bilingual education have been recognized by the educationalists, it does not suggest that bilingual education in China has been developing without limitations and obstacles. Nor does it mean that successful practices at some experimental schools can easily be copied to other schools. One of the most serious constraints on the development of bilingual education in China is that many practitioners have mistakenly interpreted bilingual education as a western invented product that was imported to China in the 1990s. The practitioners thus borrow the model of bilingual education in western countries such as the United States and are not aware of the enormous disparities in educational contexts and the objectives of bilingual education between China and the West (Jiao, 2011; Wang, 2008). Consequently, the development of bilingual education in China has been severely constrained by problems in education practices. The problems are: conceptual ambiguity between bilingual education and English language teaching (ELT) (H. Wang, 2016), insufficient authentic teaching materials (Wang, 2008), shortage of bilingual teachers, students' limited English proficiency for English-medium courses (Yu, 2008), imbalance between English language education and Chinese language education (S. R. Wang, 2016), and skepticism over the feasibility of bilingual education in China (Song, 2011; Yu & Yeoman, 2007).

Apart from being constrained by the practical problems, the development of Chinese-English bilingual education also lacks a sound and consistent language-in-education policy in China (Shu, 2004). For instance, as stipulated in Article 10 of *Law of the People's Republic of China on the Standard Spoken and Written Chinese Language*, "the Chinese language, in both oral and written forms, shall be the basic MOI at schools and other

educational institutions”⁴ (p. 2). The legal notification stresses the high status of Chinese in education, but it does not mention the use of foreign languages as the MOI at schools, which provides a stark contrast to the above-mentioned policy of the Ministry of Education on encouraging practitioners to offer English-medium courses at universities. The legitimacy of Chinese-English bilingual education has been questioned as it goes against the national education law in China, and no government bodies have given any clarification to the inconsistency in the policies (Feng, 2007).

1.1.4 The historical perspective on the origin of bilingual education in China

The practical constraints of Chinese-English bilingual education, the absence of a consistent policy to support bilingual education, as well as the social debate over the status of Chinese and English in the education system, have revealed the embarrassing situation of language education policy in China. It has been constantly swinging between pursuing the benefits of English and lowering the status of English to maintain national identity in China.

The seemingly conflicting ideologies represented in China’s language education policy, together with the failure of borrowing models of bilingual education in other countries, provides me with an impetus for adopting a historical perspective on bilingual education in mainland China and investigating the possible impact of historical precedents on current language education policy and practices.

Within the field of applied linguistics and ELT, a number of scholars (e.g. Howatt & Smith, 2014) have pointed out that a sense of history can provide teachers with a basis to evaluate the current ideas and practices and help teachers to examine how the current problems of

⁴ The original text is “學校及其他教育機構以普通話和規範漢字為基本的教育教學用語文字”.

ELT were grounded in history and developed over years (McLelland & Smith, 2014). The value of historical research is not to offer direct solutions to their current problems but to provide people with insights into identifying the problems and analyzing the context they are situated in (Smith & McLelland, 2014). Therefore, although bilingual education in today's China is quite different from that in any other historical period, it is still necessary to examine whether bilingual education is by origin a western product imported to China or has its own historical precedents. The current policymakers of bilingual education in mainland China can also draw legacy from the history and at the very least view current problems from a wider perspective. Specifically, the questions central to the investigation are the following: how did English come to China? Should English in China be framed as the linguistic legacy of the powerful British Empire in the 19th and early 20th century? Should it be characterized as a foreign language that has been influenced by the history and culture of Chinese who have practical needs to learn it? Is bilingual education an imported educational approach to China since the 1990s or does China have its own historical precedents of bilingual education? If it is the latter, what were the main objectives of bilingual education in the modern history of China, and what insights can current policymakers and practitioners of bilingual education gain from history?

The shift to a historical perspective on bilingual education in China also interlocks with the investigation of the spread of English all over the world, particularly to East Asia⁵ in the 19th century. Ostler (2005) identifies migration, military conquest, empire consolidation, trade and religious proselytizing as the main causes for the worldwide spread of English during the 19th century. However, his analysis may not be comprehensive enough to account for the spread of English to the countries that have their native languages, culture and

⁵ In the 19th century, East Asia was the region in which the countries were not under the direct colonial governance of Britain and the United States.

civilization and may put up natural and implicit resistance to foreign languages. As an imported language from the Anglophone countries to China in the 19th century, what roles did English and English education play in intercultural communication between China and the West? Why and how did the mainstream Chinese accept English? It is, therefore, important not to view Ostler's general account as the causes for the spread of English to all countries, but to conduct an in-depth historical analysis on the individual cases in order to complement the existing sociolinguistic perspective on the worldwide spread of English.

In terms of the historical span in the present study, the late Qing period, which started from the outbreak of the First Opium War⁶ in 1840 to the overthrow of the Manchu in 1911 (Biggerstaff, 1961; Gao, 2007; Karl & Zarrow, 2002), is chosen as the focused historical period in the present study. There are four main reasons why I focus on late imperial China instead of other historical periods. Firstly, the late Qing period witnessed the beginning of bilingual education in China (C. C. Li, 1987), particularly the original government provision of bilingual education in a systematic manner, which had far-reaching historical significance in China's modernization. After the fiasco of China in the two Opium Wars⁷, some Chinese scholar-officials⁸ such as Lin Zexu (林則徐) realized the sophisticated power of western military weapons, and thus called on the Chinese to learn foreign languages and acquire western knowledge. Since there were not enough Chinese teachers who understood modern science and technical knowledge in late imperial China, a large number of western specialists were employed to teach Chinese students at modern schools,

⁶ **The First Opium War**, also called the First Anglo-Chinese War, was a military war between the United Kingdom and China (the Qing Dynasty). It broke out as Chinese banned British opium trade in the 1830s and burned up chests of opium in coastal China.

⁷ **The two Opium Wars** included the First Anglo-Chinese Opium War from 1840 to 1842 and the Second Opium War from 1856 to 1860 between China and the allied army of the United Kingdom and French Empire.

⁸ **Scholar-officials** were civil servants in the imperial or provincial government from Han Dynasty to Qing Dynasty (Elman, 2000).

which initiated the development of bilingual education in late imperial China. Dai (2011) points out that a better understanding of the history of the Qing dynasty can provide the current policymakers with significant insights into discussing today's issues in China. Similarly, in order to seek possible solutions to current problems in bilingual education policies and practices in China, we need to have knowledge of the development of bilingual education over history, particularly that of the earliest ideas and practices of bilingual education in late imperial China.

Secondly, despite the under-resourced and politically turbulent sociolinguistic contexts, the bilingual education in late imperial China was enormously fruitful. The bilingual education cultivated many prominent bilinguals such as Yan Fu (嚴複) and Zhan Tianyou (詹天佑). Those bilinguals later became experts in various fields such as diplomacy, mining, translation, navigation, shipbuilding, education and chemistry, and played important roles in China's modernization. A broad consensus has been reached among scholars that the late Qing period was the earliest and probably the most successful and influential period of bilingual education in the modern history of China (Gao, 2007; Gao & Li, 2009; Shi, 2014; Zhang, 2011). The success of bilingual education in late imperial China inspires me to explore why bilingual education in the late Qing period achieved such results, to investigate contextual factors affecting bilingual education policies and practices in that historical period, and to gain historical insights into current problems of bilingual education in China. Admittedly, there was a fundamental shift from elite education to mass education in the late 20th century in China, so it may be difficult to form definitive judgments on the results of bilingual education practices in late imperial China from today's perspectives. Nevertheless, since bilingual education is by nature a "practice-oriented activity" (Smith, 2004, p.262), historical legacy from the late Qing period should have implications for today's bilingual education practices. The implications may not necessarily be direct or obvious, however,

the valuable sense of history, as Sweeting (1997) implies, will inform current policymakers of knowledge and experience in avoiding, or at least, mitigating the mistakes in policymaking processes, and lay a historical basis for today's research on bilingual education policy in China.

Thirdly, a historical investigation of bilingual education in late imperial China will advance our knowledge of how English spread to China, and how Chinese people who had enjoyed their superiority in their languages and had excluded the influence of foreign cultures, languages and ideologies for a long time gradually accepted English education. The historical investigation thus has a broad significance in that it traces the spread of English to East Asia during the 19th and early 20th century.

Finally, the seventy-year scope of the late Qing period constitutes a coherent historical period when China ended its "Closed-door" policy and initiated the modernization movement. A span of 70 years also contributes to the full exploitation of sources of data to ensure the depth of the historical study and provides me with a sufficient scope to analyze the changes in bilingual education policies and practices over time.

1.1.5 Filling a scholarly gap on language policy research

The study focuses on the policy dimension of bilingual education in late imperial China. It falls into the domain of language policy research because bilingual education policy is an integral component of language policy (Spolsky, 2012).

Since systematic research on language policy began in the 1950s, most scholarly attention has been paid to the language policies in the last three decades such as critical issues concerning the former colonial countries or regions to establish their national identities and

eradicate colonial influence through the marker of their official languages. However, few scholars have explored the development of language policies over history, particularly in the 19th century when English started to spread to different parts of the world and entrenched in the national curriculums of many non-Anglophone countries.

Among a limited number of historical studies on the foreign language education in the 19th century, most previous research has focused on continental Europe (e.g. Rouco, 2002; Smith, 2005; Weir, Vidakovic & Galaczi, 2013) and the former British colonies (e.g. Evans, 1998, 2002, 2003, 2006, 2008 a, b, c, 2009, 2011; Pennycook, 1994, 1995, 1998, 2000; Phillipson, 1992, 1994, 2000, 2009). By contrast, few studies were conducted in non-European countries with no British colonial history (e.g. Koike & Tanaka, 1995; Kubota, 1998; Zhang, 2011). Thus, the way English spread to non-colonial societies during the 19th and early 20th century and the primary driving forces behind English education in these countries have not been sufficiently explored.

If we examine the small number of previous studies on bilingual education in late imperial China, we can see that almost all the previous studies (e.g. Fu, 1986; J. Y. Li, 2010; Zhang, 2011) were studies in Chinese and thus gained insufficient attention from western academia. Despite that those historical studies have advanced our knowledge of bilingual education in late imperial China, they have a number of scholarly limitations. To begin with, from a methodological perspective, they uncritically make references to secondary sources of data or some readily accessible primary data instead of the primary sources of bilingual education in the late Qing period. As a result, the validity and reliability of their analysis and conclusions may be questioned as they lack solid empirical underpinnings to substantiate their central arguments. Furthermore, previous studies are either brief chronological accounts of bilingual education in late imperial China, or case studies on

bilingual education practices in one or two modern schools in the late Qing period, which overlook the policy dimension of foreign language education, namely the government attitudes towards foreign languages and modern education in late imperial China. Nor have they linked the development of bilingual education in late imperial China with changes in the external socio-political settings. Therefore, there is a need to explore the changes in government attitudes towards foreign languages and to examine the link between sociolinguistic contexts and government decisions on bilingual education. Additionally, previous research has not sufficiently explored the relationship between foreign language education and bilingual education in late imperial China. What were the respective objectives of foreign language education and bilingual education in the late Qing period? What was the motivation for Chinese people to acquire foreign languages in late imperial China? Were they more interested in acquiring content knowledge or just attracted by foreign languages in order to obtain well-paid jobs and acquire a higher social status?

The limitation of previous studies and the different research foci between previous research and the present study highlight the need to delineate a holistic picture of bilingual education in late imperial China, and to conduct an in-depth analysis of the link between the development of bilingual education and sociolinguistic factors.

1.2 Objectives of the present study

The present historical study aims at bridging the gap in language policy and bilingual education research in China, presenting a detailed historical account of bilingual education in the late Qing period, and exploring the implicit link between language education policies and socio-political settings. It also serves a practical purpose: to provide current bilingual education policymakers and practitioners with historical insights and a wider perspective on addressing the problems of English education during the critical turn of “Education

Reform”⁹ in mainland China at present. It is with the above-mentioned scholarly and practical research purposes in mind that the present study is designed.

Specifically, the present study intends to identify the nature and purposes of bilingual education in the late Qing period and to trace the development of the bilingual education policies and practices over the 70 years in late imperial China. It also analyzes curricular characteristics of bilingual education and explores socio-political factors affecting the development of bilingual education in late imperial China.

1.3 Research questions

In order to achieve the research objectives, the present study addresses the following research questions:

- (1) What were the nature and purposes of bilingual education in late imperial China?
- (2) When, how and why did bilingual education policies and practices change?
- (3) Who was the main actor or agency in the policymaking processes of bilingual education in late imperial China?
- (4) What were the results of bilingual education in the late Qing period?
- (5) What were the curricular characteristics of bilingual education in late imperial China?
- (6) What were the contextual factors contributing to the development of bilingual education policies and practices in the late Qing period?

In order to answer the research questions and present a detailed account of bilingual education in late imperial China, the present study draws on a range of primary archives.

⁹ In the third Plenary Session of the 18th CPC Central Committee in November 2013, the “Education Reform” was viewed as one of the most important reforms in mainland China in the next decade (2013-2023). The ultimate goal of the “Education Reform” was to promote the educational equality and enhance educational efficiency in mainland China.

The main sources of data include memorials to the throne in Qing Dynasty, the original archives (such as teaching materials and examination papers) on bilingual education practices in premier modern schools, imperial decrees, imperial and provincial governors' manuscripts, private correspondences, contemporary periodicals and newspapers. It also draws on a few secondary sources concerning the social milieu of bilingual education in late imperial China. The main sources of data and the data analysis methods applied in the study will be detailed in Chapter 3, Research Methodology. The six research questions above will be answered one by one in Section 7.1 — “Summary of findings”.

1.4 The significance of the present study

The present study is expected to make theoretical, practical and methodological contributions to the current academia and education practices in mainland China. Specifically, the study provides a historical perspective to the current language policy research that is predominantly concerned with today's language issues in post-colonial societies and minority language rights all over the world. The study bridges the gap in our knowledge of the history of bilingual education in China during the 19th and early 20th century and explores the historical precedents of bilingual education in East Asian countries with no British colonial history. It also provides a historical foundation based on which current language policymakers in mainland China can make relevant appropriate choices, and scholars can develop current theories of language policy.

The present study also has scholarly contributions to existing historiography on late imperial China. Different from previous historical studies on the political, economic and societal changes during the late Qing period or progressive historical figures who promoted modernization in late imperial China, the study has a particular focus on the impact of bilingual education in the society. It associates the process of modernization and self-

strengthening in late imperial China with the development of bilingual education. The study also reveals how English spread to China, how and why it was accepted by the mainstream Confucian society, and what roles English played in China's modernization in the late Qing period.

An investigation of bilingual education practices in late imperial China has valuable pedagogical implications for today's bilingual education in China, yields historical insights into addressing the problems of English education in China and provides a historical basis for research on Chinese-English bilingual education policies and practices.

The significance of the present study also lies in its historical methodological design to draw on a range of primary sources instead of relying on secondary sources to analyze the development of bilingual education in late imperial China. The application of archival research methods in the present study shows the value and enhances the status of research into the history of bilingual education in mainland China within the field of applied linguistics and establishes solid foundations for present-day professionalism in the field.

1.5 Definitions of key terminologies in the present study

(1) Majority-language students in mainland China

Though there are 56 ethnic groups and more than 80 ethnic minority languages in China, over 90 % of the people are by ethnicity Han Chinese and use Putonghua (or called Chinese Mandarin) as a lingua franca for oral communication and simplified Chinese as the written language (Yu, 2008). According to the *Law of the People's Republic of China on the Standard Spoken and Written Chinese Language*, which was promulgated on October 31, 2000, Chinese is the official language in mainland China. Thus, the majority-language students in mainland China refer to students who are either originally Han Chinese or were

born in Han linguistic community and speak Chinese (including standard Mandarin and local dialects of Chinese) as their first language.

(2) Bilingual education

“Bilingual education” in the study refers to the use of foreign languages as the MOI for non-language subjects¹⁰ in formal school systems with a dual objective of imparting content knowledge to students and improving students’ foreign language proficiency, and the use of Chinese as the MOI for the Chinese-related subjects such as the Chinese language and China’s history.

The “bilingual education” in the late Qing period has a wider connotation than the “Chinese-English Bilingual Education” in today’s China. Firstly, there was no clear-cut conceptual distinction between “foreign language teaching” and “bilingual education” in late imperial China. Those early policymakers, administrators and educators in late imperial China did not distinguish teaching foreign languages as a subject from teaching non-language subjects through the medium of foreign languages since they had no knowledge of the theories on bilingual education that were developed in the second half of the 20th century. It can be seen from the history that in late imperial China foreign language teaching was also a preparatory stage for bilingual education since it laid a foundation for students’ foreign language proficiency before acquiring content knowledge in other subjects. Therefore, in the present study, bilingual education in late imperial China does not exclude foreign language teaching but includes both teaching non-language subjects through foreign languages and teaching foreign languages as a subject¹¹. Furthermore, the “bilingual

¹⁰ The non-language subjects were called “western content subjects” in the parts concerning the history of bilingual education in late imperial China and Meiji Japan.

¹¹ In the chapters concerning the history of bilingual education in late imperial China, foreign language subjects and western content subjects were combined under the general term “western subjects”.

education” in late imperial China was not restricted to EMI but included using other foreign languages such as French as the MOI for content subjects. It also included the use of Chinese Mandarin as the MOI for Chinese-related subjects, which had a wider conceptual scope than EMI for content subjects.

(3) bilingual education policies and practices

Bilingual education policies as used in the present study involve government decisions at various levels on the promotion of bilingual education in China. Specifically, the decisions include when, how and why to introduce bilingual education, to whom and for how long. It is worth recalling that the present study does not intend to make decisive judgment on whether the decisions were right or wrong, but to examine how the decisions were made, for what purposes and their changes over time.

Though the study is more concerned with the policies of bilingual education in late imperial China, the term “bilingual education policies and practices” is used in the present study. The reason for mixing policies and practices is that due to the likely absence of government documents of bilingual education in late imperial China, it is necessary to reconstruct education policies from the education practices at premier government-funded modern schools. A thorough investigation of the education practices can also reflect the attitudes and decisions of the Qing government on the promotion of bilingual education and western knowledge in an indirect way. Information on the nature of bilingual education at the modern schools can be collected and analyzed from the original archives of those premier schools. Specifically, the archives include enrollment statistics, curriculum schedules, teaching materials, teacher journals or diaries, examination papers, rules and regulations of teachers and students. To investigate bilingual education practices at the premier government schools after the promulgation of a national education system in 1904 also

helps us to identify the gulf between bilingual education policies and practices and explore why there was incongruence between the rationale of education policies and the actual educational delivery in practices.

1.6 Organization of the thesis

The thesis consists of the following seven chapters:

Chapter 1 is an introduction to the whole thesis, which includes the background of research, research objectives, research questions, the significance of the study, the definitions of key terminologies and the organization of the thesis.

Chapter 2 provides a review of previous studies on theoretical constructs of language policy as well as historical studies on foreign language education in continental Europe, the former British colonies, late imperial China and other British and American informal empires in East Asia in the 19th and early 20th century.

Chapter 3 gives a detailed description of the research methods used in the study, which includes nature of research, sources of data, methods of source evaluation methods, data collection processes, methods of data analysis, and means of enhancing trustworthiness of the study.

Chapter 4 presents a historical account of foreign language education in the first two decades of late imperial China from 1840 to 1860, when the provision of foreign language education was not in the hands of the government but other important and powerful actors or agencies such as the western mission societies in China. By interpreting relevant document-based information on the practices of foreign language education at the early

mission schools and the proposals of progressive scholar-officials for foreign language education during the 1840s and 1850s, the chapter provides a pretext for the subsequent government promotion of bilingual education in the Self-Strengthening Movement¹² since 1861.

Chapter 5 presents a historical account of bilingual education policies and practices during the Self-Strengthening Movement from the 1861 to 1894 when the Qing government attached importance to foreign languages and western knowledge and played leading roles in promoting bilingual education in China. The chapter also presents a detailed account of bilingual education practices at the premier government schools such as Peking Translation College.

Chapter 6 presents the history of bilingual education from 1895 to 1911, the period during which the provision of bilingual education in the late Qing period was not restricted to some coastal cities but spread to the whole country after the establishment of a national modern education system in 1904. The accounts of bilingual education practices at the premier government schools such as Imperial Peking University will be detailed in the chapter.

Chapter 7 is a concluding chapter that summarizes answers to the research questions raised in Chapter 1 and extends discussions of the findings in comparison with history of foreign language education in other East Asian countries in the same historical period. It thus identifies the main patterns or salient themes of the spread of English to East Asia during the 19th and early 20th century. The concluding chapter also discusses the historical insights

¹² The Self-Strengthening Movement (洋務運動) was a modernization movement in late imperial China from 1861 to 1894. After the defeat in the Opium Wars, the Qing government launched a reform to learn western military technology in order to guard against western colonizers.

and implications for the current bilingual education policies and practices in China, pinpoints the limitations of the study and gives suggestions for future research.

As a genre feature of a historical thesis, footnotes are used in the thesis to: (1) give definitions of important terms; (2) provide additional information for units of content; (3) provide original Chinese quotes; (4) give examples to some terms; and (5) refer to other parts of the thesis.

Chapter Two

Literature Review

2.1 Chapter introduction

It is widely acknowledged that research on the history of bilingual education in any context is not restricted to the field of language education but is a multidisciplinary field which is related to the domain of language policy, modern history, education policy, public policy and modern education (Shen, 2012; Smith & McLelland, 2014). Thus, before moving to previous historical studies on bilingual education in late imperial China, it is necessary to widen our perspectives to the theoretical studies on language policy because bilingual education policy is part of language policy (Spolsky, 2012).

This chapter will also present an extensive review of the studies on English education policies and practices in countries or regions where English was the second or foreign language in the 19th and early 20th century. Specifically, the chapter consists of four distinctive parts:

- (1) Theoretical constructs of language policy.
- (2) Foreign language policy in countries or regions within the “Outer” and “Expanding” Circles of English¹³.
- (3) Historical studies of English education policies and practices in the countries or regions within the “Outer” and “Expanding Circle” in the 19th and early 20th century.
- (4) Historical studies of English education in late imperial China.

13 It is based on Kachru's (1992) “Concentric Circles” model of world Englishes.

In the third and fourth section of the chapter, the term “English education” replaces “bilingual education” or “ELT”. Since the early English education policymakers and practitioners might not understand the conceptual differences between ELT and EMI, the 19th and early 20th century witnessed a mixture of both ELT and EMI in content subjects in countries or regions where English was the second or foreign language. The term “English education” thus includes both teaching English as a language subject and teaching content subjects through the medium of English. “ELT” and “Bilingual Education” are subsumed in the category of “English education”. The early education policymakers and practitioners in the 19th century also distinguished “native language education” from “English education” or “foreign language education” as they were not informed of today’s bilingual education theories that combined foreign language education and native language education in a curriculum. As there are a limited number of studies on the history of native language education in one country in the 19th and early 20th century, the two sections focus on the studies concerning English education in the historical period.

Through a review of previous studies on the history of English education in the 19th and early 20th century, I attempt to make connections of various studies on the research topic, search most recent historical studies, and identify the research niche for the present study. The literature review will begin with a review of studies on the theoretical foundation of language policy.

2.2 Theoretical constructs of language policy

As mentioned above, the research domain of bilingual education policy falls into the category of language policy since the former is an integral component of the latter (Spolsky, 2012). Thus, though the present study is primarily a historical investigation of the bilingual education policies and practices in late imperial China while theoretical research of

language policy only originated in the 1960s, it is still necessary to examine modern theoretical constructs of language policy before shifting to historical studies. A review of language policy research also shows that the present study is based on solid theoretical foundations and provides a historical perspective to the existing theoretical frameworks of language policy.

Specifically, the following section synthesizes various definitions of language policy formulated in previous studies and analyzes the core components or major theoretical frameworks of language policy research. The section also summarizes the scholarly discussions about the role of main actors or agencies in language policymaking process and the crucial socio-political factors affecting the language policymaking process.

2.2.1 Definitions of language policy

Language policy is a field of study emerged in the period after World War II when many colonized countries achieved independence and were confronted with challenges of rebuilding and restoring their identity (Varcasia, 2011). Language policy thus became an important issue for those post-colonial countries to resolve the language problems in communication and seek their identity markers through identifying the official language (Norrby & Hajek, 2011). In the 1960s, linguists in the newly independent countries of Africa and Asia attempted to define various functions that different varieties of languages in the country could perform. The linguists also made suggestions for the national governments to establish central language agencies, and to make critical decisions on language issues including establishing and modifying the national language for their country, which initiated follow-up worldwide research on language policy (e.g. Bodomo, 1996; Bolton, 2008; Heugh, 2009; Kuteeva & Airey, 2014).

2.2.1.1 Language policy and language planning

The need for government decisions on languages after World War II places spotlight on language issues in many countries or regions in the world. Charles Ferguson, one of the pioneering scholars in language policy and planning, points to the difficulties in separating the term “language policy” from “language planning” (Ferguson, 2006). In reality, Ferguson’s inquiry into the conceptual distinction between two terms (language policy and language planning) has puzzled many linguists in the field of language policy and planning for a long time (Bergenholtz, 2006; Gottlieb & Chen, 2001).

Various definitions have been formulated to describe the characteristics of “language planning” and “language policy”. Bright (1992) defines “language planning” as a “deliberate, systematic and theory-based attempt to solve communicative problems of a community by studying various languages and dialects it uses, and to develop a policy concerning their selection and use” (p.310). It influences the “behaviors of others with respect to the acquisition, structure, or functional allocation of their codes” (Cooper, 1989, p. 45). Evidently, the definition above emphasizes the influence on target people’s linguistic behaviors, which sounds ideologically softer than the earliest definition of language planning from Leibowitz (1974), who emphasizes language planning should serve the purpose of social control (such as for discriminatory purposes). Therefore, the language planning process in any context needs critical scrutiny to examine whether language planning is ideologically neutral or contains certain social and political intentions.

According to various purposes and targets of language planning, in previous studies language planning can be further categorized into “corpus planning” (Wiley, 2006), “status planning” (Wiley, 2006) and “acquisition planning” (Tollefson, 2013; Tollefson & Tsui, 2004). “Corpus planning” is associated with internal linguistic aspects of a language, such

as orthography, vocabulary and grammar. “Status planning” focuses on the relationship of different languages within a speech community. It is often associated with promotion of languages by supranational, national or provincial (state) governing agencies (Spolsky, 2012). As time goes by, especially with the emergence of English as the global lingua franca, language acquisition for a wider communication has gained increasing attention. It results in Cooper’s (1989) complementary category “acquisition planning”, as a third category, added to the existing language planning framework. “Acquisition planning”, which has direct relevance to foreign language education, refers to the formulation of policies regulating language education practices on a large scale, including the choice of MOI.

Carroll (2001) maintains that there is no universally accepted distinction between the concepts of “language planning” and “language policy”. “Language planning” is often used interchangeably with “language policy”, and some scholars even attempt to integrate the two terms into “language policy and planning” (LPP). Despite conceptual similarities of the two terms, some researchers have been trying to differentiate them. Hu (2001) draws a distinction between the two concepts by examining actors or agencies in language policy and planning process. Specifically, he asserts that language policy hinges on the actions of government to manage people’s linguistic behaviors and overcome communicative barriers while language planning depends on either government agencies (individuals, interest groups), or even collaboration between both government and individuals. Hu’s clear-cut distinction between “language policy” and “language planning” has gained support of other linguists who assert that language planning has a wider scope and produces a language policy (e.g. Ager, 2001; Gottlieb, 2011; Spolsky, 2012). However, other researchers such as Bolton (2012) argue that “language policy” has a wider connotation than “language planning”. The former refers to the decision makers’ general ideologies of language use within a community while the latter term targets the actions of decision makers. Given the

similar indeterminacy of the two terms, Ferguson (2006) agreed to the view that the two terms can be regarded as such a closely-related entity for exposition and analysis, and it is up to the researcher who decides which term should be used according to different contexts.

2.2.1.2 The various definitions of language policy

As with discussions on the differences between “language policy” and “language planning”, the definitions of language policy are also diverse in various studies (Johnson, 2013), which highlights the need to examine and synthesize definitions already in circulation in previous studies. The following definitions of language policy will focus on the aspects of main actors or agencies in policymaking processes, the socio-cultural dimension of language policy and the power distribution represented in language policy.

Traditionally, language policy is viewed as a top-down imposition of government language beliefs or ideologies on societies in forms of official regulations or law (Spolsky, 2004). However, Johnson (2013) extends the scope of language policy and maintains that language policy also involves some “unofficial, covert, de facto and implicit mechanisms” (p. 9). His definition lends support to Kaplan and Baldauf’s (1997) definition that demonstrates the two-way traffic of language policymaking process. They explicate the view that language policies are not necessarily issued and enacted by an authoritative body in a top-down manner. The bottom-up movement or grassroots organizations may also play important roles in the language policymaking process (Johnson & Johnson, 2015). In an ideal situation, language policymakers in today’s world take account of both the national authorities’ ideologies to strengthen the position of national languages and the grassroots’ ideologies to promote linguistic diversity and protect minority language rights. But in a more realistic situation, as what has been shown in most countries, the policymakers may favor one

language and marginalize other languages in a country to achieve their different purposes (Phillipson, 2006).

Apart from defining “language policy” by main actors and agencies in the policymaking process, some scholars give a more abstract definition from the perspective of social culture. For instance, Schiffman (1996) defines language policy as primarily an outcome of a particular social culture:

“[Language] policy as a cultural construct rests primarily on some conceptual elements — belief systems, attitudes, myths — the whole complex that we are referring to as linguistic culture, which is the sum totality of ideas, values, beliefs, attitudes, prejudices, myths, religious strictures, and all the other cultural ‘baggage’ that speakers bring to their dealings with language from their background.” (p. 276)

Schiffman’s abstract definition of language policy stresses the importance of social culture constructs to language policy, people’s language beliefs and attitudes in particular, which is similar to the dimension of language ideology or beliefs in Spolsky’s (2012) “Three-component” Framework of Language Policy (See Section 2.2.2). Schiffman’s socio-cultural perspective of language policy also indicates that language policy is not an arbitrary decision of a government in contextual vacuums, but a natural result formed by the interaction of various socio-cultural factors.

McCarty (2011) agrees with Schiffman’s view that language policy is a complex socio-cultural process. He further identifies relations of power as one of the most important variables shaping language policy:

“I have characterized language policy as a complex socio-cultural process [and as] modes of human interaction, negotiation, and production mediated by relations of power. The ‘policy’ in these processes resides in their language-regulating power; that is, the ways in which they express normative claims about legitimate and illegitimate language forms and uses, thereby governing language statuses and uses.” (p.8)

Compared to Schiffman’s definition, McCarty seems to be more interested in how language policy is formulated, and how language policy, as a mechanism, regulates everyday language use and constructs social hierarchies. The slight shift towards the relations of power in language policy, as the second half of McCarty’s definition shows, reveals an important perspective in language policy research — the critical perspective, which is more reflected in Tollefson’s (1991, 2013) work on language policy.

Influenced by critical theory (Foucault, 1979; Giddens, 1971; Habermas, 1973, 1989), Tollefson (1991) implemented critical conceptualizations into the analysis of language policy. He maintains that language policy creates an unequal mechanism that favors the dominant group of people as they attempt to establish hegemony through regulating the language use within a speech community.

Complicated as the definitions may seem, common to the definitions are four core components: (1) purposes: language policy serves a certain purpose such as promoting social welfare, prioritizing the status of dominant languages or maintaining minority language rights; (2) a construct targeting a speech community: language policy texts and discourses are heavily influenced by language ideologies unique to the context. It is thus unjustifiable to conflate language policy in formal schooling institutions with language

policy in other domains such as family language policy despite the fact that language policies in different domains may have a certain link; (3) actors or agencies: although government represents the overarching power and control of a speech community primarily and traditionally formulates language policy, the policymaking process is also heavily affected by bottom-up efforts from grassroots practices; and (4) a dynamic process: the interpretation of a language policy should not be limited to evaluating the static outcome such as written or oral law, rules and regulations, but should also examine the policymaking process driven by the ideologies of various language policy actors and agencies as well as the particular socio-political context (Johnson, 2013).

2.2.2 Spolsky's framework of language policy

Apart from giving various definitions of language policy, a number of theoretical models or frameworks (e.g. Fisherman, 1991, 2001; Hornberger, 2003; Johnson, 2013; Kaplan & Baldauf, 1997) have been conceived to delineate various types of language policies, interpret language policy from different perspectives and evaluate the outcome of language policy in multiple contexts. Given the complexities and variations in different contexts of language policy, it is difficult to reach a consensus among language policy scholars on a universally applicable theoretical model of language policy. Nevertheless, Spolsky's framework (2004) is regarded as one of the most valuable and widely used models to analyze language policy in any linguistic and socio-political context.

In Spolsky's framework, language policy consists of three components: language practices, language ideologies and language management (Spolsky, 2004). The first component "language practices" refers to what actually happens in speech communities. Sociolinguists also describe the term as the language ecology or the ethnography of speech (Spolsky, 2012). Specifically, language practices of members within a target community involve: 1) the

language variety (or a different language) that the community members choose for fulfilling the particular communicative functions; 2) the variants they use with other interlocutors in dialogues; 3) the rules people follow for talking about common topics and expressing or concealing identity. Despite the bitter controversy over the issue of whether language practices at the micro level belong to language policy (Johnson, 2013), Spolsky (2004) includes language practice as an integral component of language policy. He explicates the view that the effectiveness of language policy can be better reflected in language practices, and the language practices can in turn affect the modification of language policies.

The second component “language ideologies”, or “language beliefs”, refers to beliefs or conceptualizations of language and language use such as the status and function of languages (Blommaert, 2006; Silverstein, 1998). The third component of Spolsky’s framework is “language management”, which is similar to “language planning” in a broad sense. Spolsky (2009) defines “language management” as specific efforts of some members within the target speech community who claim to have authority over others to modify the subordinate’s language practices through language intervention such as forcing or encouraging language users through establishing national or official language.

Despite a few opposing voices that exclude “language practices” and “language ideologies” from the category of “language policy”, Spolsky’s innovative framework broadens my understanding of language policy. The framework associates language policy with language ideologies, beliefs as well as external socio-political factors including power and authority of dominant actors and agencies in language policymaking processes. The tripartite framework provides me with illuminating insights into designing the research questions, identifying coding labels, categories and themes from the data and interpreting my data.

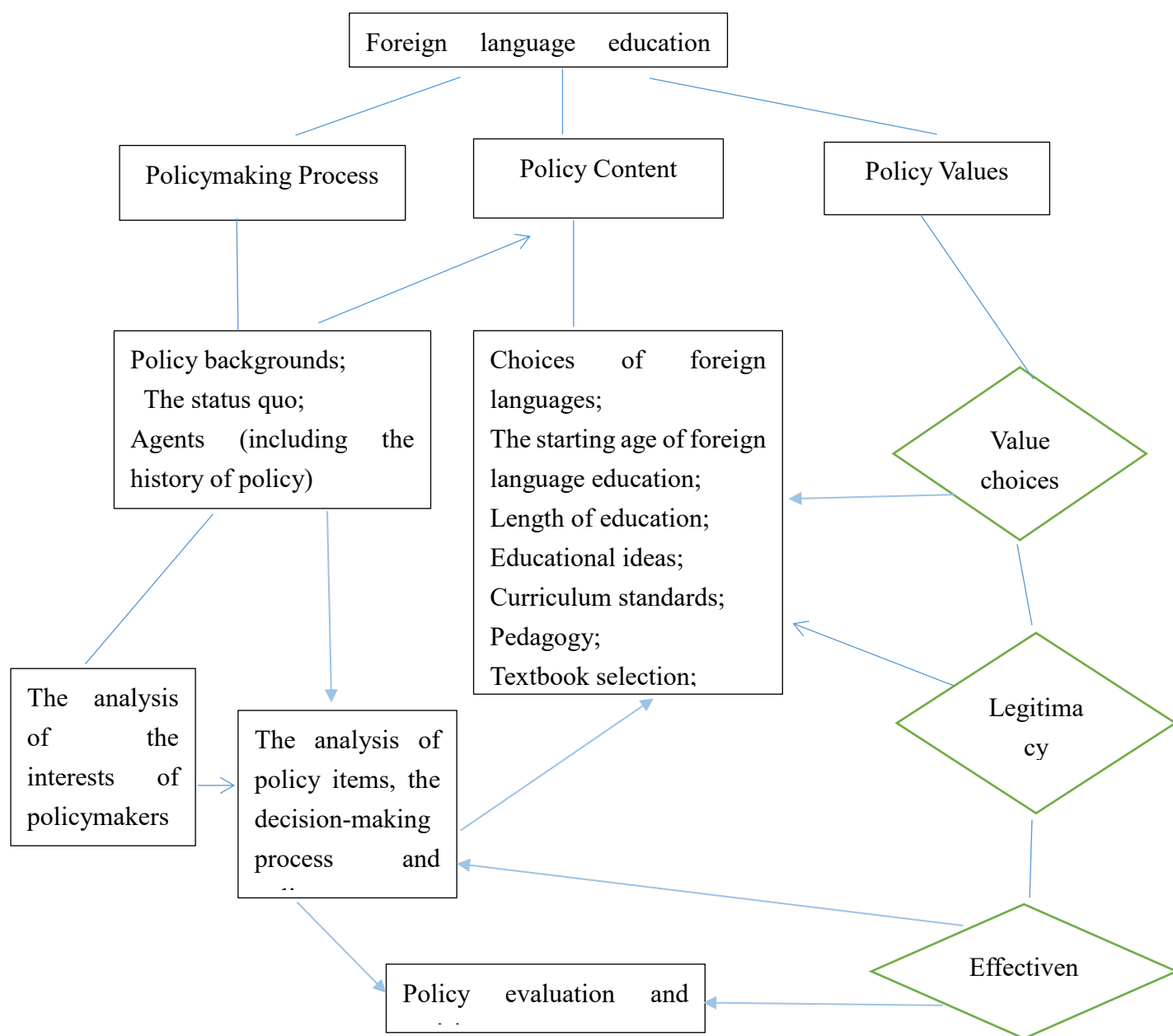
2.2.3 Shen's framework on foreign language education policy

Inspired by Spolsky's framework and other frameworks of language policy and education policy, Shen (2012) conceives his theoretical framework of foreign language education policy and subsumes his framework in the domain of language policy research.

Based on Hogwood and Gunn's (1984) analytic framework of public policy research, Shen maintains that policymaking process, policy content and policy values are three integral components in the framework of foreign language education policy. As shown in Figure 1 (See Page 35), Shen's framework of foreign language education policy has much resemblance to Spolsky's Framework (2004). The first component of Shen's analytic framework — "policymaking process" is similar to Spolsky's "language management", which investigates the policy background, the rationale of policymakers and addresses the issues of how foreign language education policy is formulated to accomplish the certain objective and how it is implemented in practice. The "policy content" component is similar to Spolsky's "language practices", which is concerned with micro-pedagogical issues of foreign language education. Shen emphasizes that the policy content of foreign language education is greatly affected by the policy background, the status quo of education in a certain context. Thus, an investigation of foreign language education policies should encompass an exploration in the relationship between foreign language education and its socio-political contexts. Compared with the first two components, the third component "policy values" in Shen's framework is more complex. It not only includes language ideologies of policymakers behind their decision-making process (this point is similar to Spolsky's 'language ideologies' component) but is also concerned with the impact of foreign language education policy on the society. Shen summarizes the three-dimensional impact including value (of foreign language education) to the public, value to the decision-making actors or agencies and value to the people in interest groups of foreign language

education including schools, teachers, educationalists, students and parents. Based on the three-dimensional impact, Shen views the “policy values” as an important component of policymakers’ decisions on foreign language education. It addresses the questions of whether foreign languages have instrumental value or humanistic value, and what the relationship between foreign language education and native language education is. The “policy values” component is also related to the legitimacy and effectiveness of foreign language education policy, namely, whether the policy ensures educational equality for people at different strata of the society, and whether the policy enhances the effectiveness and efficiency of foreign language education. In contrast with Spolsky’s framework (2004), Shen’s framework (2012) has not been popular in international academia as it has only the Chinese version and has been conceived in the context of foreign language education in East Asia. However, because of its relevance to the present study in the research context, I have gained much insight from it when I design the research questions.

Figure 1: Shen's Framework of Foreign Language Education Policy (2012)



(Source: Shen Qi's (2012) *On the Development of Foreign Language Education Policies in Contemporary East Asia*, p.39)

2.2.4 Main actors and agencies in language policy

Compared with voluminous research on definitions and theoretical frameworks of language policy, the role of actors or agencies in the language policymaking process is largely unexplored in previous studies. Johnson and Johnson (2015) assert that it is essential to

examine the ideologies of main actors and agencies behind their language management behaviors or choices when a policy is subject to evaluation. What matters most in the process of language management is not the result or decision on language policy but the power distribution of actors or agencies in the language policymaking process before arriving at the decision.

Previous studies have advanced our understanding of the role and power of actors and agencies in language policymaking process, which reveals that three categories of actors or agencies play important roles in the language policymaking process (e.g. Johnson, 2013; Johnson & Johnson, 2015; Spolsky, 2012). The three categories of actors and agencies are the national government, the supra-national bodies and the stakeholders at the “micro-level” of language policy. Among the related actors or agencies, the national (or state) government and government bodies affiliated to the central government play a central and most authoritative role in the language policymaking process (May, 2001; Tollefson, 1991). Johnson (2013) views agencies affiliated to the central government as policy intermediaries, administrators and arbiters in language policy and planning. In specific terms, language actors or agencies at the national level may be a legislative assembly writing a national constitution or a national legislature that is responsible for enacting language policies. In some countries like the United States where the state enjoys high autonomy in determining its language policy, the central language policy agency may be a provincial or prefectural government. Alternatively, a special interest group made up of linguists also make their suggestions to a legislature or at least express their voices in amending and enacting language policies (Jahr, 1992; Spolsky, 2004).

Apart from those central national government bodies responsible for language policymaking in a country, the actors or agencies higher than national government bodies

including international, cross-national and supra-national (state) bodies usually develop language guidelines to encourage some language practices or discourage others (Kyung & Hwan, 2011; Little, 2007). The most typical example is the promotion of multilingualism in the European Union. Despite that most European countries establish a standardized national language under the ideology of “one nation one language”, the European Union insists on protecting and promoting minority languages in multilingual European countries (Czyzewska, 2014; Krzyzanowski & Wodak, 2011). Another typical example is the consistent efforts of international organizations to establish English as their first working language. Though they do not force national government bodies in each country to choose English as the official language, in order to facilitate international communication, the government bodies in those countries have to choose English as their working language (Matteo, 2013). Some scholars even hold the view that the current trend of globalization in large measure weakens the power of state central agencies in the language policymaking process and grants greater importance to international organizations (e.g. Alidou, 2004; Blommaert, 1999; Mazrui, 2002; Wright, 2004).

The two categories of actors or agencies in language policy point to the “top-down” direction of the language policymaking process, and the actors or agencies are usually those who possess significant executive power in a country (Nekvapil & Sherman, 2009). However, previous studies lack a detailed investigation of the main actors or agencies in the “bottom-up direction”, namely the impact that stakeholders such as school headmasters, teachers, students and parents have on language practices. Only a few empirical studies (e.g. Adamson, 1998; Hornberger, 1996; Lai, 1994; Ricento, 2006; Shohamy, 2006; Smith & Gurney, 2016; Wiley, 2004) have attempted to identify the stakeholders at the micro-level of language policy. In some cases, actors at the “micro-level” play a stronger role in the language policymaking process compared to “top” actors or agencies, particularly in

democratic nation-states. For instance, at the stage of policy appropriation and implementation, how teachers and students interpret policies determines the effectiveness of a certain language policy (Menken & Garcia, 2010).

Ricento (2006) asserts that “bottom-up” practices are closely associated with the notion of “language governmentality”¹⁴ in language policy. The concept focuses on how power operates at the micro level of various language practices. Specifically, “language governmentality” can be analyzed with regard to how decisions about language status, codification and use through instruments such as textbooks and examinations regulate actual language practices and beliefs or attitudes of different people, groups and organizations (Spolsky, 2012). Wiley and Garcia (2016) maintain that the concept of language governmentality shifts scholars’ attention from the role of international and national governments to more localized and contradictory operations of power, which indicates a new direction of future research on the power of actors or agencies at the micro level in language policy (McCarty, 2011; Wiley, 2004).

The language policymaking process is closely tied to curriculum implementation in schools as a school is a main domain of implementing language policies in a country. Thus, theories of curriculum implementation will advance our knowledge of how language education practices affect the policymaking process. According to Snyder, Bolin and Zumwalt’s typology of curriculum implementation (1992), there are basically three models of curriculum implementation — the Fidelity Model, the Mutual Adaptation Model and the Curriculum Enactment Model. The Fidelity Model means that curriculum implementation is in congruence with curriculum design, which achieves (or is very near to) the teaching

¹⁴ The term of “language governmentality” was coined by Foucault (1991). It refers to specific language education practices that teachers solve students’ language problems by various means.

objectives that curriculum designers have set forth. The Mutual Adaptation Model requires reciprocal interaction between curriculum implementers and curriculum designers. The model views curriculum implementation as a two-way dynamic process, during which curriculum implementers redefine curriculum objectives and revise curriculum content through negotiation with curriculum designers according to the contextual demands. With respect to the Curriculum Enactment Model, curriculum implementation is viewed as a process during which teachers and students work together to create new education experiences. The Curriculum Enactment Model emphasizes the creativity of teachers and students in classroom in constructing new knowledge through their collaboration instead of adhering to the curriculum design. The three models of curriculum implementation provide us with a new perspective to examine language policymaking and policy implementation in different contexts and to investigate the roles of curriculum implementers in the policymaking process.

In summary, the enactment of language policy hinges on the interplay of actors at the national level, the supranational level and the micro individual level (parents, students, headmasters and teachers). As Johnson and Johnson (2015) assert, policy actors wield different degrees of power in the language policymaking process, policy interpretation and policy implementation in various contexts. The present study will provide empirical evidence to explore the impact of main actors or agencies on the bilingual education policymaking process in late imperial China.

2.2.5 Key factors affecting the language policymaking process

Actors or agencies are central stakeholders to influence the language policymaking process. However, the stakeholders are all affected by certain language ideologies, attitudes or beliefs concerning the status, forms and functions of languages. More importantly, the

language ideologies, attitudes and beliefs are formed in certain socio-political settings, indicating that one cannot fully understand language policies without consideration of how a policymaking process goes within a specified context (Ferguson, 1977). The socio-political settings can also be called sociolinguistic “domains” for formulating language policy and providing the context to establish the connection between contextual factors and linguistic realizations (Fishman, Cooper & Ma, 1971).

A major limitation in most previous studies on language policy (e.g. Phillipson, 1992) lies in their tendency to regard the language policymaking process as a contextual vacuum, and to overlook the socio-political factors affecting language policies. Solano and McConnell (1991 in Spolsky, 2004) criticize that previous studies on language policy have only investigated a small number of linguistic factors affecting language policy while have lacked a careful examination of the relationship between language policy and its sociolinguistic context. Thus, future research is needed to identify the inseparable link between language policy and external non-linguistic factors.

Spolsky (2004) identifies both linguistic factors and non-linguistic factors that affect language policy formation. The linguistic factors refer to standardization and homogeneity of languages in a given context, while non-linguistic factors have a larger scope and are context-bound. In general, the non-linguistic factors include political, economic, social and bureaucratic factors, but different factors play different roles in certain socio-political settings (Spolsky, 2012).

Among the non-linguistic factors, the political factor is a primary variable in the formation of language policy. Williams (1992) argues that previous language policy studies have lacked a detailed analysis of the political nature of language policymaking process and

failed to incorporate theories in the field of political science and sociology into the analysis of language policy. He thus conducted a further investigation into the relationship between language policy and sociopolitical variables and found that factors such as migration, state formation, colonization and political conflicts affected the formation of language policy.

Williams' findings initiated scholarly explorations on the relationship between language policy and political power. A large number of scholars start to investigate the differences of power among different groups in language policymaking process (Ricento, 2006; Shohamy, 2006; Tollefson, 2013; Wiley, 2006). Tollefson (2013) maintains that language policies create inequality in society. During the policymaking process, language policymakers make decisions that favor the interests of the dominant ethno-linguistic group (Johnson & Johnson, 2015). Though many critical studies on the relationship between political nature and language policy lack ample empirical evidence and exaggerate the role of political power, they inform us of the importance of power relations in the language policymaking process and extend the research scope in language policy from the field of applied linguistics to politics and sociology.

Previous studies on socio-political contexts beyond English language policy have identified that British colonial legacy and globalization are two political factors leading to the prevalence of English in a country (e.g. Kirkgöz, 2009; Majhanovich, 2014; Price, 2014). For instance, with respect to those newly independent countries with a long history of British colonization, the colonial history is the best single predictor of a pro-English language policy in those post-colonial societies (Spolsky, 2004). The linguistic

heterogeneity¹⁵ in those countries also provides a favorable condition for the pro-English policy because language policymakers find it difficult to select a common language for internal communication and English is a desirable choice to unify the diversity in communication across various linguistic communities (Rassool, 2014). Other sociopolitical factors including better education and employment opportunities, technological advancement, the economic value of exports to English-speaking countries are all important variables for the spread of English to the countries (Spolsky, 2012).

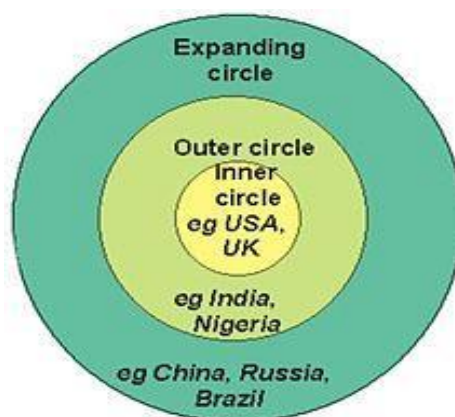
During the policymaking process, the linguistic and non-linguistic factors are not isolated but interdependent variables that determine the language policy. Thus, it is important to investigate the very complex interrelationship between the variables in order to explore the link between language policy and key factors affecting the policy (Spolsky, 2004). These linguistic and non-linguistic factors are also context-bound, which paves the way for research on the impact of various sociolinguistic factors on different contexts.

2.3 Foreign language policy in the countries or regions within the “Outer” and “Expanding” Circles of English

After reviewing studies on theoretical constructs of language policy, it is necessary to narrow our perspective to foreign language policy in the countries or regions where English is a second or foreign language since the present study focuses on the context of China. In order to facilitate our understanding of English use in different countries, Braj Kachru (1992) constructed the model of three “Concentric Circles” to analyze how English is used in different countries or regions. The details of the model are presented in Figure 2.

¹⁵ **Linguistic heterogeneity** here refers to the linguistic phenomenon that the countries had no established or standardized indigenous written languages before the British colonization. People in different places had difficulties in communicating with each other.

Figure 2: Kachru's "Concentric Circles" Model of World Englishes (1992)



(Source: B. Kachru. (1992). *The Other Tongue: English across Cultures* (2nd.), p. 356)

As shown in the figure above, the “Inner” Circle includes countries representing the traditional base of English, such as the United Kingdom, the United States, Australia and Canada. The “Outer” Circle of countries refer to those countries or regions where English is not the native language but a second language. Most of the countries or regions within the “Outer” Circle are the former British colonies such as India, Nigeria, Hong Kong, Singapore, Malaysia and Kenya. After independence, a large number of post-colonial countries or regions prefer to take English as one of the official languages and largely use English in domains of higher education, legislature, judiciary and national commerce (Harries, 2012). The “Expanding” Circle includes countries such as China, Japan, most of Europe, countries in South America and Egypt, where English is a foreign language. In the countries within the “Expanding” Circle, English is used as a medium of international communication and a tool for gaining knowledge of modern science and technology.

As noted in Section 2.2.1.1, “acquisition planning” is a component of language planning and policy research. Thus, a thorough investigation of foreign language policies in the particular sociolinguistic context involves research on the policy of how a foreign language is acquired for the target linguistic community through education, namely the foreign

language education policy. In the following sections, I will focus on English education policies and practices in countries or regions within the “Outer”¹⁶ and “Expanding” Circles instead of the “Inner” Circle. The objective of English education in countries within the “Inner” Circle is not to teach majority-language students English or use English as a tool for imparting content knowledge to students, but to assimilate ethnic minority students into the mainstream society (Grooms, 2011), which is radically different from the objectives of the present study.

2.3.1 The issue of English education policy in applied linguistics

Compared to voluminous studies on curricular and pedagogical issues within the field of applied linguistics, there have been fewer empirical studies on the nature of foreign language education policy, and the relationship between foreign language education policy and ELT (Pennycook, 1994). Lack of interest in foreign language policy research may result from the education practitioners’ relatively limited knowledge of education policy theory, public policy theory and politics. As Phillipson (1992) points out, the pedagogical issues in most ELT research projects tend to be insulated from the wide educational context, which leads to a serious consequence that current ELT research, overlooks their relationship with the socio-political context (Evans, 2003).

Since Cooper (1989) added “acquisition planning” in the framework of language policy, foreign language education policy has become an integral part to language policy and planning research. Previous research on foreign language education policy has primarily been concerned with English education in the countries within “Outer” and “Expanding”

¹⁶ Although mainland China is within the “Expanding Circle”, I still focus on the history of English education in the countries or regions within the “Outer Circle” as the countries or regions had similar historical background of English education to that of late imperial China in the 19th century.

Circle (e.g. Hamid, 2014; Poon, 2013). As there are not enough internationally popular theoretical frameworks of foreign language education policy¹⁷, recent empirical studies (e.g. Hamid, 2014; Hamid, Nguyen & Kamwangamalu, 2014; Kumaravadivelu, 2008; Song, 2012) have a tendency towards drawing on existing theoretical frameworks from the field of language policy, particularly Spolsky's framework of language policy (Spolsky, 2004), to analyze English education policy in different contexts.

Among the three components of Spolsky's framework (language practices, language ideologies and language management), the "language practices" component, which turns into language education practices within the research field of English education, has drawn much scholarly attention. Previous research has centered on the quality of English education, the impact of English education policy on education practices and pedagogical issues in ESL or EFL classrooms (e.g. Kaplan & Baldauf, 1997; Shohamy, 2006). One of the focused research topics of English education practices is the decision on the MOI (Spolsky, 2004). In any context, policymakers and practitioners are confronted with a difficult choice of appropriate MOI among local varieties or native dialects, standard regional or national languages and foreign languages for students who start formal education at school. Fierce debate or controversy over the choice of MOI in foreign language policy is a common topic in most relevant studies. In Section 2.3.4, a review of previous studies on the choice of MOI in countries or regions within the "Outer" and "Expanding" Circles will be detailed. Apart from the controversial topic of MOI, previous scholarly attention has also been paid to other important topics of foreign language education practices including when to start learning English, how much time should be devoted to the curriculum for ELT and which threshold

¹⁷ As mentioned in Section 2.2.3, Shen's Framework of Foreign Language Education Policy (2012) has only the Chinese version. Thus, it has not drawn the scholarly attention from the western academia.

of English proficiency should learners attain before taking EMI courses (Choi, 2016; Yazejian, Bryant, Freel & Burchinal, 2015).

For the policymakers' language ideologies behind their decisions, a substantial body of empirical studies (e.g. Wright, 2004; Ricento, 2006) show that linguistic imperialism, globalization and national identity are the three prevailing ideologies imposed by the policymakers. These studies have examined the relationship between language ideologies and English education policies, revealing how policymakers' attitudes towards English education affect their policymaking process. The representative studies will be, categorized by topic, detailed in Section 2.3.2 (linguistic imperialism and globalization) and Section 2.3.3 (foreign language policy and national identity).

Previous research has overlooked the dimension of language management in the spectrum of language policy. Few studies have centered on the role and power of main actors or agencies in the policymaking process of foreign language education in non-Anglophone contexts. Thus, there are some doubts over whether foreign language education policymaking is a total top-down process or involving bottom-up efforts from schools, teachers and students. Another obvious research lacuna lies in the overemphasis on static analyses of policy discourses with inadequate attention to the dynamic policymaking process as well as the development of foreign language policy over history.

2.3.2 Linguistic imperialism and globalization

Within the field of foreign language education policy, "linguistic imperialism" is the language ideology that has aroused heated debate in the world. The term "linguistic imperialism" was coined under the influence of Critical Theory and Critical Language Policy (CLP) research in the 1970s and 1980s (Foucault, 1979; Gramsci, 1971; Habermas,

1989). Most studies in the field of language policy are concerned with the primary concepts in CLP such as power, struggle, colonization, hegemony, identity and resistance, which lay a solid foundation for the following critical studies on language policy (e.g. Pennycook, 1994, 1998; Phillipson, 1992, 2009; Tollefson, 1991, 2002).

In fact, the earliest attempt to introduce the “linguistic imperialism” ideology to research on language education policy is not from the field of language policy but from historical research on colonial education. Carnoy, one of the earliest researchers who criticize colonial schooling, claims that the imposition of European values through languages and curriculums on indigenous people created the inequality and cultural inferiority among indigenous students in former Asian and African colonies. For the colonizers, colonial language policies were their important weapons to maintain their hegemony over the submissive subjects (Carnoy, 1974). Carnoy’s criticism of colonial education gains support from Kelly and Altbach (1978), who argues that colonial education made a hierarchical social division among colonized people. The local elites who received advanced western education through the medium of western languages became the intermediary class between rulers and the mass, and thus enjoyed a higher social status than those who were denied access to modern education in the colonies.

Phillipson’s (1992) seminal work *Linguistic Imperialism* elaborates on the inequality between the status of western languages and native languages in the colonies, and the social stratification brought by colonial language policy. Although Phillipson claims that his book is mainly concerned with the spread of English after World War II, he also devotes a brief section to the “colonial linguistic inheritance”. He associates the spread of English to post-colonial societies with the development of the British Empire and its colonial language

policy in North America, sub-Saharan Africa, Asia and the Pacific in the 19th and 20th century.

Evidently, Phillipson (1992, 1994, 1996, 1997, 2000, 2003, 2006, 2009) bases his central argument on conspiracy perspective. He attributes the prevalence of English in the current context of globalization to deliberate efforts of the English-speaking countries through associated cultural agencies such as the British Council. Phillipson asserts that the dominance of English in today's world is not an unplanned natural result of a multiplicity of socio-political factors but the achievement of British and American carefully-nurtured bureaucratic management agencies including their governments, civil servants, English teachers, ELT experts and the local social elites in the peripheral countries (Phillipson, 1992). With regard to the impact of linguistic imperialism on language policy, Phillipson (2009) contends that linguistic imperialism privileges the dominant English in the world, marginalizes the native languages in countries within the "Outer" and "Expanding" Circle and forces indigenous people to shift to English. A prime exemplar of Phillipson's linguistic imperialism argument is that post-colonial countries such as most African countries accord a high status to formal colonial languages and attach a marginal status to the indigenous languages (Phillipson, 1996).

However, Phillipson and other critical theorists' analyses of both colonial language policy and the conspiracy theory behind the spread of English are subjected to penetrating critiques (e.g. Brutt-Griffler, 2002; Evans, 2003). Firstly, Phillipson fails to consider multifarious socio-political factors behind the current prevalence of English, which underlies the need for further research on the analysis of the external factors affecting colonial language policy (Bolton, 2008). Rajagopalan (1999) criticizes that the concept of linguistic imperialism involves excessive nationalist fervor and overlooks other factors to the worldwide spread

of English such as the utilitarian value of English and convenience for interracial communication. Thus, there is still a fundamental question as to whether the spread of English to British colonial and post-colonial period results from deliberate efforts of the United States and Britain to impose their colonial language policy or the third world's unconscious inclination to English for economic development, science, technology and modernity. Ricento (2006) maintains that the spread of English is not a one-way direction from the "Inner" Circle to the "Outer" and "Expanding" Circle, but a two-way communication to satisfy the practical demand for English in the countries or regions within the "Outer" and "Expanding" Circle. Clearly, the indigenous people in countries of the "Outer" and "Expanding" Circle have a tendency to embrace the ideology of "English" for national interest, for globalization and internationalization. Thus, it is important for scholars within the field of applied linguistics, as Rajagopalan (1999) suggests, to shift away from the extreme view of linguistic and cultural imperialism, and to understand how the English language is used for different purposes in multiple contexts.

Another limitation of Phillipson's approach lies in its inadequate empirical evidence. His research on colonial language policy lacks the support of primary sources of data, particularly data on colonial education practices, ideologies and language management behaviors of many colonial administrators. His interpretation is mainly built on his "one-sided" intuition rather than objective reasoning, which is not supported by empirical evidence. Probably since there is not enough empirical evidence, some of Phillipson's arguments are even self-contradictory. For example, Phillipson (1992) laments the British imposition of English on vernacular languages in the colonies. However, he is equally critical of the British vernacular-oriented language education policy¹⁸ in their colonies,

¹⁸ The term "vernacular-oriented language education policy" is used to describe the British colonial language policy as some colonies had not established their national languages before the arrival of British.

arguing that the indigenous language-in-education policy is another means of maintaining the inferiority and social stratification of local people (Phillipson, 2009). The contradictory arguments in Phillipson's study raise a question concerning his central argument: does he criticize linguistic imperialism or colonialism itself?

An additional doubt cast on the linguistic imperialism hypothesis is the current prevalence of English education in countries without any British or American colonial history. In response to the doubt, Phillipson and other critical language policy researchers suppose that the force of globalization leads to the monopoly of English in the current world (Bamgbose, 2003; Yano, 2009). Bourdieu (1991) maintains that globalization is a gradual process of Americanization, during which the United States extends its economic and cultural model to the world through the medium of English after World War II. Similarly, after analyzing the impact of globalization on learners' communicative skills, Cameron (2002) argues that American language "experts" have been disseminating American ways of speaking in teaching and marketing "communicative skills", signaling a gradual shift from linguistic imperialism to communicative imperialism in today's globalization context. He also argues that cultural vitality and linguistic diversity in the world may suffer from the combined force of linguistic imperialism, communicative imperialism and cultural imperialism.

Nevertheless, the efforts of promotion do not necessarily entail uptake since the acceptance of a foreign language needs both an absence of ideological resistance to the promoted language and a belief that people will gain practical benefits from acquiring foreign languages (Spolsky, 2012). The two preconditions above for accepting a foreign language in a country corroborate Bolton's (2008) view that it is the indigenous people's demand for

However, for clarity and convenience, the terms "native language" or "native language education" are used to describe students' mother tongue (L1) education in other parts of the thesis.

superior science and technology from English-speaking countries that accelerates the spread of English to countries or regions outside the Anglo-sphere. Therefore, as Mufwene (2008) suggests, to curtail the influence of English in the world necessitates altering the market ecology and making political intervention in the language policymaking process. The direct intervention can be reflected in many national and supranational organizations' efforts in formulating national or regional language policies such as the policy of EU on promoting linguistic diversity in Europe to curb an excessive focus on English in education systems (Gazzola, 2006).

2.3.3 Foreign language policy and national identity

A language ideology against linguistic imperialism is nationalism, a leading and primary ideology of language policy in the 19th and 20th century (Hemat & Heng, 2012; Spolsky, 2004). As discussed in the previous section, globalization accelerates the spread of English and establishes English as a global *lingua franca*. However, globalization may also undermine the indigenous language in countries or regions within the “Outer” and “Expanding” Circle if not properly handled and intervened (Nettle & Romaine, 2000), which poses a threat to both national identity and linguistic diversity in the places.

In the last three decades, much scholarly attention has been devoted to the relationship between national identity and language policy (e.g. Anderson, 2016; Bauman & Briggs, 2003; Greenfeld, 1992; Ricento, 2006). Ehala (2015) considers the ethnolinguistic vitality as an important marker of identity in a linguistic community at a national or regional level. It is thus desirable that leading actors or agencies should seek a balance between developing foreign language education and maintaining national identity when they make decisions on the use of foreign languages in a linguistic community.

Before moving to the detailed discussion on conflicting ideologies between globalization and national identity in language policy, it is necessary to examine various types of nation-states and their diverse linguistic ecology in order to understand the exact meaning of “national identity”. Spolsky (2004) lists three types of countries in the world based on the number of national languages and dominating ethnolinguistic groups. The first type of countries are those ethnolinguistically homogeneous countries that have only one national official language (e.g. China). The policymakers in the countries assume that a unified national language should be selected and standardized. Though there are some linguistic minorities in the countries, the minorities are usually perceived as small and insignificant, resulting in a socially- and geographically-marginalized situation for minority groups. The second type of countries are the dyadic (or triadic) countries where two or three dominating ethnolinguistic groups. Those countries thus have two or three national languages, Typical examples are Switzerland, Belgium and Canada. The third type of countries are mosaic societies with more than three dominating ethnolinguistic groups in a country. Typical examples are Nigeria, India and Papua New Guinea.

In light of differences in the linguistic ecology of countries, there is no universal model of language policy applicable to all types of countries. However, as recommended by Cooper (1989), the two main dimensions of language planning — status planning and acquisition planning, are basic means to structure people’s language practices. Specifically, status planning refers to government actions to establish the respective status of the national language, local varieties of national language or ethnic minority languages as well as foreign languages. Under the influence of nationalist movements in Europe in the 19th century, the “one nation, one people, one language” model became widely accepted by most European democratic countries and was later exported to other parts of the world (Stewart, 2016). The model requires language policymakers to establish a standardized written

language as the dominant language and to assimilate the ethnic minority groups of people into the mainstream society in order to maintain national identity of the whole country (Spolsky, 2004). Ricento (2006) argues that the “one nation, one people, one language” model fits the countries with only one official language, but it cannot easily be adapted to dyadic or triadic countries where people in their respective linguistic communities enjoy high autonomy and have no single and standardized national language. In particular, the model has been proved problematic in most post-colonial countries (Spolsky, 2012). The policymakers in Asian and African newly independent countries harbor the desire to mark their national identity and break away from their colonizers’ language influence (Canagarajah, 2005). However, after years of futile efforts, they realize that it is not accepted by people living in other linguistic communities to enshrine the language of one ethnic group as the dominant language (Sinfreeb, Busi & Pedzisai, 2006). Thus, those language policymakers in the post-colonial countries are faced with a difficult choice of either preserving the language of their former colonial power as the official language or choosing a regional lingua franca (Pan, 2010).

If we review previous research on language acquisition planning, we find that the locus of controversy lies in the status and role of English and the native language in the countries or regions within the “Outer” and “Expanding” Circle. It is a seemingly irreversible trend that English is becoming a major lingua franca in the global world, which penetrates in the education system of every country. Nevertheless, the nation-state ideology in those countries within the “Outer” and “Expanding” Circle resists the idea that English should take precedence over other languages (Billig, 1995; Carroll, 2001). Saraceni (2010) suggests that in order to maintain national identity, countries should prioritize native language acquisition in language education policy and view English as an additional language on the language education curriculum. The functions of English and the objectives

of English education should also be more specific to link with other fields such as commerce, trade and science to prioritize the utilitarian value of English education (Jensen, 2007).

The two aspects of language planning (status planning and acquisition planning) are possible ways to maintain national identity for the countries in the “Outer” and “Expanding” Circle. Nevertheless, a multiplicity of competing forces such as globalization and the worldwide spread of English also affect the language policies adhering to nation-state ideology (Carroll, 2001; Coupland, 2010). Apart from external pressures, internal factors such as the struggle for ethnic minority language rights, calling for multilingualism and diverse sociolinguistic situations within a country are all essential socio-political or socio-cultural variables for an appropriate foreign language policy (Ricento, 2006). For instance, considerable disparities in sociolinguistic situations between China and the post-colonial countries lead to different preconditions for language policymaking. In China, it is much easier to promote a strong national ideology against foreign linguistic and ideological influence and to maintain national identity through establishing a standardized written language for all nationals. While for the post-colonial countries, an absence of a dominant national language necessitates a more careful and deliberate design of native language education (McGlynn, 2013).

2.3.4 Controversy over the choice of MOI in language policy

In Spolsky’s (2012) framework of language policy, the three components (language ideologies, language practices and language management) are closely interrelated and interdependent that constitute a certain language policy in a sociolinguistic domain. Language users, who had formed their language ideologies or beliefs within a certain sociolinguistic community, frequently make their own decisions on the issues of which language should be used for a purpose, which directly affected language practices in

people's daily life. When policymakers find it necessary to regulate people's language use in a certain domain, they often intervene in language practices through explicit language management (Feng & Adamson, 2018).

As shown in previous studies, in countries within the "Outer" and "Expanding" Circles one of the most debatable issues concerning language management in the domain of schools is policymakers' decision on which language (s) should be used as the main MOI (Aceme, 2015; Early & Norton, 2014; Tollefson & Tsui, 2004).

Since the world is a multilingual place, even those countries with only one official language cannot break away from the influence of other languages, particularly the prevalence of English in today's world (Walter & Benson, 2012). Thus, most contemporary speech communities have to ponder over the roles of different languages in schools, a main formal domain for language acquisition. Spolsky (2012) claims that nearly 40 percent of people in the world are negatively affected by inappropriate MOI policy. Although Spolsky chooses not to reveal the source of data, in recent literature there has been a growing scholarly interest in exploring the MOI in countries or regions within the "Outer" and "Expanding" Circle, such as most African and Asian countries (e.g. Hamid, Jahan & Islam, 2013; Kirkpatrick, 2012; Kung, 2013; Poon, 2013).

These studies have revealed a complex picture involving two diametrically opposing views of MOI at schools: using students' mother tongue as the MOI and EMI. The strongest support for using mother tongue as the MOI is UNESCO statement in 1953. Evans (2009) maintains the decisions of MOI are relatively easy to make if they are only considered from the pedagogical perspectives since mother tongue is the most efficient and ideal medium for teaching content subjects. Other convincing arguments for the use of students' mother

tongue as the MOI include its benefits of curtailing educational expenditure (Bruthiaux, 2002), creating and maintaining national identity (Moseley & Nicholas, 2009; Skutnabb-Kangas, 2000), respecting minority language rights (May, 2001) and maintaining educational equality (Mohanty, 1990).

Contrary to the viewpoints of using students' mother tongue as the MOI, supporters of EMI perceive it as an invaluable means to facilitate international communication, boost students' employment prospects, acquire cutting-edge knowledge of modern science and technology, and address the need of globalization (Albo & Anaya, 2003; Breton, 2003). As English is an important language of tertiary education in many countries within the "Outer" and "Expanding" Circle, EMI becomes a practical option for language policymakers, which arouses increasing scholarly debate between the use of mother tongue as the MOI and EMI in diverse contexts (Cenoz & Gorter, 2008).

The MOI policies in different countries or regions are diverse. In the developed European countries, language policymakers have a tendency towards educating their majority-language populations, or sometimes their minority-language ones in their mother tongues in order to achieve better pedagogical results and maintain national identity (Slobodanka, Kristina & Christian, 2015; Spolsky, 2012; Tamtam, Gallagher, Olabi & Naher, 2012). However, what makes it more complicated is the issue whether "mother tongue" refers to the national language, minority languages or local dialects. Despite constant demands for minority language rights and language diversity from some supra-national organizations such as the European Union, the language ideology of "one nation, one people, one language" compels language policymakers to view the dominant national language as the first choice in formal education settings, except in tertiary education (Ali Fuad, 2014; Coleman, 2006; Ricento, 2006).

For the developing African and Asian countries, ample evidence has indicated that level of education is an important variable in addressing the issue of MOI. There is an emerging consensus on choosing the mother tongue as the MOI at primary schools and adopting EMI at tertiary institutes (e.g. Bolton, 2012; Howe, 2002; Kirkpatrick, 2012). In most African and Asian countries or regions, the idea to adopt EMI in tertiary education is based on the rationale of raising the international profile of universities, producing graduates with international competitiveness and facilitating their communication with the outside world (Albo & Anaya, 2003; Gill, 2004). However, although the benefits of EMI have been recognized at most African and Asian universities, there are also criticisms over some pedagogical issues of EMI in some cases. EMI at Chinese universities was found to result in students' misunderstanding of subject knowledge, as most students had not reached the linguistic and cognitive threshold level and teachers found it difficult to explain abstract subject matter in English (Hu, Li & Lei, 2014). The opposition to EMI is also evident in other similar studies conducted in Asian and African contexts (e.g. Afungmeyu, 2014; Trent, 2012), which demonstrates the dilemma for language policymakers in seeking a balance between the use of mother tongue as the MOI for pedagogical benefits and EMI for socio-political concerns.

At the other extreme, with respect to primary education, policymakers in most Asian countries or regions without the colonial history prefer to choose the mother tongue as the MOI (Ricento, 2006). A complexity lies in the post-colonial countries such as India, Malaysia and Singapore where language policymakers have to choose the colonial language (English in most cases) as the MOI at primary schools. The primary reason for EMI is that their multilingual linguistic ecology may destabilize those newly independent countries if they choose one language of an ethno-linguistic group as MOI at the expense of languages

in any other ethno-linguistic groups (Tibategeza & Plessis, 2012). Thus, English functions as a neutral language in such contexts.

Another reason for EMI at primary schools of most post-colonial countries is connected with the worldwide trend of globalization and social advancement. Despite the constant voices for minority language rights, English has been continually the preferable MOI in the post-colonial countries since it is a major lingua franca in the world and a language of social progress. Alidou (2004) points out that the choice of EMI also results from the fact that some African countries lack comprehensive corpus planning of their native languages in the aspects of language purification, stylistic simplification, terminology standardization and lexical modernization.

Despite the benefits of EMI, some scholars criticize that EMI at primary schools leads to some negative social consequences. Spolsky (2012) asserts that EMI widens the social stratification between the poor people who have limited access to EMI and the urban middle class who acquire capital and superior social status from their English linguistic repertoire. In reality, the social stratification brought about by EMI is not confined to post-colonial countries but also in countries such as China. It was found that students who receive EMI at an early stage are likely to enjoy higher social prestige and have better employment opportunities in the future than those who receive Chinese-medium instruction (CMI) at schools (G. W. Hu, 2007).

The most heated debate on MOI in African and Asian countries or regions lies in the controversy of MOI at secondary schools. Secondary education functions as a transitional period from mother tongue instruction at primary schools to EMI at tertiary institutions (Lin & Morrison, 2010; Lo & Macaro, 2012; Walker, 2010). Hong Kong, as a typical example,

had a relatively inconsistent language policy on MOI at secondary schools during the decolonization period, which aroused fierce debate and harsh criticisms from the Hong Kong society. After Hong Kong's handover to the People's Republic of China in 1997, the Hong Kong government reversed the original British laissez-faire approach to MOI (Kirkpatrick, 2012) and mandated Chinese as the MOI in most secondary schools except for the original EMI schools which met the rigid standards to continue EMI (Evans, 2009). Not surprisingly, the coercive language policy met bitter opposition from parents and students who desired to receive EMI as a cornerstone to social mobility in Hong Kong (Evans, 2010). In 2007, the government modified the CMI policy and released the *Fine-tuning the Medium of Instruction for Secondary Schools*, which set no stringent regulations or mandates on the MOI in secondary schools.

The change of MOI policy in Hong Kong reflects a common dilemma and an “implicit” battle in most African and Asian secondary schools between the policymakers' nation-state ideology and the masses' desire for utilitarian value of English at the secondary level of education (Baldauf & Nguyen, 2012; Hamid, 2014; Heugh, 2009; Ho & Wang, 2003; Hossein & Tollefson, 2007; Poon, 2013). It confronts the policymakers with a difficult yet crucial issue of accommodating both pedagogical factors and socio-political factors in their policymaking process of MOI (Evans, 2009). The inconsistent MOI policies at secondary schools in Hong Kong and other similar contexts also point to a new direction of empirical research on more specific topics such as when to start EMI and how to design a balanced bilingual curriculum to satisfy people's need for English education and maintain national identity at secondary schools (Singleton & Ryan, 2004).

A consensus has been reached among scholars that in some cases there is the disparity between MOI policy and actual practices in educational delivery (e.g. Kim, Kweon & Kim,

2017; Poon, 2013). In English-medium courses, the use of code switching¹⁹ and code mixing frequently occurs when students fail to understand content knowledge in English (Bernard & McLellan, 2014; Maurizio, 2015; Moghadam, Samad & Shahraki, 2012). However, it is found that government administrators have different attitudes from students and teachers towards code switching and code mixing. The government agencies criticize the code switching as a hurdle to students' development of English proficiency (Lin & Martin, 2005). However, students, teachers and other EMI practitioners view it as a useful pedagogy in facilitating students' absorption of content knowledge (Cleghorn & Rollnick, 2002; Poon, 2013). The diverse viewpoints on code switching signal a pedagogical difficulty in English-medium courses, which inspires the policymakers to be wary of their decisions on MOI and to take account of pedagogical feasibility and effectiveness as an important variable in the policymaking process (Donnacha, 2002).

Due to space constraints, the section of literature review only focuses on some studies on MOI policies and practices in countries or regions within the "Outer" and "Expanding" Circle. Many variations in multiple contexts are indeed worth noting and analyzing since MOI is a highly context-bound issue. Nevertheless, by reviewing the studies on MOI, we can find that in countries within the "Outer" and "Expanding" Circle, the controversy over MOI results from the overarching conflicting language ideologies between maintaining national identity and pursuing modernity. Language policymakers are thus struggling with making decisions on MOI to achieve better pedagogical results and in the meantime accommodate the socio-political factors including religion, nation-building process, colonial influence, economic advancement and social stratification.

¹⁹ "Code switching" here refers to resorting to students' mother tongue frequently in EMI class.

2.3.5 The emergence of bilingual education

The controversy over the MOI further develops into a mounting concern for new ideologies or educational approaches to resolving the battling question, or at least mitigating ideological conflicts in MOI policy. “Bilingual education” has been recognized as a problem-solving approach to seeking a balance between deriving the utilitarian benefits of English education and maintaining national identity by native language education in countries or regions within the “Outer” and “Expanding” Circle (Cummins, 2001; Hashimoto, 2007; García & Beardsmore, 2009).

2.3.5.1 Definitions of bilingual education

Corson (1992) posits that it is virtually impossible to give a universally acknowledged definition of “bilingual education” since it carries different connotations in different contexts. Thus, there is a need to re-clarify definitions of “bilingual education” in the present study before reviewing studies on bilingual education in the world.

In the *Encyclopedia of Language and Education*, “bilingual education” is defined as the use of two languages for students’ learning in schools. The purpose of bilingual education is not to teach a language as a subject, but to use languages as MOI to impart content knowledge to students (Edwards & Corson, 1997). However, the definition fails to pinpoint the time and amount of two languages used in bilingual classrooms. It is still yet to know whether the two languages should be used simultaneously or alternatively in classrooms. As defined in *The International Encyclopedia of Education* (1994), the two languages are not necessarily used simultaneously or alternatively in the same semester, but they can be used in the full education period of any learner. For instance, students’ mother tongue is chosen as the MOI in Grade 1 and the second or foreign language is chosen as the MOI in higher grades.

Longman Dictionary of Language Teaching and Applied Linguistics (2002) gives a narrower definition of bilingual education: in bilingual education practices, students acquire content knowledge through a second or foreign language. To be more specific, Hamers and Blanc (2000) define “bilingual education” as an approach to using two languages as the MOI for different subjects in schools.

In view of the objectives of the present study, “bilingual education” here is close to Hamers and Blanc’s (2000) definition. It refers to the use of foreign languages as the MOI for content subjects and the use of Chinese as the MOI for Chinese-related subjects in schools with a dual educational goal of imparting subject knowledge to majority-language students in mainland China and improving their foreign language proficiency. Thus, the literature review in this part is mainly concerned with theoretical and practical developments of bilingual education targeting majority-language students, namely Chinese-English bilingual education. The studies on bilingual education for ethnic minority groups in China are not included in the literature review.

2.3.5.2 Bilingualism and cognitive development

Before moving to previous studies on bilingual education, it is necessary to analyze theoretical foundations of bilingual education and its benefits to individuals. Within the field of psychology, some researchers attempt to explore the relationship between bilingualism and cognitive development. Ellen Bialystok, one of the pioneering scholars in this field, has conducted a large number of experimental studies to compare the behaviors of bilingual and monolingual children and adults. She found that though bilinguals were slower in retrieving lexical items than monolinguals (Bialystok, 2011; Sullivan, Poarch & Bialystok, 2018), they had obvious advantages over monolingual counterparts in the aspect

of executive control (Bialystok, 2001; Bialystok, Craik & Luk, 2012). Previous empirical studies have also found that the development of bilingual competence exerts a positive impact on children's divergent thinking (Alexanda, 2016; García, 2007; Zheng, 2014) and metalinguistic awareness (Bialystok & Barac, 2012; Cheung et al., 2010; Ter Kuile, Veldhuis, Van Veen & Wicherts, 2011). Bialystok, Craik and Luk (2012) posit that because bilinguals have to shift between two languages constantly and select proper words from one language and filter competing information from the other language, they will have more practices in using multiple components of their behavioral control at the same time. Nonetheless, their supposition is not confirmed as researchers have not found concrete scientific evidence to account for the difference between behaviors of bilinguals and monolinguals. Nor have they identified a special mechanism in the neural system of bilinguals to control their behaviors.

It is worth recalling that Bialystok and other western scholars only chose balanced bilingual participants in their experiments. As those participants were raised in the bilingual environment and used the two languages on a daily basis, they were highly likely to be competent in two target languages. Thus, it should be cautious to apply the results of their studies to the context (such as China) where most people may not become balanced bilinguals since they have few opportunities to use the foreign language frequently in their daily life (Hu, 2008).

2.3.5.3 Main types of bilingual education

Among various categorizations of bilingual education, Baker's (2006) typology has been widely accepted in the academia. Baker categorizes bilingual education into ten main types of programs according to target students, choices of MOI, educational objectives and sociolinguistic ecology of the countries or regions. According to Baker's typology, three

types of programs, including “Mainstream with Foreign Language”, “Immersion” and “Mainstream Bilingual”, target only majority-language students. However, it is difficult to apply those types of bilingual education to China or other Asian countries within the “Expanding” Circle since Baker’s research focuses on the western contexts (the countries within the ‘Inner’ Circle in particular), which has different socio-political contexts from China.

Some scholars maintain that in almost all East Asian countries with only one official language, the rationale for bilingual education practices has much in common with the concept of “additive bilingual education”²⁰ (Latham, 1998; B. H. Wang, 2003; Hamid, Nguyen and Kamwangamalu, 2014). The main objective of additive bilingual education is to develop students’ foreign language proficiency while not to thwart the development of students’ native language proficiency (Tuafuti, 2010; Xiao, 2016).

In additive bilingual education practices, both foreign languages and the mother tongue are used as the MOI from the beginning to the end of education. As Le Mottee (2008) found, learners who had been taught in their mother tongue up to the end of primary schools (6 years) performed better than their counterparts who lost the mother tongue proficiency in subtractive and transitional bilingual education. However, though the model of additive bilingual education is conceptually similar to bilingual education in China and other East Asian countries, the main purpose of additive bilingual education is confined to developing students’ proficiency of two languages instead of imparting expertise to students through the medium of two languages (Gao & Park, 2012; Hu, 2009). Therefore, the models of

²⁰ The “additive bilingual education” concept was introduced by Peal and Lambert (1962) and the education programs of additive bilingual education were further studied in various contexts (e.g. Baker, 2006; Koch, 2015).

additive bilingual education may not be directly applied to China or other similar contexts, and it is necessary to seek other feasible models that are based on the dual educational objectives of imparting content knowledge to students and improving their language proficiency.

2.3.5.4 The education model of CLIL

Content and Language Integrated Learning (CLIL) is a pedagogical model to combine foreign language teaching with content knowledge teaching (Murphy & Stoller, 2001), which bears many resemblances to bilingual education in mainland China.

The term “CLIL” was coined by David Marsh from University of Jyväskylä in Finland to analyze students’ behaviors of acquiring subject expertise through foreign languages in Europe (Marsh, 2002). CLIL theorists and practitioners view language and content to be an indivisible entity throughout the educational process. In contrast to the program of “Immersion Bilingual Education” that is carried out in learners’ own linguistic ecology such as their home or living community, the MOI in CLIL model is a foreign language with which most learners may only have contact in formal educational contexts. Another major difference between “Immersion Bilingual Education” and CLIL is that most immersion programs require learners to start bilingual education at an early age, but a CLIL program is designed to develop students’ language skills and enhance their understanding of content knowledge after they complete traditional foreign language education at primary schools (Lasagabaster & Sierra, 2010).

There is an emerging consensus among scholars on the unique benefits of CLIL (Llinares, Morton & Whittaker, 2013; Whittaker & Llinares, 2009). Having examined the historical development of CLIL and the case studies on CLIL in Europe, Coyle (2008) maintains that

the application of CLIL is conducive to enhancing motivation for both teachers and students. For teachers, cooperation with colleagues from other subjects or fields provides them with more opportunities to work across curriculums and afford them a sense of achievement when they are engaged in curriculum design (Urmeneta, 2013). For students, the stimulating content-based tasks increase students' interest in learning foreign languages, which offers a sharp contrast to students' low motivation for traditional grammar-based EFL courses (Coyle, Hood & Marsh, 2010).

The application of CLIL in education practices has stimulated a growing scholarly interest in Europe in the last two decades (e.g. Cañado, 2016; Merino & Lasagabaster, 2018; Eurydice, 2006; Pérez-Vidal & Roquet, 2015). Most empirical studies have centered on the impact of CLIL on students' acquisition of foreign languages and content knowledge. Some scholars found that after CLIL practices, learners achieved similar educational results in the acquisition of content knowledge compared to traditional teaching conducted in students' mother tongue (Dallinger, Jonkmann, Hollm & Fiege, 2016; Lasagabaster & Sierra, 2009; Lorenzo, Casal, Alba & Moore, 2007). In some post-experimentation tests, students demonstrated better skills in problem-solving tasks since they were engaged in challenging tasks requiring their problem-solving skills, patience and tenacity towards frustrations and challenges (Surmont, Struys, Noort & Craen, 2016; Van deCraen, Ceuleers, Lochtman, Allain & Mondt, 2007). However, some conflicting findings reveal that a poorly managed CLIL practice even leads to detrimental effects on students' learning (Dalton-Puffer, 2008). The diverse experimentation results in previous studies demonstrate the complexity in implementing CLIL in different contexts and necessitate more context-bound studies on the link between CLIL and students' acquisition of content knowledge.

CLIL aims to develop students' foreign language proficiency (communicative competence in particular) since they are open to more negotiated interactions in CLIL tasks (Vidal & Roquet, 2015). Specifically, CLIL is believed to improve students' vocabulary knowledge and help them achieve fluency in communication while their competency in syntax, pronunciation and writing may not be impacted if the aspects are not emphasized in CLIL tasks (Vollmer, 2007; Xanthou, 2011). However, a few scholars argue that previous studies on the positive impact of CLIL on students' language learning only concentrate on CLIL programs in secondary education (Dalton-Puffer, Nikula & Smit, 2010), which necessitates more in-depth studies on the impact of CLIL on students' language learning and subject learning at various levels of education and in various educational contexts.

Apart from the studies on unique benefits of CLIL on learners, recent empirical studies are more concerned with the implementation of CLIL in classrooms including task design (Llinares & Dalton-Puffer, 2015; Nikula, 2015), language use (Dalton-Puffer, Nikula & Smit, 2010), teacher-student interaction (Dafouz & Hibler, 2013; Mariotti, 2006), assessment methods (Koch, 2015) and teacher training (Cenoz, 2015). An extensive investigation of those micro-pedagogical issues relating to CLIL yields practical insights into Chinese-English bilingual education since CLIL and bilingual education in China have many commonalities in the aspects of educational objectives and curriculum designs. The following section will present a review of recent studies on bilingual education practices in China.

2.3.5.5 Current bilingual education practices in China

The idea to develop Chinese-English bilingual education in mainland China was promoted in the early 21st century when the national education policy *Strengthening Undergraduate Teaching and Improving Teaching Quality in Universities and Colleges* was promulgated.

The policy prescribes that great efforts should be taken to make it possible for the percent of English-medium courses in universities to reach from 5 to 15 percent within three years in the field of information technology, biological technology, finance and law. Since the enactment of the education policy in 2001, the next 15 years have witnessed a multitude of bilingual practices in tertiary education in China, which also stimulates voluminous research on Chinese-English bilingual education practices. By topic of research, the studies can be roughly categorized into two types:

- (1) Models of bilingual education in China.
- (2) Pedagogical issues of bilingual education in China.

A large number of Chinese scholars (e.g. Feng & Xu, 2012; Yang, 2004) view transitional bilingual education, maintenance bilingual education and immersion bilingual education as the three models most widely used in Chinese contexts. All these three models use English as the MOI but differ in proportional distribution of EMI. In transitional bilingual education models, Chinese is still the dominant language used in class while English is used for explaining concepts, formulas and definitions of terminologies. The maintenance bilingual education model requires a larger proportion of EMI in class while Chinese only occupies 10% - 50%. By comparison, the immersion bilingual education requires the exclusive use of English as the MOI.

Clear-cut as the model classification may seem on the surface, Hu (2008) argues that the three models have different meanings in western and Chinese contexts and may sound misleading to western scholars. Maintenance bilingual education in western academia, for example, refers to the model of education requiring minority-language groups of people to preserve their minority language but in the meantime to learn the dominant language of majority language groups. However, in the context of Chinese-English bilingual education,

it targets the majority-language groups of people. The goal of maintenance bilingual education in mainland China is not to preserve a minority language or the cultural identity of minority-language students, but to develop majority-language students' limited bilingualism and promote their learning of English. The conceptual ambiguity of "maintenance bilingual education" in Chinese and western senses suggests that some Chinese researchers have a tendency towards borrowing the terms of bilingual education in western multilingual societies to describe the model of bilingual education in China. Apart from the direct borrowing of western labels and terms, some Chinese practitioners of bilingual education apply the western models of bilingual education such as the Canadian-style immersion model to China with inadequate attention to the considerable contextual disparity between the two countries. A direct transfer of the western immersion programs has resulted in the confusion of some practical issues such as the starting age of English immersion and the amount of time allocated to immersion in mainland China (B. H. Wang, 2003). It is thus necessary for future scholars and practitioners to coin clear and precise Chinese terminologies to describe the Chinese-English bilingual education and to take full account of China's educational context before designing bilingual education programs.

The second major focus of research on bilingual education in China is micro-pedagogical issues in bilingual education practices. Given the diverse and complicated socio-political context beyond Chinese-English bilingual education, it can be understood that bilingual education in China encounters enormous challenges and constraints. The major challenges include: (1) a shortage of appropriate teaching materials (e.g. Tong & Shi, 2012; Zhang, 2007), (2) insufficient teachers who are capable of teaching content subjects in English (e.g. S. C. Gu, 2004; Wang, 2014), (3) students' weak foundation in English (e.g. He, Xu & Zhu, 2011; Dong & Du, 2013) and (4) absence of objective assessment or evaluation methods (e.g. Song, 2011; Xia, et al., 2017).

Specifically, in the bilingual education practices in mainland China, the authentic teaching materials from foreign countries hamper teachers and students' understanding of the content, and there are inadequate teaching materials compiled by Chinese teachers (Tong & Shi, 2012). With respect to teacher employment and training in the bilingual education practices, most practitioners in China's bilingual education are either language teachers who lack in-depth understanding of content knowledge or content subject teachers who lack basic knowledge of English language teaching. Furthermore, few effective pre-service and in-service teacher training sessions are held for developing Chinese teachers' knowledge of bilingual education and the essential teaching skills (Wang, 2014). Concerning students' English foundation, most students have not yet reached a requisite threshold level of English proficiency, so they find it difficult to understand content knowledge lectures delivered in English (He, Xu & Zhu, 2011). Similar to the problems of CLIL practices in Europe, assessment is a thorny problem to examine the effectiveness of bilingual education in mainland China. Because of the close and intangible link between content and language, few reliable and effective assessment methods are formulated to test students' content knowledge and their English proficiency respectively through an examination paper (Hu, 2008; Song, 2011).

Probably due to the pedagogical problems, the envisioned positive effects of bilingual education on students' English competence and content learning have been questioned. Some scholars found that the Chinese students who had received EMI for one or two years did not outperform their counterparts in Chinese-medium programs in English proficiency tests or content knowledge examinations (Lei & Hu, 2014; Song, 2007). The bilingual education has also been criticized to perpetuate inequality among the students as only a few elite students who acquire an accepted English proficiency and who are able to pay for the

higher tuition of bilingual education can enjoy the envisioned positive benefits (Hu, Li & Lei, 2014). Despite the fact that those empirical studies still need more longitudinal investigations to examine the long-term effects of bilingual education on students, they advance our understanding of the wider educational context beyond bilingual education in mainland China. It thus highlights a need to focus on a deeper analysis of socio-historical, geopolitical, economic, cultural and educational factors beyond bilingual education in China.

In summary, previous research on the pedagogical aspects of bilingual education in today's China has examined how current bilingual education practices are carried out and what the practical challenges for bilingual education are in mainland China. However, most of the studies tend to view "bilingual education" as a static issue, and thus overlook the diachronic development and historical continuity of bilingual education. Do all those pedagogical problems only exist in today's practices? Are there any precedents of education practices in history that may provide them with insights into handling the problems? A historical perspective on bilingual education in China is needed to reveal how the problems were created in history and developed over years.

2.4 Historical studies of English education policies and practices in the 19th Century

As shown in the review of studies on current Chinese-English bilingual education, a wholesale borrowing and application of western models of bilingual education such as dual language/two-way immersion model with inadequate attention to China's context has constituted challenges to the development of bilingual education in mainland China (B. H. Wang, 2003). Thus, there is an overriding need to extend our temporal perspectives to gain valuable insights from China's historical precedents, which also helps us to examine how

the current conflicts of language education policies are grounded in history and seek alternatives to the problems of current education practices (Stern, 1983).

Apart from extending our temporal perspective to China's historical precedents, it is also important to extend our geographical perspectives on English education in other countries with similar sociolinguistic contexts during the same historical period. The reason for drawing reference to the history of English education in other places is that the historical development of English education in China is not an isolated island but is closely linked with English education policies and practices in other countries or regions within the "Outer" and "Expanding" Circle. Thus, a brief review of historical studies on English education in other contexts will provide a detailed comparison and contrast in English education between China and other countries over history.

2.4.1 A vanishing sense of history in studies of English education

In contrast with the strong scholarly interest in current English education policies and practices, there is an absence of historical awareness and historical studies within the field of applied linguistics and ELT. Stern (1983) criticizes applied linguists for their lack of historical awareness of ELT and expresses his pity for the inevitably "short memory" (p. 76) of ELT theory. The vanishing sense of history in applied linguistics and ELT leads to serious consequences that practitioners have no knowledge of education history and may fall into the same historical trap, miss the best time to remedy or at least mitigate mistakes in the past (Howatt & Smith, 2014). To chart a history of English education also facilitates our prediction of future patterns or trends of the critical issues in applied linguistics and ELT (McLelland & Smith, 2014).

Responding to Stern's call for a historical shift in applied linguistics, a small handful of historical studies on ELT in continental Europe have appeared in the last two decades (e.g. Glück, 2013; Howatt & Smith, 2002; Howatt & Widdowson, 2004; Smith, 2003, 2005). However, non-European historical traditions on ELT appear to be largely unexplored by western academia (Howatt & Smith, 2014). These studies have revealed a partial picture or certain facets of ELT in the 19th century when English rapidly spread to the world and became entrenched in national curriculums of many countries or regions within the "Outer" and "Expanding" Circle.

Previous historical studies have shown that there was a tendency to blur the conceptual boundary between EMI and ELT in the 19th century because earlier language education policymakers, administrators and practitioners were not aware of distinctions between EMI and ELT. Thus, in the following sections, "EMI" and "ELT" are subsumed in a more general and all-embracing category called "English education" in order to give a comprehensive review of historical studies on English education in countries or regions within the "Outer" and "Expanding" Circle in a coherent manner.

Before reviewing studies on the history of English education in the world, it is still necessary to return to the beginning of this chapter — Spolsky's framework of language policy that includes language ideologies, language practices and language management. Though it may not be appropriate and justifiable to apply modern theories to explaining the historical precedents because of the enormous contextual disparities between history and today, Spolsky's framework at least provides us with major themes and directions for exploring historical insights. In the following review of historical studies on English education in the world, the focus will be on two fundamental questions: (1) What were the guiding language ideologies behind English education policies in history in the target

educational contexts? (2) How did English education practices in the countries or regions within the “Outer” and “Expanding” Circle change over time and how were the changes in English education practices tied to the language ideologies in historical periods? In spite of the fact that previous studies may not provide straightforward answers to all the questions above, these studies will be cross-referenced and summarized in the following literature review.

2.4.2 Formal English education in the world in the 19th century

At the beginning of the pioneering work *A History of English Language Teaching*, Howatt and Widdowson (2004) summarize the reasons for the worldwide spread of English:

“The spread of English round the world in the wake of trade, empire-building, migration, and settlement has ensured the teaching of English as a role, sometimes central, sometimes peripheral, in the educational history of virtually every country on earth.” (p. 2)

Howatt and Widdowson’s introductory remark reveals the complexities and variations of English education development in various geographical contexts since the 18th century. Given the complexities and changes across multiple contexts and chronological periods in history, the focused temporal period in the section of literature review is narrowed down to the 19th and early 20th century — the same historical era as late imperial China in the present study. With respect to the domain of English education, the focus of literature review in the section is on formal English education practices in domain of schools instead of other domains such as family and workplace because the present study targets bilingual education policies and practices in school systems.

A further division of literature review in this section is made on the geographical scale. The first part of this section gives a review of studies on English education in continental Europe in the 19th century, shedding light on how English education originated and developed in continental Europe in the 19th century. The second section centers on studies of English education in the non-settler British colonies, namely, the countries or regions within the “Outer” Circle (such as Hong Kong) in the 19th century. The final section concentrates on the history of English education in countries of East Asia (such as Japan) in which British Empire did not establish formal colonial control.

2.4.2.1 English education in continental Europe in the 19th century

Howatt’s book *A History of English Language Teaching* (1984) is one of the pioneering works on the history of ELT. The book does not explicitly identify the geographical scope of ELT, but almost all his historical accounts center on continental Europe. Howatt’s initial investigation illuminates our understanding of the early ideas that have influenced and shaped ELT in continental Europe during the 19th century.

Since the publication of Howatt’s scholarly work, research goes some way fulfilling Stern’s call for historical research on English education in continental Europe. The following three decades have witnessed a few studies on the historical development of ELT methods in continental Europe (e.g. Cowie, 1999; Howatt & Smith, 2000, 2002, 2014; Larson-Freeman, 1986; Richards & Rogers, 1986; Smith, 1999, 2003, 2005; Weir, Vidakovic & Galaczi, 2013).

Many European scholars (e.g. A.P.R. Howatt and Richard Smith) have paid their attention to the methodological development of English education in continental Europe. Drawing on the primary sources of data instead of handed-down hearsay, Howatt and Smith (2014)

give an account of English education in continental Europe from the 1750s to the present. In contrast to those progression narrative studies on the development of ELT methods in Europe, Howatt and Smith's study prioritizes the continuity of teaching methods by "a periodization approach", dividing the historical development of teaching methods in four periods — the Classical Period (1750-1880), the Reform Period (1880-1920), the Scientific Period (1920-1970) and the Communicative Period (1970-2000+). In the Classical Period, language teachers focused on students' grammar and translation skills in class, the method of which was later named as the Grammar-Translation Method (or called as 'Classical Method') (Howatt & Widdowson, 2004). Heavily influenced by the long-standing hegemony of classical languages such as Latin and Greek, most language teachers became accustomed to the familiar pattern of teaching English grammatical rules in students' mother tongue by following the traditional paradigm and stressing the importance of vocabulary acquisition in language education (Howatt & Smith, 2014).

In the last two decades of 19th century, under the influence of phonetics and the establishment of International Phonetic Association (IPA), speech-dependent teaching methods helped those students who had been viewed as unfit for modern language learning to learn English, which initiated the Reform Movement in Europe. The dominant theme of foreign language education during the Reform Movement was to transform the traditional grammar-translation method and place teaching of spoken languages as the pedagogical priority of education. Specifically, major pedagogical reforms and innovations in Europe during the Reform Movement included the Natural Method, the Berlitz Method and the Direct Method (Howatt & Widdowson, 2004).

Howatt and Smith's (2014) study and other similar studies (e.g. Atherton, 2010; Auroux, 2000; Wheeler, 2013) present a comprehensive account of English teaching methods in

Europe in the last 250 years. Nonetheless, these studies are limited by their narrow focus on pedagogical aspects of English education and their alienation from broad social, economic and cultural transformations in Europe during the 19th and early 20th century (Achillea, 2015). It is not surprising to find the continuity and changes in ELT methods but questions are raised to interpret their findings from a sociolinguistic perspective. Was the shift to oral English in teaching methods related to the changing socio-political forces outside ELT in Europe or other parts of the world? Did the methodological changes apply to the mass of people or just favor the social elites? Who or which agencies, for what purposes, played the leading roles in methodological changes in continental Europe? As previous historical studies indicate, the key actors in English education in Europe were specialist phoneticians such as Wilhelm Viëtor, Paul Passy, Otto Jespersen and Henry Sweet, most of whom were also foreign language teachers in the last two decades of 19th century. However, previous studies tend to ignore the discussion of leading actors or agencies' (such as the national central government or the state education agency in a country) attitudes or ideologies towards English education in the 19th century. The central government might not be responsible for the methodological reforms in English education, but their attitudes greatly affected the importation of English to a non-Anglophone country and the relationship between English and the native language. The questions central to our inquiry are the following: How was English imported and spread to Europe? What was the main purpose of English education in Europe? Were there any conflicts between English education and native language education? What language ideology lay behind English education in Europe? The questions are closely bound up with the socio-cultural dimension of English education policies and practices in Europe, but few of the historical studies above link the pedagogical shift with the socio-political changes beyond English education.

Another major limitation of the historical studies on ELT methodologies in the 19th-century Europe lies in the fact that they only concentrate on the British or western European contexts instead of the whole Europe. They overlook the development of ELT methods in Central or Eastern European contexts and examine whether the methods were applicable to different contexts in Europe in the 19th century. Howatt and Widdowson (2004) praise the Reform Movement in ELT in continental Europe as an “international movement” (p. 189), but they cite no concrete evidence on ELT practices in other places like Asia. Did Asia follow the step of continental Europe to transform their ELT methodology from grammar-translation methods to oral methods in the 19th century, or did they still adhere to their traditional methods of language education?

Compared to the studies on methodological shifts of English education in the United Kingdom, few studies have been conducted to investigate the dynamic roles and purposes of English education in continental Europe in the 19th century. A limited number of historical studies indicate that the rise of English education in Europe stemmed from the utilitarian, literary and commercial value of English (Braine, 2005; Rouco, 2002; Smith, 2005; Van Essen, 1997). A passionate pursuit of modern science knowledge, wisdom and wealth brought about a seismic shift in some continental European countries from acquiring traditional Latin and Greek languages to their modern rivals English, which brought English education into a limelight (Smith, 2005). Apart from its practical utility for imparting modern science knowledge to students, English education provided a growing clientele among the educated class in continental Europe with an invaluable access to highly valued English literature such as Shakespeare’s classic works (Braine, 2005). English was also an important linguistic tool for trading dialogues between continental Europe and Britain in the 19th century (Van Essen, 1997).

Compared to the superior status of French, English played a minor role in schools of continental Europe in the 17th and 18th century. However, it later replaced French to become a compulsory subject in most continental European countries in the second half of 19th century when the British Empire exerted its influence all over the world (Braine, 2005). Special attention needs to be paid to two individual cases — Spain and Turkey. Spain followed a slightly different pattern from most European continental countries in the historical development of English education. As Halls (1970) argues, for historical, geographical and cultural reasons, French enjoyed primacy and a sort of intimacy in Spain while English was only considered as an “ornamental subject” throughout the 19th century. Compared to Hall’s study on English education in Spain, Rouco (2002) analyzed a multitude of socio-political factors that slowly but consistently promoted English education in the modern history of Spain. These socio-political factors were English teachers’ working conditions, teacher status and the societal needs for English education. In the 19th century in Spain, there were two divergent views on the roles of English. The liberals were broad-minded and open to English language and culture while the conservative forces considered the introduction of English in Spain as something dangerous that might erode the Spanish identity (Rouco, 2002). Rouco’s study is one of the few investigations of the relationship between the promotion of English education and the erosion of national identity in continental Europe, which has more often been reflected in historical studies on British colonial language education in Africa and Asia (e.g. Phillipson, 2009).

Another noteworthy case is the historical development of English education in Turkey in the 19th century, where English was taught for the purpose of military strengthening and modernization. Kirkgöz (2005) found that Turkey initiated a westernization movement in education during the Tanzimat Period in the 1830s, during which English was a linguistic means of transferring military technology from Britain to Turkey for the sake of cultural,

economic and military modernization. The educational reform during the westernization movement brought in the rise of English education in Turkey since English gradually gained dominance over other western languages including German and French in the 19th century. Saricoban and Saricoban's study (2012) collaborates Kirkgöz's findings on the purpose of English education in Turkey. It shows that under the governmental scheme of building a militarily powerful Turkey, English-medium education practices emerged in government-funded military technology schools such as the State Naval College (*Bahriye Mektebi*) and Navy Engineering School (*Carkci Mektebi*). The rise of English education resulted from the reformists' scheme of modernizing Turkey, and it was in connection with bright employment prospects for the social elites if they acquired high English proficiency (Saricoban & Saricoban, 2012). The missionaries' consistent attempts at evangelizing through establishing various mission schools in Europe also facilitated the spread of English as well as western religions and influenced the development of English education in continental Europe in the 19th century (Eurydice, 2001).

Previous historical studies on English education have also revealed the diverse roles English played in different parts of continental Europe in the 19th century. English education was conducive to absorbing superior science and technology knowledge from Britain, strengthening its military power (such as Turkey), and spreading British literary works and religion to the continental Europe. However, the conflicting language ideologies between learning English and maintaining national identity in Spain predicted possible consequences for English education in countries or regions within the "Outer" and "Expanding" Circles when English education was entrenched in almost all national educational curriculums in the world. Although English education provided a valuable linguistic access to advanced science and technology knowledge, some countries were wary of the indiscriminate spread of English education and in fear for eroding their national

identity. The conflicting language ideologies were more evident in non-European regions in the 19th century, which will be detailed in the following section.

2.4.2.2 English education in the British non-settler colonies in the 19th century

Compared to Howatt's first edition of *A History of English Language Teaching* in 1984, the second edition of the book adds a special section — the history of English education in the British Empire. In reality, the scholarly shift from the history of English education in continental Europe to non-European traditions of English education begins earlier than the publication of Howatt and Widdowson's monograph (2004). The prime exemplars are the pioneering studies on English education in former British colonies such as India and Hong Kong (e.g. Evans, 2002, 2003; Pennycook, 1995, 1998, 2000, 2002; Phillipson, 1992, 1994). A thorough investigation of the history of English education in former British colonies complements original scholarly research on the world history of English education in the 19th century and provides historical pretexts for current English education in the post-colonial countries or regions.

Previous studies on the history of English education in former British colonies have centered on the following themes: (1) various English education providers and main policymakers of English education in history; (2) the nature and purpose of English education in the colonies; (3) the changing roles and statuses of English and the native language in the education system. The following sections will present a review of the three foregoing themes in previous studies on the history of English education in former British colonies in the 19th and early 20th century.

Before reviewing these studies, it is necessary to draw a conceptual division between the British colonies of settlement and their non-settler colonies. Driven by the economic

benefits of free trade, British had started to open overseas markets by territorial and non-territorial expansion beyond the shores of Europe since the Governorship of King Henry VII (1485-1509) (Cain & Hopkins, 2016; Semmei, 2004). Supported by the Industrial Revolution and the formidable Royal Navy, the British developed their modern merchant marine systems, accelerated their colonization process and established their colonial control in North America and India in the 17th and 18th century (Hoffenberg, 2011; Winks, 1998). Following the end of European Civil War in 1815, the victorious British navy occupied more colonies in Asia and Africa to protect all the routes of access to their colonies in the 19th century. There were two types of British colonies: the colonies of settlement and the non-settler colonies. The colonies of settlement in North America and Australia were the colonies to attract British migrants to settle down while the non-settler colonies in South and Southeast Asia and Africa were the places where British intended to sustain their political and economic interests instead of encroaching on the territories (Howatt & Widdowson, 2004).

English education had different connotations in the two types of colonies. In colonies of permanent settlement, English was the mother tongue for British migrants and English education was primarily directed towards British descendants. By contrast, in the non-settler colonies, English was a foreign language imported by traders, colonizers and missionaries. Most English language courses were thus directed towards indigenous children except for the schools opened to children of British governors or colonial government officials (Evans, 2002). According to the research objectives of the present study, the following section of literature review will focus on the studies of English education in British non-settler colonies in the 19th century.

It is important to identify the English education providers or language education policymakers before exploring the nature and purposes of English education in former British colonies. Previous historical studies (e.g. Evans, 2008a, 2008b, 2008c, 2011; Howatt & Widdowson, 2004) have revealed a complex picture of English education providers in former British dependencies. Colonial or metropolitan governments, various missionary societies, some private organizations and individuals all participated in the provision of English education in British colonies in history.

Howatt and Widdowson (2004) point out that it was not until the end of the 19th century and early 20th century that the colonial government started to provide education consistently in former British colonies. The finding is later corroborated by Evans' historical argument that in the early colonial period there was almost no consistent governmental provision of education in colonial Hong Kong (Evans, 2008 a). The British colonial government was unwilling to interfere in the original education system of non-settler colonies. The relatively indifferent attitudes towards education were partly attributed to the unstable political and economic conditions in British non-settler colonies at the beginning of colonial control and their intention of curbing colossal expenditure on colonial education. It also resulted from British "laissez-faire" or "voluntarist" traditions and their antipathy to centralization and systematization in education (Evans, 2003, 2008 a; Sweeting & Vickers, 2005, 2007). Thus, in the early British colonial period, English education was not compulsory for children in colonies and education was primarily a personal choice (Hurt, 1971).

In early British colonial times, the providers of English education were many missionary societies that had no direct relations with the government (Whitehead, 1999). As Howatt and Widdowson (2004) argue, government and missionary schools in British colonies were not necessarily in competition but in complementation in their provision of both English

education and native language education. When the government paid scant attention to education at the early stage of colonization as they were unwilling to interfere too much in the indigenous people's life and to incur the wrath of the Chinese community (Evans, 2006, 2008 c), mission societies were the main providers of English education as they intended to convert students to the new religious faith. When the colonial government started to provide English education, the British-based Protestant missionaries who preferred to translate the Bible into the indigenous people's native language played an active role in developing native language education in the colonies because they believed the native language would advance the potential believers' understanding of Christianity (Owu-Ewie, 2006).

In contrast with the primary role of missionary societies in English education in British non-settler colonies in the 19th century, the government played a minor role at the early stage of colonization. Evans (2008 b) maintains that the only noticeable action of the British colonial government in Hong Kong to promote English education was to fund the English schools operated by missionary societies. It is thus difficult to examine the underlying "British policy" and government attitudes towards English education in the 19th century. As Evans (2008 b) argues, it is not clear whether the "British policy" on English education in colonial Hong Kong refers to the English education practices of government-funded schools or the British colonial education system that was greatly affected and dominated by a multiplicity of missionary societies. Nor is it clear whether the policy initiatives originated from the metropolitan government (the Colonial Office) in London or the colonial government "on the spot".

In order to analyze government attitudes towards English education and government initiatives of English education, Evans (2011) conducted an in-depth study to examine the

differences in attitudes towards English education between colonial government and metropolitan government in London. He found that the metropolitan government in London had an ambivalent attitude towards English education in Hong Kong. Although the officials accepted the idea that English education would bring practical benefits to the indigenous people, they still had doubts over the feasibility of offering a large number of English language courses in Hong Kong's government schools. In reality, although the metropolitan government in London made a final decision on English education in British colonies, the colonial government was the de facto English education policy-maker and one of the main English education providers in the colony (Evans, 2008 b).

Apart from various missionary societies and government agencies, private organizations or other individuals in British colonies also played different roles in English education. When English proficiency was closely tied to social mobility in British colonies at the end of 19th century, local children in the colonies chose to learn English in private schools if they had no direct access to government schools (Whitehead, 1989). Some individuals such as governors in the colonial government also played their important roles in the development of English education policies and practices in British colonies. For example, Evans (2008 b) found that the arrival of Sir John Pope Hennessy as the Governor-general in Hong Kong in 1877 brought about a fundamental shift from the Chinese-oriented policy to pro-English policy in Hong Kong. The shift in attitudes did not stem from the original intention of the British colonial government in Hong Kong but from Hennessy's personal predilections and preferences for English education. In reality, the true desire for the "pro-English" policy was to enhance the status of indigenous Chinese community by employing local social elites to the colonial administrative government, which was by nature a "pro-Chinese" policy (Evans, 2008 a). It can thus be surmised that the metropolitan and colonial government,

missionary societies, various individuals and private organizations played different roles in the provision of English education in British non-settler colonies in the 19th century.

Different providers for English education had different purposes beyond their English education policies and practices in British colonies in the 19th century. For missionary societies, their deliberate intention behind English education in mission schools was to evangelize the locals through education. In contrast with the explicit purpose of English education in mission schools, the government intention of English education was difficult to tell. Among the pertinent studies on the attitudes of British colonial government towards English education, there are two diametrically opposing viewpoints: linguistic imperialism (e.g. Pennycook, 1994, 1998; Phillipson, 1992) and enlightened paternalism (e.g. Sweeting & Vickers, 2005, 2007; Whitehead, 1995). Critical theorists such as Phillipson (1992) maintain that English education in former British colonies created inequality as the colonial government imposed their linguistic wills on indigenous people and marginalized native languages through English education. Pennycook (1998) replaces “linguistic imperialism” with “cultural imperialism” and argues that English education in British Hong Kong helped the colonizers to sustain their political, economic and cultural interests and facilitate colonial governance (Y. L. Hu, 2007; Schjerve & Vetter, 2003). It thus produced cultural inferiority of the indigenous Chinese community in Hong Kong and subverted them through a gradual process of cultural alienation from their traditions. Pennycook (1998) also criticizes British colonial language policy for widening social stratification by reserving EMI for the elite and denying the masses’ equal access to English education.

Pennycook and Phillipson’s studies (Pennycook, 1994; 1998; Phillipson, 1992, 1997, 2009) have been severely criticized as they lack convincing evidence, particularly the primary sources of data, to substantiate their central argument (Sweeting & Vickers, 2007). Without

sufficient evidence, they fail to prove whether British colonial governors and metropolitan officials agreed with the motives of imposing English on their colonized subjects and whether there was a deliberate colonial language policy to advance British interests in the colonies through English education (Evans, 2003, 2006).

Phillipson's studies also overlook multifarious contextual factors affecting English education in former British colonies and ignore the dynamic nature of British colonial language policy over time (Conrad, 1996; Davies, 1996; Evans, 2003, 2008 a). Paradoxically, Phillipson (1992) and Pennycook (1998) equally criticize British vernacular-oriented language education policy after World War I as an indirect way of enforcing British hegemony. Thus, what they criticize is not an intentional British language policy in the colonies, but the imperialism and colonialism. It can be easily understood that the government initiatives of English education in British colonies were to sustain and promote British colonial interests in their dependencies. However, Evans (2002) doubts that the rise of English education in the colonies was attributed to an explicit English-oriented language policy (in fact, there was no explicit language policy in British colonies) or to the colonial linguistic ecology that facilitated the spread of English to British colonies.

Whitehead's studies (1995, 1999) represent another viewpoint on the nature of colonial English education. He argues that from the perspective of British colonial government, the purpose of English education was to bring benefits of European (especially British) knowledge to the colonized people. A piece of the most compelling evidence for the enlightened paternalism view was Macaulay's Minute²¹ (1835), which clearly stated that

²¹ **Thomas Babington Macaulay** (1800-1859) was a British historian and politician. He became the chairperson of the Committee of Public Instruction in the colonial government of India in 1834 and made his infamous Macaulay's Minute.

the objective of English education was to cultivate elite Indians who acquired western knowledge. In spite of the fact that Macaulay's Minute was a barometer of British attitudes towards colonial education, its influence on British colonial education has been downplayed since the policy of offering English language courses in India had been implemented before Macaulay's Minute was formulated (Evans, 2002). The impact of Macaulay's Minute was only confined to the Indian context, which was not as Phillipson (1992) imagined as exerting seminal influence over language education in other British colonies in the 19th century.

In addition to the two opposing views on the objectives of English education in British colonies, some studies have also identified other possible purposes for English education in various sociolinguistic contexts of colonies. Tibategeza and Plessis (2012) found that the purpose of English education in the colonial Tanzania was not to educate the indigenous people but to cultivate a small group of elite Tanzanians as an intermediary class to assist the colonial administration and facilitate communication between colonial government and the mass. Tibategeza and Plessis' view lends support to Evans's findings (2008 b) that the colonial government in Hong Kong promoted English education with the intention of improving local students' English proficiency to occupy subordinate positions in the civil service.

Previous studies have mainly examined British colonial language policy from the perspective of British rulers. However, Brutt-Griffler (2002) maintains that the formation of colonial language policy, in fact, satisfied both the colonizers and the indigenous people's need. It was not only the colonial and the metropolitan government that promoted English education, but the indigenous people in the British colonies also had constant demands for English education. Followed by Brutt-Griffler's reconceptualization, other scholars (e.g.

Evans, 2006, 2008 c) found that it was not necessarily the one-way imposition of English from British colonizers, but the collaborative nature of indigenous people to accept English for bright employment prospect.

Based on different views on the purposes of English education in British colonies, it can be concluded that Phillipson and Pennycook's conspiracy perspective on British colonial language policy does not have sufficient evidence to substantiate its central argument. Nevertheless, it is undeniable that British established and perpetuated their dominating power in the colonies and altered the original linguistic ecology of the colonies in a subtle manner. Thus, further studies are needed to investigate how the British provided a favorable environment for English education and generated the indigenous people's demand for English and western knowledge.

Another important theme in studies on the history of British colonial education in the 19th century is the dynamic role and status of English education and native language education. Previous studies have provoked fierce debate over the role and status of the two types of language education in British colonies (e.g. Evans, 2003, 2008 a, b, c; Phillipson, 1992, 2009). The controversial debate is whether British colonizers forced the colonized subjects to accept English and discard the native language, or it is a more complicated picture in which both English and native language education played different roles in different historical periods.

The relevant historical studies reflect an inconsistent pattern of language education in former British colonies during the 19th century, namely that either native language education or English education became the dominant theme in the certain historical period (Chaturvedi, 2014; Evans, 2008 a). A crucial historical event relating to the status of native

language education and English education in British colonies was the Orientalists-Anglicists controversy over the content and the choice of MOI in government schools in the 1830s in India. The controversy exerted seminal influence over the development of colonial language education in India and other former British colonies (Evans, 2003).

The British colonial history witnessed the changing statuses of English, the Indian language and other classical languages in India. The colonial language policy in India shifted from the original emphasis on native languages and knowledge to the English language and western education. At the beginning of British rule in India, the British colonizers were worried that English education would have a negative impact on traditional Indian society and would arouse the stiff opposition from the indigenous people (Evans, 2002; Rahim, 1986). Some British colonial officials even developed a strong interest in spreading oriental knowledge in classical languages such as Sanskrit, Arabic and Persian, which shaped the vernacular-oriented language education policy in the first two decades of the 19th century in India. Though convinced by the superiority and utilitarian benefits of English education, most British officials believed that European modern knowledge in science and arts should be gently engrafted on the traditional Indian education system. The fundamental purpose of colonial education in India was to equip the local elites with comprehensive knowledge of traditional Indian culture and English culture so that they could act as cultural intermediary between British rulers and the mass (Evans, 2002).

The vernacular-oriented language education policy also applied to the early colonial administration of Hong Kong, where the colonial government was the provider of Chinese language education in the 1840s and 1850s and provided grant to the original Chinese schools in Hong Kong (Evans, 2006). In the 1860s, under Legge's scheme of incorporating English in the curriculums and centralizing ELT in government schools, the Central School

was established in Hong Kong to improve indigenous people's English proficiency and stimulate people's interest in English education (Evans, 2006). Evans (2008 b) found that during Stewart headmastership in the Central School, he designed the bifurcated curriculum to ensure the equal status of Chinese and English and insisted on CMI for most subjects, which suggested the vernacular-oriented language education policy in the early British colonial period.

However, when the British rule over colonial subjects was firmly established, there was a gradual shift from vernacular-oriented language education policy to English-oriented language education policy (Evans, 2002, 2003, 2006, 2008 c, 2011). In India, Hasting's belief about gently engrafting English education on Indians was replaced by the belief that Indians should become acquainted with the English language, western knowledge and Christianity (Clive, 1987). It thus initiated a long historical period of Orientalism and Anglicism controversy in India. Not until was it a series of government initiatives including Macaulay's Minute (1835), Bentick Resolution (1835) and Wood's Dispatch (1854) had been introduced that the controversy of Orientalism and Anglicism ended. In Wood's Dispatch, the central objective of British education was reaffirmed as the diffusion of superior European knowledge through the medium of English. Wood's Dispatch laid a solid foundation for the development of British colonial language education policy in the 19th century. It not only justified the English-oriented education policy as advancing British political and economic interests in their colonies, but also created a dual language education system where both native education and English education played their roles in the education system of colonies in the 19th and early 20th century. Similarly, since Pope Hennessy acquired the governorship in the 1870s, the pro-English policy became the major language policy in Hong Kong. In the 1878 Education Conference, Governor Hennessy

explicitly stated that English education would bring practical benefits to the indigenous people and the British control (Evans, 2008 c).

In contrast with the conspiracy view of linguistic and cultural imperialism (Pennycook, 1994, 1998; Phillipson, 1992, 2009), Evans (2006, 2008 b, 2011) maintains that adopting a pro-English policy did not necessarily imply the disregard for vernacular language education in British Hong Kong. The view can be confirmed by the fact that the Central School raised students' admission requirements for Chinese and the Chinese subject was not removed from the curriculum of the Central School. As Evans (2002) maintains, the British colonizers had no desire to replace Chinese education with English education, and the plausible reason for EMI in imparting European science and arts to the colonized people was the shortage of suitable translations of modern science and technology knowledge in the native language.

Despite the fact that the dual language education system in British colonies was established after Wood's Dispatch, there was a tendency for the expansion of EMI schools and the downward trend of Chinese language education at the turn of 20th century. Evans (2002) elucidates that the rise of EMI schools in British colonies did not result from the direct governmental intervention but from local students' occupational concerns as a smattering of English provided them with better employment opportunities to climb up the social ladder. Evans' view also corroborates Tsou's (1996) findings that the British colonization process established a diglossic situation in many colonies where English was regarded as the high-status language while the native language was viewed as the inferior language. However, despite the expansion of EMI schools in British colonies, the colonial government shifted its responsibility for native language education from the government schools to government-aided mission schools (Evans, 2006). It thus refutes Phillipson's argument that

the government failed to support native language education in British colonies (Phillipson, 1992, 2009).

Due to space constraints, it is difficult to summarize relevant research findings on the statuses of English and the native language in education systems of all British colonies. Nevertheless, the Indian and Hong Kong examples demonstrated the general pattern of British colonial language education in the 19th century and early 20th century (Evans, 2002, 2003, 2008 a; Vijayalakshimi & Babu, 2014; Zhang, 2009). In contrast with French and Japanese colonial language education policy that the colonizers imposed their languages on subordinate colonies, British colonial language policy changed from the early stage of vernacular-oriented language education policy to the subsequent pro-English education policy (Evans, 2008 a, 2011).

Though the historical studies on English education in British colonies in the 19th century have no direct relevance to the present study, the history of English education in British non-settler colonies in the 19th century, particularly in Asian colonies such as India and Hong Kong, provides a historical pretext for the present study. Did the imperial China follow the similar route for English education as the formal British colonies? Did China have its unique pattern of English education in the late Qing period? How did English, as a typical symbol of British culture and knowledge, penetrate the Confucian society in the 19th century? What factors facilitated the spread of English to late imperial China?

The next section will focus on the history of English education in countries or regions (excluding China) which were not British formal colonies but heavily influenced by the British Empire in the 19th century.

2.4.2.3 English education in the British and American Informal Empire in the 19th century

Compared to studies on British colonial language education, fewer empirical studies (e.g. Gottlieb, 2001, 2005; Ike, 1995; Imura, 2003; Kitao & Kitao, 1995; Koike & Tanaka, 1995; Kubota, 1998; Reesor, 2002; Sasaki, 2008; Tanaka, 1998) have been conducted on the history of English education in countries with no colonial history. In reality, during the 19th century, the spread of English was not confined to British colonies, but also to countries in the non-European region with total territorial sovereignty such as China.

The rapid rise of English education in the 19th century in the world corresponded to the empire-building process of the western powers. The concept “Informal Empire” was introduced in the background of western free trade from the 1830s to 1870s when western powers were engaged in expanding their overseas markets and grabbing economic profits to support their internal industry (Savage, 2010). In contrast with traditional colonial strategy of territorial conquest and annexation, the British and Americans adopted various tactics such as gunboat diplomacy to retain persistent and institutionalized control over the subjugated countries (Dean, 1976). The subjugated countries thus fell in the category of British and American “Informal Empire”.

Abstract as the term “Informal Empire” may seem, two indicators can describe its features. One indicator is extraterritoriality, which means western powers enjoyed non-territorial privileges and immunities within the boundary of the subjugated country (Fishel, 1952). The other important indicator is that the western powers exercised their control over many government organizations²² in the subordinate countries (Savage, 2010). For the super-

²² The government organizations, for example, included the Chinese Maritime Customs and the Salt Administration in China in the 19th century.

ordinate countries, the benefits of establishing informal empire were to avoid administrative expenses because British and American imperial intermediaries²³ took charge of internal administration and protected the super-ordinate country's political and economic interests in the colonies (Nexon, 2008).

As Fairbank (2006 a) mentions, the western-imposed unequal treaties in the 19th century suggest that Latin America, the Middle East and East Asia were the three areas that fell into the British and American "Informal Empire". Since the present study focuses on the history of English education in late imperial China, the section devoted to the history of English education in British and American "Informal Empire" centers on the countries in East Asia. The questions central to the discussion in previous historical studies are the following: why did the British and American informal empire-building process give rise to the spread of English education to East Asia? What were the primary purposes for English education in the monolingual countries that were not British and American colonies in East Asia in the 19th century? What was the relationship between English education and native language education in the countries? Were there any inconsistencies and contradictions in English education policies and practices? Who were the main English education policymakers in the countries? In the following sub-section of literature review, previous studies will be summarized and critically evaluated according to the thematic questions above. The review of these studies will be divided into three sub-sections: (1) the primary purposes for English education, (2) the role and status of English and the native language in the education system, and (3) the main English education providers, primary actors or agencies of English education.

²³ **The British and American imperial intermediaries** were primarily the original governments in the subordinate countries.

The objective of English education in British informal empires was closely tied to the sociopolitical contexts and the principal purpose of British and American control in the places. As mentioned in the previous sub-section, during the peak time of free trade, western powers competed for overseas markets in East Asia. The purpose of British and American empire building in those countries was not to attract British or American immigrants to settle down in such a faraway place from their home country, but to seek raw materials such as coal to support their industrial revolution back home and open new overseas markets for business (Akita, 2002).

In contrast to formal colonies, the British and American colonizers did not establish colonial government in East Asian countries but maintained their control over the East Asian countries through a limited number of organizations made up of native British or Americans, and social elites from the subordinate countries (Savage, 2010). Apart from commercial negotiations between British or American businesspersons and Chinese people, the use of English in real-life situations was minimal (Koike & Tanaka, 1995). Thus, the argument for linguistic imperialism is too intuitive and requires compelling empirical evidence in the 19th-century cases of East Asia since the East Asian countries were not colonial subjects of the West and did not need frequent communication with the West in English. Instead, the rise of English education in East Asia might result from other reasons such as the internal enthusiasm for English education.

Japan was a country under the American informal empire in the 19th century. Before the arrival of Americans, Japan pursued an implicit foreign language policy that restricted western influence on the commercial field and far away from the mainstream society (Inoguchi, 2002). However, since the United States made Japan a trading port after the “Black Ship Turmoil” in 1853, there was a gradual open attitude towards English education.

It harmonized with American political, economic and military interests, and satisfied the Japanese need to modernize the country after the long-term isolationist policy (Reesor, 2002). The unequal treaties such as “Kanagawa Treaty” signed between Japan and the United States awakened the “sleeping” Japanese to realize the necessity of strengthening its power through learning from the West (Mieko, 1983).

The previous historical studies have found that the pressing need for modernization and self-strengthening in Japan, together with practical benefits from learning English, was the primary ideology of English education in Japan (Glasgow & Paller, 2016; Gottlieb, 2001, 2005; Ike, 1995; Koike & Tanaka, 1995). It thus created favorable conditions for English education in the following decades and led to the peak of English education in the 19th century — the period of Meiji Restoration.

During the modernization process in Meiji Japan, English played an important role in absorbing superior western knowledge in modern science and technology and getting access to advanced political, economic and cultural values in the West (Koike & Tanaka, 1995). However, it is too simplistic to link the spread of English to Japan with the national need for English education without consideration of other contextual factors such as the dynamic role and status of English education and native education in history (Løfsgaard, 2015). A large number of historical studies (e.g. Glasgow & Paller, 2016; Gottlieb, 2001; 2005; Hosoki, 2011; Ike, 1995; Joseph, 2011; Koike & Tanaka, 1995; Reesor, 2002) have explored the changing roles and statuses of English education and native education in Japan in the 19th and early 20th century, but few of them have investigated the complex reasons behind the changes.

The role and status of English education dramatically changed in Meiji Restoration when Japan grew from a small and weak island to a strong military power in the world during the second half of the 19th century. Ike (1995) points out that the dominant theme of early Meiji Restoration from 1868 to the 1870s was the absorption of western knowledge through the medium of English. The pro-English policy exerted a considerable impact upon the language education practices in Japan. The modern national education system, which was established in 1871, included English into the curriculum of elementary schools as an elective subject (Koike & Tanaka, 1995). In the secondary schools, English became a compulsory subject (Koike & Tanaka, 1995) and every student was required to pass the hurdle test in English grammar and English-Japanese translation before they were admitted to universities (Matsuda, 2003). English also facilitated communication among Japanese people in the 19th century. Since there was no standardized national language in Japan in the 1860s and the linguistic obstacles prevented people in North Japan from communicating with their counterparts in South, English became an option to bridge the gap in communication among Japanese. Arinori Mori, the then Japanese Minister of Education in the Meiji Era, outlined the proposal that English should replace Japanese as an official language because of its superiority, simplicity and practicality as an international language (Joseph, 2011). Although the proposal was finally denounced, it displayed Japanese pious attitudes towards English education and enhanced the status of English in Japan in the 19th century. For the tertiary-level education, English became the MOI at the premier University in Meiji Japan — Tokyo University, and more than 170 specialists from Britain and the United States were hired to teach content subjects such as mathematics, chemistry and science in English (Koike & Tanaka, 1995).

However, the pro-English education in Japan did not last long. A fundamental shift to an anti-English movement was noticeable at the later stage of the Meiji Restoration. During

the modernization process in the Meiji Restoration, Japan rose to become a military power in the world and claimed its military competitiveness in the world arena after successive victories in the Sino-Japanese Naval War in 1895 and the Russo-Japanese War in 1905 (Kaiser, 2003). Despite the fact that Japan struggled for the western recognition, it met with recurring rebuffs as the western powers did not recognize Japan as one of their members but a country to take a short cut in rising by drawing lessons from western success and failures (Beasley, 1972). The negative attitudes towards Japan catalyzed the anti-English sentiment and nationalism in Japan. It thus had negative influence on English education — to diminish the influence of English and prioritize the status of the Japanese language in the national education system (Mckenzie, 2008).

The growing nationalism led to the rising status of Japanese education and the downward trend of English education since English education was negatively viewed as a byproduct of western culture. Ike's historical study (1995) lists many facts to indicate the lower status of English education at the later stage of the Meiji Restoration. The academia and media initially waged attacks against “westernization” including English education through spreading the spirit of *Nihon Jin* (The Japanese) in many news reports and books in the 1880s. After 1882, English was only taught as an elective subject in all the secondary schools in Japan (Kawasumi, 1999). The Ministry of Education in Japan also changed the MOI for western content subjects in Tokyo University from English to Japanese in 1883. Not only was the MOI changed in schools at various levels, the hours of English language courses were also cut down in secondary schools (Ike, 1995). In the early 20th century, there was even a heated debate in society over whether English should be removed from Japan's education system (Kawawumi, 1999; Reesor, 2002). In contrast to downplaying the importance of English education at the later stage of the Meiji Restoration, the 1890 *Imperial Rescript on Education* stressed the traditional Confucian and Shinto values in

Japan, such as the hierarchy of human relations (Nivison & Wright, 1959). Shimizu (2010) argues that the growing nationalism was not the only reason for the downgrading status of English education at the later stage of the Meiji Restoration. Japan's longstanding fear for falling prey to western countries also limited the development of English education in Japan since they were afraid that the American teachers and missionaries who emphasized pronunciation and oral English proficiency might colonize the Japanese minds (Goto-Shibata, 2006; Imura, 2003).

By reviewing previous studies on English education in Japan, we find that English education in the Meiji Restoration served the practical and technological purpose of defending against western imperialism and acquiring advanced science and technology knowledge from the West in the 19th century. However, there was still a deep-rooted and longstanding conflicting language ideology in English education policy in Japan, namely, the desire for acquiring western knowledge through the medium of English and the fear of sacrificing its national identity.

A few historical studies have focused on the main providers of English education in Japan in the 19th and early 20th century (e.g. Gottlieb, 2005; Gottlieb & Chen, 2001; Ike, 1995). As shown in these studies, missionaries took an initial role in providing English education and spreading both western knowledge and their religion to the places where the western powers exerted their influence in the 19th century. For example, the unequal "Kanagawa Treaty" signed in 1854 granted American missionaries the freedom to spread Christianity to the Japanese (Ike, 1995). In order to convert more Japanese children to Christianity, the missionaries taught English and rudimentary science knowledge at private schools (Koike & Tanaka, 1995). In most East Asian countries in the 19th century, mission schools were outside the government education system and they were even not recognized by the national

government like the Qing government in late imperial China (Gu, 2002 a) because the spread of Christianity was supposed to provoke conflicts with traditional beliefs such as Shinto values in Japan (Nivison & Wright, 1959). However, those mission schools created favorable conditions for government provision of English education in Japan in the 19th century. During the Meiji Restoration, for instance, the American missionaries' creed for honesty, hard work and simplicity represented in English education practices had a deep impact on the samurais who started the westernization movement in Japan (Reesor, 2002).

The government was still the most important provider of English education in Japan in the 19th century. In contrast with British and American missionary efforts in converting indigenous people to Christianity through English education, the government intention of providing English education stemmed from the nation's practical need of modernization, military modernization in particular. Though the government in Meiji Japan was in some sense subjugated to superordinate western powers, the Japanese government still enjoyed a high degree of autonomy in education since the western powers preferred not to interfere with too many internal affairs of Japan (Wong, 1976). Interesting was the fact that the central government in Japan, whether it was the feudal government before Meiji Restoration or progressive reformist government after the Meiji Restoration, chose to support English education with radically different purposes. In Sasaki's (2008) study on the 150-year history of English education in Japan, he found that the former feudal Tokugawa Shogunate government founded English schools such as Yokohama Academy to collect military intelligence of the British and American armies. By contrast, the progressive government after Meiji Restoration provided English education to modernize and strengthen Japan.

This comprehensive review of studies on the history of English education in Japan in the 19th century provides us with information on the issues including how English was imported

to Japan and what the purposes of English education were in Japan. It also reveals what conflicting language ideologies were behind language policies and who the main actors or agencies of English education were in the 19th and early 20th century of Japan. However, these studies have only presented a pure historical account of English education in Japan in the 19th century without explicit arguments or an in-depth analysis of socio-political factors behind the language policymaking process. Previous studies also lack primary sources of data concerning the early English education practices in government schools in Japan and fail to provide concrete evidence of how the main actors and agencies played their respective roles in the policymaking process of English education at the micro level. These studies are inclined to view the history of English education in Japan as being isolated from other East Asian countries such as China, ignoring links among the East Asian countries in the 19th century. Was the development of English education in Japan in the 19th century a special case? Did other neighboring countries in East Asia learn from Japan's lessons of English education in that historical period? Thus, in order to identify the patterns of the spread of English to East Asia in the 19th century, there is a need for in-depth historical investigations of English education in other countries, and for comparative studies on different countries in East Asia.

2.5 Historical studies of English education in late imperial China

The previous review of research into the history of English education in the countries or regions within the “Outer” and “Expanding” Circle provides a pretext or basic perspectives for a literature review on English education in late imperial China. Thus, before we move to pertinent historical studies on English education in the late Qing period, it is necessary to identify and explain the similarities and differences in the contexts of English education between late imperial China and other countries or regions within the “Outer” and “Expanding” Circle.

There was a contextual similarity in the historical development of English education between the British colonies and late imperial China. Although China has never lost its total territorial sovereignty in history, after the military defeat in the Opium Wars during the 1840s and 1850s, China became a semi-colony. It was forced to sign many “unequal treaties” with the western powers and grant westerners special extraterritorial privileges including the freedom to spread religion and low tax revenue for commodity import (Wong, 1976). Thus, the development of English education in late imperial China bore some resemblance to English education in British colonies in the 19th century.

The contextual disparity between late imperial China and the colonized countries primarily lay in the main decision-maker of education policies. Since no colonial government was established in late imperial China, there was no direct interference and involvement of the western powers in English education in mainland China during the 19th century. Instead, the Qing government made the final decision on the promotion of English education (Li & Xu, 2006). Another major contextual difference between the imperial China and British colonies was the relationship between the central government and missionary societies. The mission societies in former British colonies were part of western colonizing powers, and thus education practices at the mission schools complemented government education and gained solid support from the colonial government (Wilkinson, 1973). In contrast, despite the fact that China was a joint “semi-colony” of western powers, the Qing government still had the full autonomy in educational affairs and put up considerable resistance to the influence of western ideas. Thus, although the missionaries established a few schools in China, the Qing government did not recognize the mission schools and graduates from the mission schools in China were not permitted to work in the government (Jongeneel et. al, 2009).

Compared to former British colonies within the “Outer Circle”, the territorially independent countries such as Japan had more resemblance to late imperial China. The similarities were not restricted to the geographical locations, but also in external socio-political contexts, cultural traditions, educational objectives and even historical development of English education. Deeply immersed in Confucian culture, in the second half of 19th century, both Japan and China launched westernization movements to transfer advanced military technology from the West (Hevia, 2012). Foreign languages (primarily English) thus became a major vehicle of learning from the West for self-defense and self-strengthening. There is a striking contextual similarity in the historical development of English education between China and Japan (Blowers, 2001). In particular, after the military failure in the Sino-Japanese Naval War in 1895, China launched a nationwide campaign on learning from Japan for its own sake, which included drawing close reference to the model of English education in Japan (Fong, 2015 a).

Nevertheless, despite the striking similarities between the other East Asian countries (e.g. Japan) and China in the history of English education, late imperial China had its unique social background. To begin with, China had a longer history of cultural traditions and Confucian education than their East Asian counterparts, which made people adhere to Chinese mindsets, values, ideologies and attitudes towards oriental education. It was thus difficult for western languages and modern knowledge to penetrate the Confucian society and gain general acceptance in the mainstream society of China, which also constituted a formidable obstacle to English education in China (Cohen, 2016).

In contrast to Japan’s centralized political and military power, there was an inclination towards decentralization and devolution in late imperial China since the second half of the

19th century (Su, 2007). Political and military power was not exclusively in the hands of the Qing government but also of provincial governors and viceroys (Li, 2012). Thus, the policies for promoting English education were open to diverse interpretations by different provincial governors and practitioners in late imperial China.

Another major contextual difference between China and other East Asian countries in the 19th century was the deep-rooted negative attitudes towards foreign languages in society. It is widely recognized that ancient China enjoyed a high status in the world in terms of its comprehensive power and economic prosperity before the outbreak of the First Opium War (Xu & Ma, 2015). Due to the long-time “Closed-Door” policy²⁴, Chinese people were ignorant of western progress in science and technology during the Industrial Revolution and took it for granted that imperial China was the center of the world (Bourgon, 2008). In contrast with the Japanese in the 19th century, the Chinese tended to be preoccupied with their own business, were proud of their own classics, knowledge and language, and despised foreign ideas, languages and knowledge (Nagata & Wang, 2014). It was thus more difficult to convince Chinese of the benefits of western knowledge and accept foreign languages in the 19th century.

Based on the three major contextual differences between China and other East Asian countries, it is important to research the history of English education in late imperial China, to examine whether China followed a different route to developing English education and western knowledge in the late Qing period. It also indicates the link between English

²⁴ Since the 18th century, in response to the increasing trade relations between China and the rest of the world and the growing anti-Manchu uprisings, the Qing rulers adopted the “Closed-Door” policy to forbid any international commercial communication in China.

education and the complex socio-political context beyond education practices in late imperial China.

2.5.1 A paucity of empirical historical studies on English education in late imperial China

The development of English education in China has attracted growing attention within the field of applied linguistics and ELT in the past few decades. Most recent studies have centered on either micro-pedagogical issues (e.g. Hu, 2008; Jiang, 2013; Li & Yao, 2014; Pan, 2007; Song, 2011; Tong & Shi, 2012; Wei, 2013; Zhu & Yu, 2010) or comparisons of English education between China and other countries (e.g. Cai, 2007; Dai, 2010; Han, 2009; Kong, 2007; Xie, 2011). However, few scholars within the field of applied linguistics, particularly in the western academia, have focused on the history of English education in China. Zhang Meiping (張美平), one of the influential figures in the field of English education history in China, recommends that more attention be paid to the history of English education in the late Qing period — the inception of foreign language education in China. It is necessary for current policymakers and practitioners to understand the history of English education in China and make prediction of its development (Zhang, 2011).

Zhang's constructive suggestions for exploring the history of English education in China represent a significant call for historical studies among scholars from China and abroad within the field of applied linguistics. However, since most scholars in the field have no learning experiences or research backgrounds of history, they may not have sufficient knowledge of modern history or historical research methods. They are also possibly loath to undertake the painstaking task of searching for historical evidence, which leads to few historical studies on English education in late imperial China or other historical periods before the founding of the People's Republic of China in 1949.

The relative absence of historical studies on English education in China compels me to review historical studies on the socio-political settings beyond English education in late imperial China (e.g. Bai, 2001; Bickers, 1999; Cui, 2017; Fairbank, 2006 a, b; Ford, 1988; Zarrow, 2005) and the general modern educational studies on late imperial China (e.g. Biggerstaff, 1961; Chen, 2007; Sun, 2009). Although these historical and educational studies are not exclusively related to English education in late imperial China, each of them devotes a small section to foreign language education in late imperial China.

Due to the differences in the nature and research foci between historical, educational studies and language policy studies, the general thread throughout the previous sections of literature review, which is inspired by Spolsky's framework of language policy, may not be explicitly presented in the historical studies of English education in late imperial China. Thus, in this final part of Literature Review, it is preferable to summarize previous studies by topic of research in order to present the findings of previous research in a coherent manner and identify the gap for the present study. According to the research foci, previous studies can be categorized into the following:

- (1) Brief historical summaries of foreign language education policies and practices in late imperial China;
- (2) Case studies on foreign language education practices in various types of schools in late imperial China.

In previous studies on western education in late imperial China, "foreign language education" is a more widely used term than "English education". Western education in the late Qing period was not restricted to English education, but included teaching students other foreign languages, and imparting content knowledge to students through the medium

of foreign languages. Thus, the following two sub-sections will extend the literature scope to foreign language education (instead of English education) in late imperial China.

2.5.2 Historical studies on summaries of foreign language education in late imperial China

The first pioneering study on the history of foreign language education in mainland China is Professor Fu Ke's monograph *The History of Foreign Language Education in China* (<中國外語教育史>) published in 1986. In his scholarly work, he presents a brief overview of foreign language education in mainland China from 1862 to the 1980s. Although the major part of Fu's study centers on the foreign language education in the post-1949 period after the People's Republic of China was founded, he gives a brief account of foreign language education in late imperial China. In this section, Fu focuses on the first group of modern bilingual schools in mainland China from the 1860s to the 1910s. However, it is problematic for Fu to trace the origin of formal English education in China to the founding of Peking Translation College in 1862 while overlooking the pioneering initiatives of early mission schools in coastal China during the 1840s and 1850s (Wu, 2004; Wu & Tian, 2012). Fu does not state the reason why English education practices of mission schools are not included in his study. Nor does he make a further analysis of the reasons why foreign language education originated in China in the second half of 19th century and the possible historical figures promoting foreign language education at that time. It appears that Fu's pioneering research presents a superficial historical account of foreign language education in China with no solid support by primary data and in-depth historical analysis. However, the importance of his work cannot be undervalued as it is inaugurating research on the history of foreign language education in China.

The three decades since Fu's monograph was published have witnessed some but not many detailed studies on the history of foreign language education in mainland China (Chen & Liu, 1998; Gao, 1992; W. X. Gu, 2004 a, b). Among these studies, Professor Zhang Meiping's monograph *Studies on Foreign Language Education in the Late Qing Period* (<晚清外語教學研究>) (2011) is the most recent, comprehensive and representative historical investigation of foreign language education in late imperial China. In the study, Zhang categorized bilingual schools in the late Qing period into government language schools, government science and technology schools and mission schools according to the nature and educational objectives of the modern schools. In the study, Zhang did not separate foreign language education policies from practices as he maintained that language policies and practices in late imperial China were inextricably intertwined. According to the content of research, the focus of Zhang's study was on micro-pedagogical issues of foreign language education in the modern schools instead of an in-depth analysis of the government policy or attitudes towards foreign language education in late imperial China.

Zhang concluded his historical investigation with a definitive judgment that foreign language education in late imperial China was successful for its clear educational objectives, seamless integration of Chinese education and foreign language education in bilingual curriculums, and stringent assessment approaches. He also made a positive comment on the bilingual education practices in some modern schools as they reserved Chinese language education in the curriculum. Apart from being included in the bilingual curriculum, the importance of Chinese was accentuated in the bilingual schools. Chinese proficiency was a requisite for entry into all modern bilingual schools in the late Qing period although western knowledge and foreign languages were the focus or primary objectives of bilingual education in the schools.

Zhang's positive judgment of bilingual education in late imperial China exhibits a striking contrast with the negative judgment from some scholars (e.g. Shen, 2012; Wu, 2004; P. H. Zhang, 2006). They contend that modern education including bilingual education in imperial China was "unsuccessful" because of its inability to break away from the influence of Imperial Examination²⁵ and Confucian education in China in the 19th century and its near-sighted planning for saving China from being colonized and overthrowing the dictatorship of the Qing government. It is manifest that the negative comments from previous historical studies betray the weakness of "presentism" (Johnson & Christensen, 2004), which tends to explain past events from today's perspectives without any careful consideration of socio-political settings beyond education practices. The "negative voices" arouse considerable doubts. There are some questions arisen from their conclusions: Is it possible to discard feudal traditions that had existed in China for more than two thousand years within such a short period? Is it justified to discard the Imperial Examination that focused on memorization of ancient Chinese classics like a baby with bath water? Thus, the educational studies with negative comments on modern education in China have overlooked historical and contextual factors behind bilingual education in late imperial China and lacking empirical underpinnings to support their assertive argument.

However, to point out the limitation of those educational studies does not necessarily imply that Zhang's study is not without explicit drawbacks. Although he gives an informative account of foreign language education practices in late imperial China, his study has two fundamental limitations. The first limitation is that he overemphasizes some curricular and pedagogical issues such as curriculum designs, textbook choices, teacher employment, teaching methods and assessment to bilingual education practices in modern schools and

²⁵ **The Imperial Examination** was an examination system to select scholars for the state bureaucracy in China since the Sui Dynasty (隋朝) in 605 A.D. It was not until 1905 that the Imperial Examination was abolished.

fails to take full account of the relationship between the development of bilingual education in late imperial China and the educational, political and social contexts. Though the foreign language education practices were part of language policy according to Spolsky's tripartite framework, there is still a gap in exploring how the language education practices were linked to policymakers' language ideologies and language management from the overarching Qing government in late imperial China.

In Zhang's study, he identified self-strengthening and modernization as the main objectives of foreign language education in late imperial China. In reality, "Self-Strengthening" and "modernization" were common themes of most East Asian countries in the 19th century, but it was still unknown if all the countries followed the same route of modernization or China had its unique features of modernization. Thus, it was too general and abstract to use the term "modernization" to summarize the complex social milieu of foreign language education in China. Even if "modernization" was the common desire for all Chinese at that time (it was evidently not the fact), there is still a need for future scholars to explore the leading actors or agencies who promoted the spread of foreign languages and western knowledge in the Confucian society. Thus, Zhang's study fails to present a holistic picture of foreign language education in late imperial China. Nor does he fully analyze the primary language ideologies behind government decisions on foreign language education at that time. Zhang Yaying (2008) maintains that the historical development of foreign language education in China in the 19th and 20th centuries was closely tied to the changes in diplomatic relations between China and the western powers. It is thus necessary to analyze the dynamic socio-political factors when interpreting foreign language education policy in late imperial China. Those factors are not restricted to the external factors such as the Anglo-Chinese relation, but also include a multitude of internal factors such as the financial state of the Qing government and the influence of Confucian culture.

The other major drawback in Zhang Meiping's study (2011) is that, similar to many existing studies on the history of foreign language education in China, Zhang's historical investigation involved little primary sources and placed heavy reliance on secondary sources without an explicit critical analysis. Thus, the accuracy of data in the historical studies is questioned and their conclusions may contain certain degree of bias.

Apart from the studies in the field of applied linguistics, some studies in other research fields such as modern history and modern education in China (e.g. Dong, 2007; Ji & Chen, 2007; Shu, 2012; Sun, 2012) have also advanced our understanding of how modern education originated in China and what roles bilingual education played in China's modernization and self-strengthening. Ji and Chen (2007) conducted a comprehensive study on how the imperial China overcame linguistic obstacles for modernization. The historical study examined what negative impact the Chinese ignorance of foreign languages had on China's development in the 19th century, how modernizers in the Self-Strengthening Movement imported English education from the West and spread it to the mainstream society in late imperial China. Ji and Chen attributed the emergence of foreign language education in China to the difficulties Chinese imperial governors had in communicating with western diplomats after the Opium Wars. Ji and Chen's findings are corroborated by Shen's (2012) findings that early proposals for foreign language education in late imperial China resulted from the British translators' fraudulent behaviors when signing the *Nanking Treaty* with Chinese imperial governors. Specifically, due to the limited English proficiency, the Chinese representatives had to rely on British translators who championed the British interests when translating the *Nanking Treaty*. Apart from being in a disadvantageous position in treaty negotiations, an increasing number of commercial communication between China and western businesspersons in coastal China as well as the great disparity

in the power of military weapons between China and the West necessitated foreign language education in late imperial China.

A striking characteristic of Ji and Chen's study is that their study was not limited to a summary of foreign language education practices in government schools but included a careful analysis of the socio-political background behind foreign language education, such as the conflicts between Confucianism and western culture. Ji and Chen reported that the bilingual schools in late imperial China were confronted with heated oppositions from conservative officials in the Qing government who firmly believed that Confucian knowledge was superior to western knowledge. Apart from the hardcore officials' opposition, the development of foreign language education in late imperial China was also hindered by practical difficulties in students' enrollment, teachers' recruitment and negative social ambience of westernization at the early stage of the Self-Strengthening Movement. Compared to previous historical studies, Ji and Chen's study made a step further to examine the changes in foreign language education in late imperial China, and the study investigated the gradual change in people's attitudes towards foreign language education upon the failure of the Sino-Japanese Naval War in 1895. They found that the great fervor for foreign languages in late imperial China was not merely aroused by the arrival of an increasing number of western businesspersons or western ambassadors in China, but also by a pressing societal need for bilinguals in the field of military technology and modern education after the Opium Wars.

Since the two scholars have research backgrounds in history, they abide by some core guidelines of historical research, and search for some primary sources of data to enhance the credibility and originality of their study. However, their study only focuses on the first modern government school in mainland China — Peking Translation College, and only

presents a sketchy account of other types of schools. After dividing modern education in late imperial China into two distinct chronological periods — the period before the establishment of the modern education system in 1904 and the period after it, Ji and Chen found that before the establishment of a national education system, access to foreign language education was limited to the elite class. The establishment of modern education system and the Ministry of Education witnessed the popularization of modern education from the elite class to the mass. Despite the distinct chronological division, Ji and Chen fail to give a clear definition of “elite” and it is uncertain whether “elite” refers to social nobility in imperial China or just a small number of ordinary people to study in modern schools. As the historical evidence reveals, since the founding of Fujian Naval College in 1867, the source of students in government schools was not limited to the imperial “Eight Banners” class but to students from poor families. Thus, Ji and Chen’s use of the term “elite” may be misleading to suggest that only students from the noble class were eligible for modern schools in the late Qing period.

Another major limitation of Ji and Chen’s study is that probably due to their research background in modern history instead of applied linguistics, they do not distinguish EMI from ELT, but mix the two concepts interchangeably. Thus, it is still yet unknown what the roles of English in China’s modernization played and which educational model applied to foreign language education practices in late imperial China. A more important reason for investigating the differences of the two forms of education is to explore the relationship between ELT and EMI in content subjects. Was ELT equal to EMI or a preparatory stage of EMI at a higher level of schooling? The conceptual ambiguity results in Ji and Chen’s failure to identify the main objective of foreign language education at different stages of history. Did foreign languages function as a tool to gain military intelligence, and facilitate multilateral communication between China and the West throughout the late Qing period,

or an invaluable instrument to transfer western science and technology? What was the purpose of English education in different historical periods in late imperial China? Who played an important part in promoting English education in late imperial China at different stages of the Self-Strengthening Movement? Though Ji and Chen's study is not, in terms of research foci, directly relevant to the present study that centers on the policy dimension of bilingual education in late imperial China, their study still provides me with invaluable methodological insights into conducting historical studies to construct historical narratives of bilingual education in late imperial China.

2.5.3 Case studies on foreign language education practices in various types of schools in late imperial China

According to the nature of modern bilingual schools in the late Qing period, the case studies on foreign language in modern schools fall into the following three categories: (1) case studies on government language colleges such as Peking Translation College, Shanghai Translation College and Hubei Self-Strengthening College (e.g. Gao, 2007; W. X. Gu, 2004 a; Xia, 2007; Yan & Zhu, 2015);

(2) case studies on government technical colleges such as Fujian Naval College and Tianjin Naval College, modern universities such as Peiyang University and Imperial Peking University (e.g. Gao & Li, 2009; Pan, 2013; Shen, 2007; Shi, 2014; Wang, 2011; Xu, 2012);

(3) case studies on mission colleges such as St. Johns University and Fuzhou Anglo-Chinese College (e.g. Shao, 2009; Shen, 2007; Xu & Fan, 2001).

These case studies are of considerable value to the present study as they reveal a panorama of diverse foreign language education practices in modern schools of late imperial China.

Through a detailed investigation of the education practices in government schools in the late Qing period, Biggerstaff (1961) found that the original purpose of foreign language education in late imperial China was to train translators to overcoming linguistic barriers in Sino-western treaty negotiations in the 1860s. The purpose later changed to learn western military technology to strengthen China's military power during the 1870s and 1880s, and to absorb the essence of western political systems and social transformation in the last two decades before Manchu domination was overthrown in 1911.

As Biggerstaff (1961) draws his conclusions primarily from English sources instead of primary Chinese sources such as original memorials to the throne and imperial decrees, there are a few inaccuracies in his historical accounts. For example, he mistakenly points out that there were only one or two foreign teachers at Fujian Naval College. As shown in the original records of the College, approximately 30 western teachers and experts were hired at the College.

However, despite the inaccuracies in historical accounts, Biggerstaff's study (1961) affords illuminating insights to the present study. It identifies a multiplicity of social-political factors including financial conditions of school operation, political backgrounds, social attitudes towards foreign language education, and pedagogical factors such as the difficulties in students' enrollment, teachers' employment and students' limited English proficiency before receiving EMI. Both socio-political and pedagogical factors had a considerable impact on education practices in the modern government schools. Biggerstaff's focus on the socio-political dimension of foreign language education is in stark contrast with most case studies in China (e.g. Gu, 2002 b; Zhang, 2003) which center on pedagogical issues. Despite slight variations in different individual cases of bilingual

schools, it was a common practice that authentic foreign language textbooks and a limited number of translated textbooks were chosen as main teaching materials of modern science and technology in modern schools in the early period of late imperial China (Shen, 2007). With respect to teacher employment, a large number of western specialists or Japanese teachers were employed to impart western knowledge to Chinese students through the medium of foreign languages since few Chinese teachers had spoken foreign languages and understood modern knowledge before modern teacher training schools were established in the early 20th century (Su, 2007).

A common limitation of the case studies is that the scholars fail to go painstakingly through primary sources to present a comprehensive picture of bilingual education practices in modern schools, which raises many questions about their historical accounts and arguments. For instance, given students' weak foundation in foreign languages, students might find it difficult to adapt to EMI in content subjects. However, the previous case studies have not yet answered the question whether there were any teaching assistants present in bilingual classrooms to offer extra language help to students. If there were assistants present, how they taught the courses? Was it a collaborative teaching team consisting of both western specialists and Chinese teachers? It is an ironical paradox that the deeper scholars delve into the micro-pedagogical issues of bilingual education practices in late imperial China, the more gaps in the studies need to fill if they intend to give a coherent, comprehensive and accurate account of bilingual education in late imperial China.

Informative as those case studies of education practices may seem, a fundamental limitation is that they bear no relevance to other cases, nor do they place education practices in each bilingual school within the context of the education system in late imperial China. For example, government language schools, technical schools as well as mission schools in late

imperial China had their own characteristics in curriculum designs and other pedagogical issues, but the case studies have ignored the relationship among various modern schools and overlooked the impact of earlier education practices on the latter schools. Though it may be difficult to generalize the findings of foreign language education practices in all bilingual schools, none of the schools existed independently and all types of modern schools, whether they were government schools, mission schools, or private schools, were not in competition, but complemented each other (Zhang, 2011).

Apart from the case studies on bilingual education practices in late imperial China, other case studies have centered on the micro-pedagogical issues. The issues include teaching materials design (e.g. Wu, 2011; Zhang, 2003), teacher employment and training (Li, 1997; Wu & Tian, 2012; L. C. Zhang, 2006), teaching methods (e.g. Gu, 2002 b; Xia, 2013) and assessment methods (e.g. Cheng, 2008; Elman, 2013). Previous studies have shown that since foreign language education was a rising enterprise for China's modernization and westernization in the 19th century, the Qing government had to rely on foreigners' help in importing original teaching materials (Wu, 2011) and employing foreign teachers to impart advanced technical knowledge to students (Wu & Tian, 2012). However, those case studies fail to reveal the western governments' attitudes towards foreign language education and the Self-Strengthening Movement in China and the westerners' real intentions to support China's modernization. It is yet unknown whether the western powers agreed to send teachers or technicians to China because of their hope to strengthen China or other deliberations?

When cross-referencing various studies concerning the history of foreign language education in late imperial China, I find that previous studies have interpreted foreign language education in the late Qing period merely from its practices in bilingual schools

instead of focusing on the policy dimension of bilingual education in late imperial China. Despite the fact that it is justifiable and necessary to reconstruct foreign language education policies from language education practices, previous studies have no direct relevance to the present study. The present study centers on the government attitudes towards bilingual education and explores an implicit link between bilingual education and external socio-political settings in late imperial China.

Five important issues have not received sufficient scholarly attention and need to be further explored in the present study:

(1) Reasons for the rise of bilingual education and the language ideologies behind government decisions on bilingual education in late imperial China. Previous studies have not revealed whether the rise of bilingual education in the late Qing period stemmed from British linguistic imperialism, the enlightened Chinese social elites and intellectuals' need for self-strengthening and modernization, or a complex interplay of both western threat and China's inner need.

(2) Actors or agencies in promoting bilingual education in imperial China. Few previous studies have centered on important actors or agencies in promoting bilingual education in the late Qing period. Future research is needed to investigate the roles of different actors or agencies including the central imperial government, the central educational committees or organizations in late imperial China, viceroys and provincial governors, gentry merchants, western administrative agencies in China and other individuals in promoting bilingual education in mainland China during the 19th century.

(3) The roles and statuses of foreign languages and Chinese in bilingual curriculums, and the relationship between Confucian education and Western education. Being a newborn

baby in feudal China, foreign language education in the late Qing period might have constant conflicts with Chinese language education. The void in previous studies highlights the need to explore how the Qing government and other decision-making actors or agencies sought a balance between foreign language education and Chinese language education.

(4) A close comparison between ELT practices and EMI practices in modern schools in late imperial China. No previous studies have attempted to differentiate the concept of English education and bilingual education. However, if we want to provide historical legacy to today's bilingual education in China, it is necessary to investigate the relationship between ELT and EMI in content subjects in the late Qing period and their roles in facilitating students' understanding of western knowledge.

(5) The socio-political factors of bilingual education in the late Qing period. Few historical studies have exclusively linked the socio-political factors with the emergence and development of bilingual education in late imperial China. Since the socio-political factors had stronger influence over the language education policy than pedagogical factors in late imperial China, it is necessary to examine how the socio-political factors affect the government attitudes and decisions on bilingual education. Was it a smooth road for the development of bilingual education, or a rough track filled with a number of barriers for bilingual education? If it was the latter, what were the barriers for bilingual education in late imperial China? How did the leading actors or agencies overcome those barriers?

2.6 Chapter summary

As suggested by Borg (1963), the function of a literature review in historical studies is different from other types of studies such as educational studies in that the literature review provides the pretext and data for historical research. Thus, historical researchers have to

seek a multitude of comprehensive documents in order to acquaint themselves with previous research on the topic, identify the research niche and prepare for the stage of data gathering.

Borg's suggestion informs me of the basic perspectives and principles on conducting a substantial literature review in the present study before data collection and analysis. This chapter synthesizes recent findings on theoretical constructs of language policy including its definitions, core elements and representative research frameworks. It also gives a holistic review of previous historical research on foreign language education in countries or regions within the "Outer" and "Expanding" Circle including countries in continental Europe, the British colonies and East Asian countries within British or American Informal Empire in the 19th century.

When cross-referencing a large number of historical studies on English education in continental Europe, the British colonies and the East Asian countries within British or American Informal Empire in the 19th century, I find that previous historical research has predominantly centered on the methodological continuity and shift of ELT in history. A few studies also discuss issues relating to language ideologies of English education policies, different roles and statuses of English and the native language, and main actors or agencies of English education over history. The historical studies in other contexts provide me with insights into exploring the development of bilingual education in late imperial China, into comparing the historical development of bilingual education in late imperial China with that in other similar contexts. Nonetheless, these studies focusing on other contexts are not of direct relevance to the present study since language education is a contextualized topic and China has its own historical route for bilingual education.

When we narrow our scope of literature and examine previous historical studies on foreign language education in late imperial China, we find that previous historical studies have tended to focus on foreign language education practices, pedagogical issues of language education in particular. Government policies and socio-political factors of foreign language education in the late Qing period have been overlooked. Previous historical studies also have methodological limitations in terms of the depth, validity and sources of data, which fuels the necessity to examine the bilingual education policies and practices in late imperial China historically and empirically for convincing arguments.

The present study, based on the appropriation of primary sources of data, is designed to supplement the sociolinguistic perspectives of the spread of English to British and American Informal Empire during the 19th century. The study focuses on the bilingual education policies and practices in late imperial China, identifies the purpose of bilingual education in the late Qing period and above all, explores the implicit link between multifarious socio-political factors and the development of bilingual education in late imperial China.

Chapter Three

Research Methodology

3.1 Chapter introduction

The present study is a historical investigation of the origin of bilingual education in mainland China. It aims to examine how foreign languages were introduced and spread to mainland China as a means of understanding western knowledge on science, technology and political systems in the late Qing period, and to identify the contextual factors that affected bilingual education in that historical period. The document-based sources of data in the present study, which target the development of bilingual education in late imperial China (1840-1911), were collected and analyzed to address the following research questions:

- (1) What was the nature and purpose of bilingual education in late imperial China?
- (2) When, how and why did bilingual education policies and practices change?
- (3) Who was the main actor or agency in bilingual education policymaking process in late imperial China?
- (4) What were the results of bilingual education in the late Qing period?
- (5) What were the curricular characteristics of bilingual education in late imperial China?
- (6) What were the contextual factors contributing to the development of bilingual education policies and practices in the late Qing period?

This chapter presents a detailed description of the research methods employed in the study. Specifically, the nature of study, the sources of data, the process of data collection, the methods of data analysis and the means of enhancing the trustworthiness of study will be

detailed in the following parts to establish the methodological framework of the present study.

3.2 Qualitative research

The present study belongs to qualitative research. Qualitative research is described as “a not-so-descriptive adjective attached to the varieties of social inquiry that have their intellectual roots in hermeneutics, phenomenological sociology, and the Verstehen tradition” (Schwandt, 2007, p. 247). In contrast to quantitative approaches in which the research hypothesis can be tested with empirical support, the interpretation of social phenomena or historical events requires an in-depth exploration of the totality of the targeted situation (Bogdan & Taylor, 1990). The data in qualitative research are thus generally descriptive rather than numerically based data derived from a measuring instrument (Fraenkel & Wallen, 2000). Flick (2007) maintains that qualitative methods are used to examine why and how the decision-making takes place, not just presenting “what”, “where”, “when”, “who” or other superficial issues represented in the data. Thus, qualitative research methods are frequently employed in studies of history, political science, social work and education to understand government decisions. In the present study, the whole analysis, which aims at reconstructing governmental decisions on bilingual education in late imperial China, is based on document-based archival data. The study thus falls into the category of qualitative research.

Depending on research foci and objectives, qualitative research methods vary from grounded theory practice (Glaser & Strauss, 1967), narratology, storytelling, interview, observation, ethnography, case studies and many other approaches. Researchers determine the preferred research methods based on their research objectives and the type of data to be collected. In the present study, historiography, the method of doing historical research

(Furay & Salevouris, 2010), is chosen as the overarching research framework in collecting and interpreting the document-based data collected from various sources.

3.3 Historical research

Williams (2007) describes the historical investigation as “a process of discovery and construction” (p. 11). In the process, historians are seeking ample and compelling evidence to establish the chronology of historical events and construct the history from the evidence. The present study provides substantial information on how bilingual education originated in mainland China and how the policies of bilingual education evolved over time in late imperial China.

A historical investigation generally consists of two processes — collecting historical data and writing a narrative for interpreting the history (Harvey & Press, 1996). In light of the definitions above, Connors (1992) maintains that historical research involves the following five stages: 1) identifying a research problem; 2) locating available evidence to address research questions; 3) discovering factors and organizing events that affected people; 4) constructing events in chronological order; 5) interpreting the meaning of the past by concrete evidence.

The significance of historical research has been widely recognized as it has scholarly value for its own sake (Elton, 1969) and yields practical insights into the present problems that cannot be easily addressed by other research methods. Within the field of language education and applied linguistics, historical research is conducive to demonstrating how language educational problems emerged, developed over history and formed blueprints for contemporary education practices (Connors, 1992). Contemporary educationalists gain historical insights from former education policies and practices to evaluate the present

issues, to explain the historical precedents or even to predict the future. As Birkby (2012) notes, putting a historical perspective on education policies will also enhance our understanding of the direct or indirect relationship between education and politics within a broad socio-political context in a given geographical area. In essence, the purpose of historical research in the domain of education and applied linguistics is not limited to find the historical precedents but more importantly, to seek historical legacy (Tosh & Lang, 2006).

Different from the direct observation and experimentation in the field of social sciences, historical research heavily relies on collecting and interpreting evidence of the past facts and human's thoughts (McCulloch & Richardson, 2000). In historical studies, the textual data provide primary foundation upon which the analysis and interpretation are built (Webb et al., 1981). Similarly, Berg (2007) summarizes that the essential issues concerning data-driven historical research are collecting document-based data and developing a meaningful interpretive framework to analyze the data.

Based on the above principles of conducting historical research, the present study mainly relies on the original archives in relation to bilingual education in late imperial China. The study is designed to provide readers with substantial information on when bilingual education originated and how bilingual education policies and practices evolved over time in late imperial China. The present historical study is also concerned with the broad contextual setting beyond bilingual education in late imperial China, attempting to analyze the purposes of bilingual education and identify the socio-political factors affecting bilingual education policies and practices in the late Qing period.

3.4 Archival research

Archival research is thought to be the most classic form in the domain of historical research (Ventresca & Mohr, 2001). In contrast to other qualitative research methods, which generate data through research activities such as interviewing participants, archival research requires collecting and analyzing the data represented in the existing records (McBurney & White, 2007).

Specifically, archival research is structured by a flexible but painstaking sequence of stages that begin with identifying a historical problem. The researcher subsequently delimits the problem in precise terms and raises research questions. In order to address the research questions, the historian locates the sources of archival data, collects and processes the data, and finally synthesizes the data into a balanced and objective account. The present archival study focuses on the history of bilingual education in mainland China and delimits the research focus on the historical development of bilingual education policies and practices in the late Qing period. The next step of research is to locate the available sources of archival data for interpretation.

3.5 Sources of data

The sources of data in historical research are the information from which researchers make valid inferences and form the argument to answer research questions (Howell & Prevernier, 2001). The sources of data can be in any form, either oral or written accounts, describing historical events and providing detailed historical information about what happened, how and in what contexts the event occurred. According to the content, sources can be categorized into: 1) the so-called ego documents, or named as personal narratives including historical figures' personal diaries, private correspondences, memoirs as well as the biography to emphasize a person's life chronicle and achievements in history; 2) diplomatic

sources, namely, the documents that record a law-giving situation in a country, such as a charter; 3) social documents, namely the official records kept by bureaucratic agencies such as state ministers and schools (Howell & Prevenier, 2001). Within each category, the degree of subjectivity contained in the sources are at different levels. For instance, in the category of ego documents, biographies of a historical figure contain more subjectivity than historical participants' diaries or manuscripts because the biographies were produced long after historical events and written by scholars in today's age with more contextual sensitivity and hindsight involved.

According to historians' personal distance from the historical events, the sources of data in historical research are roughly divided into primary and secondary sources. Primary sources, which are regarded as the life-blood of historical research, refer to the sources produced by those who participate in or at least witness the particular historical episode or events (Kamil, Mosenthal, Pearson & Barr, 2002). Primary sources are valued by historians because the eyewitnesses approach original historical events and avoid preconceptions from other people. A further distinction within the category of primary sources can be further divided into easily accessible published primary sources, and unpublished primary sources such as private manuscripts and confidential government records in history. Howell and Prevenier (2001) maintain that compared to unpublished primary sources, the easily accessible published sources should not be accorded special weight as they tend to have a selection of the historical evidence for a particular purpose. In contrast, the unpublished primary sources are preferable to historians since confidential documents such as letters and diaries record the historical participants' decisions, discussions or even their innermost thoughts. Thus, historians prefer searching for unpublished or original primary sources and carefully scrutinize the published primary sources if the originals are not available.

In historical research, secondary sources are written by those who are not participating in the events. There is the possibility that secondary sources contain certain degree of bias since the writers' interpretation of history may be influenced by the society they live in (Bentz & Shapiro, 1998). Alternatively, the writers may have much commitment to specific historical issues of the study, leading them to choose certain historical facts to arrive at the conclusions. Thus, caution needs to be exercised when examining secondary sources of data because of its bias and subjectivity. However, secondary sources of data also have their significance in providing historians the backcloth to historical events and filling the gaps of primary sources. On some occasions, historians are as much interested in what the later generations think was happening in the past as in what actually happened in history (Tosh & Lang, 2006). For this reason, they will turn to secondary sources for a fuller understanding of what modern people think about the history.

3.5.1 The primary sources of data in the present study

The present study drew on a wide variety of primary and secondary sources. I relied as far as possible on primary sources of data and adopted a critical stance towards the secondary sources to provide the background context and fill gaps in the primary sources of data. Specifically, there were four major primary sources of data in the present study:

(1) Memorials to the throne in the late Qing period

Memorials to the throne were suggestions of the imperial or provincial government officials offered to the throne, which covered an array of topics including imperial China's foreign policy, economics, culture and education. The memorials were important testimonies of government decisions on education or at least governors' attitudes towards bilingual education and western knowledge. The textual data in those memorials in relation to the direct issues of bilingual education provided the data basis on which the present study was

constructed. Copies of the memorials are accessible in the State Archives Administration of the People's Republic of China and the First Historical Archives of China. Details of the memorials to the throne including the genesis, titles and the author are presented in the Section "Reference" under the heading of "Memorials to the Throne concerning Education in the Late Qing Period".

(2) Original archives on bilingual education in schools

Due to the relative absence of explicit government policies on bilingual education, it is necessary to reconstruct bilingual education policies from practices of the premier government schools in late imperial China. In the present study, the original archives of education practices in the bilingual schools were important historical records to examine congruence between bilingual education policies and practices in late imperial China. The archives included original curricula and syllabi, teaching materials, teacher and student name lists and examination papers. Those archives were used to explore details of bilingual education policies and practices in the premier government schools from 1840 to 1911. Copies of the original archives of bilingual education practices in the modern schools are accessible at the Special Collection of the university libraries in mainland China. The predecessors of those universities were the premier government universities in late imperial China. The details of primary archives are presented in the Section "Reference" under the heading of "Reports on Education practices in Government Schools in the Late Qing Period".

(3) Imperial decrees, governors' manuscripts, memoirs, private diaries and correspondences

Imperial decrees were the edicts sent by the emperor in Qing Dynasty and governors' manuscripts were the hand-written orders sent by imperial and provincial governors. The

confidential records revealed the attitudes of imperial and provincial governors towards bilingual education, providing direct and corroborative evidence of bilingual education policies and practices in late imperial China. Apart from public records, the imperial or provincial governors' private diaries or correspondence concerning education deepen our understanding of the governors' views on bilingual education, which they were unwilling to disclose in public. Copies of the decrees, manuscripts, governors' diaries and correspondence are accessible in the State Archives Administration of the People's Republic of China, the First Historical Archives of China, and the special collection division of provincial libraries or archives in mainland China such as Fujian Provincial Archives. The primary records are presented in detail in the Section "Reference" under the heading of "Imperial Decrees, Governors' Manuscripts, Memoirs, Private Dairies and Correspondences".

(4) Contemporary essays, articles, periodicals and newspapers

Articles, editorials, letters published in contemporary journals and newspapers provided concrete evidence for the significant historical events in relation to bilingual education as well as the socio-political settings beyond bilingual education in the late Qing period. The present study drew on materials from a variety of periodicals and newspapers such as *Chinese Repository*²⁶, *the China Mail*, *Chinese Recorder and Missionary Journal*, *Chinese Globe Magazine*, *Education World* and *North-China Herald*. Among those periodicals and newspapers, *Chinese Repository* (1832-1851) recorded some reports on the spread of English to late imperial China including the earliest missionaries' efforts to spread Christianity to China and teach Chinese people foreign languages in late imperial China.

²⁶ *The Chinese Repository* (1832-1851) was a periodical published to inform the Protestant missionaries of China's politics, economics, culture, military power and geography, and it was an important channel for the western colonizers to get knowledge of China in the Opium Wars.

Although the present study focused on the government schools as they directly reflected the attitude of government towards bilingual education, the accounts of missionaries' work as well as the earliest English education practices in coastal China provided us with the social background for the introduction of foreign languages and western knowledge in China. The contemporary newspapers such as *North-China Herald* gave detailed and vivid accounts of the facts and people's opinions concerning bilingual education policies and practices in government schools. Of particular value were the comments from western countries on education practices in China's government schools. The westerners' comments provided us with outsiders'²⁷ views on bilingual education in the late Qing period. The periodicals and newspapers used in the study are available (in microfilm or digital database) in the national or provincial archives and libraries such as the State Archives Administration of the People's Republic of China and Shanghai Municipal Archive. The list of periodicals and newspapers referenced in the present study is presented in the Section "Reference" under the heading of "Contemporary Essays, Articles, Periodicals & Newspapers".

3.5.2 The secondary sources of data in the present study

The secondary sources of data provided us with the social milieu for bilingual education in the late Qing period. Since the present study concentrated on the government attitudes and decisions on bilingual education, a thorough investigation of the historical backcloth of education provided us with information on socio-political settings behind the policymaking process and the changes in bilingual education over time. The secondary sources also provided new perspectives on existing ideas (McDowell, 2002), offered complementary historical evidence to the study and an opportunity to explore similarities and contradictions between the primary and secondary sources. The appropriate use of secondary data in some

²⁷ The outsiders were those who did not directly participate in the bilingual education practices in late imperial China.

sense increased reliability and validity of the present study and extended the discussion to a much broader scope instead of giving a pure historical account without the critical analysis (Plummer, 2001).

The secondary sources of data in the present study mainly involved monograph studies on the history of late imperial China, biographies of historical figures, journal articles published in peer-review publications and web-based data. The full list and details of these secondary sources of data are presented in the Section “Reference” under the heading of “Secondary Sources”.

3.5.3 Sources evaluation

The procedure of source evaluation is as an indispensable part of data analysis. Howell and Prevenier (2001) maintain that prior to data analysis, the primary and secondary sources of data need to be carefully evaluated to enhance the credibility of the sources used. Only the reliable sources of data after evaluation can be viewed as validated information in historical studies. The source evaluation stage is not concerned with information contained in the sources but external characteristics of the sources, such as the genesis or provenance of sources, the originality of source as well as the authorial authority²⁸.

The present study is largely based on unpublished primary sources deposited in national and provincial archives as well as special collections of the university libraries, which ensures a high degree of originality of the sources. The unpublished primary sources in the present study also have high authorial authority. For instance, *Collections of the Memorials*

²⁸ **Authorial authority** refers to the credibility of authors, namely, their distance from the historical events, their competence of observing and recording the history, their intention of the historical account and the historical context in which authors give a historical account.

to the Throne on Foreign Affairs (1836-1874) were official collections of the governors' memorials to the emperor. The memorials were recorded by three official compilers in the Qing government including Wen Qing (文慶), Jia Zhen (賈楨) and Bao Yun (寶鋆). They were also the participants witnessing historical events and changes in late imperial China. Thus, the unpublished primary sources used in the study possess a high degree of external credibility.

While most of the sources analyzed in this study are unpublished primary sources, there are still a few published primary sources compiled by the historians or archivists living later than the period under review. Thus, before evaluating the published primary sources of archival data, it is necessary to consider the author's purpose of compiling the sources and his rationale of selecting the historical events. Even for some unpublished primary sources such as private diaries, manuscripts and correspondences, they may provide a ready-made chronology and a coherent selection of events and recount on what the author finds noteworthy, which contains the personal bias in the data (Tosh & Lang, 2006). In order to increase the reliability and validity of the published primary data, it is important to triangulate the sources and compare the published sources with other sources of data.

3.6 Data collection

Some national and provincial archives and libraries as well as a few university libraries in mainland China were chosen as the primary sites of data collection since the study focuses on the historical development of bilingual education in mainland China. Hong Kong Central Library and the National Archives of Britain were also chosen as the sites for me to retrieve valuable primary data as some students in late imperial China came from Hong Kong and furthered their education in Britain after they graduated from the premier government

schools in China. Details of the data-collection process including the primary data retrieval sites and the targeted sources of data are presented in Table 1.

Table 1: The primary data retrieval sites and targeted sources of data

Data Retrieval Sites	Targeted Sources of Data
The First Historical Archives of China; The State Archives Administration of the People's Republic of China; National Library of China; Hong Kong Central Library	<i>The Collections of Memorials to the Throne on Foreign Affairs (1836-1874); New statutes and decrees of Qing Dynasty in the Guangxu period (1875-1908); New statutes and decrees of Qing Dynasty in the Xuantong period (1909-1911)</i>
China Chuanzheng Culture Museum; Fujian Provincial Library; The National Archives of Britain	<i>Rules and Regulations on the Western Teachers' Behaviors at Fujian Naval College; Statutes of Fujian Naval College;</i>
The Library of Peking University	<i>Statutes of Imperial Peking University; Statutes of Peking Translation College; The Name List of Teachers and Students at Imperial Peking University</i>
The Library of Xi'an Jiaotong University	<i>Original Archives on Xi'an Jiaotong University</i>
The Library of Shanghai Jiaotong University	<i>Archives of Shanghai Jiaotong University; The Original Archives of Sheng Xuanhuai;</i>
The Library of Tianjin University Tianjin Library	<i>The Selections on the Records of History of Peiyang University and Tianjin University</i>

3.7 Data analysis

“Carefulness” is the guiding principle or the attitude in the data analysis process of any historical study. Richard Cobb (1974) vividly compares the historian's data analysis to the musician's approach to the music:

“The most gifted researchers show a willingness to listen to the wording of the document, to be governed by its every phrase and murmur. ... so as to hear what is actually being said, in what accent and with what tone.” (p. 14)

In order to process the collected data and understand their internal meaning, it is important to adopt a consistent method to analyze the data. Content analysis is viewed as the most standard method to analyze textual data (Flick, 2009; Grbich, 2007) and is thus the preferred analysis method used in the present study.

3.7.1 The adoption of content analysis method

As an extensively adopted qualitative research method, content analysis is a method of extracting important information from the texts and making logical references (Krippendorff, 2004). Krippendorff maintains that content analysis has four key characteristics. Firstly, content analysis is based on the actual archives, so it minimizes researchers' errors when they analyze the data. Furthermore, content analysis can be adopted to analyze unstructured materials such as the historical evidence scattered in various sources. Additionally, content analysis is contextually sensitive in that it needs to consider the contextual factors such as the specified social background when researchers analyze the data. Finally, content analysis can be used to handle voluminous data. The characteristics of content analysis fit in with the nature and objectives of the present study as it is designed to reconstruct past events concerning bilingual education policies and practices from the unstructured and extensive historical archival data. As Grypma (2008) argues, historical data will not attain its value until they are analyzed in the historical context. Thus, the present study also involves the analysis of broad historical contexts in which bilingual education originated and developed in late imperial China.

3.7.2 The choice of “Conventional Content Analysis” method

Before starting content analysis, I reviewed the collected data repeatedly to become familiar with the data. Subsequently, faced with voluminous archival data, I categorized them by the chronology and the general topic. In order to analyze data in a coherent manner, the data in the 70-year chronological span of late imperial China were sub-divided into three periods: Period 1 (from 1840 to 1860), Period 2 (1861-1894) and Period 3 (1895-1911). The division of chronology is determined by three epoch-breaking historical events in the late Qing period — the Opium Wars starting in 1840, the Self-Strengthening Movement starting in 1861 and the Sino-Japanese Naval War in 1894. The three significant historical events changed the socio-political context in China, which also brought about considerable changes to the education in late imperial China.

After I had become familiar with the data and divided the data into several folders according to the chronology, I examined the data line by line and coded the data for further analysis and organization (Berg, 2007; Herda, 1999). In historical research, when coding data, there was a choice of three approaches to establishing the coding scheme: conventional content analysis, directed content analysis and summative content analysis (Hsieh & Shannon, 2005). Adhering to the natural paradigm, the three qualitative content analysis methods are all used to interpret meanings from the textual data but the three approaches differ in coding schemes, origin of codes and degree of trustworthiness. In terms of the directed content analysis approach, the analysis begins with a theoretical model or bases itself on the previous research findings that provide preconceived categories for the initial coding scheme. In contrast, for the conventional content analysis approach, codes and categories naturally flow from the data instead of directly applying preconceived categories to the analysis of archival data. The summative content analysis method is primarily used for linguistic purposes when the study is conducted to identify and quantify linguistic patterns

or characteristics of words and content represented in contexts for decoding contextual meanings of words and content.

Each of the three approaches has its own strengths and limitations. However, the conventional content analysis approach is more relevant to the present research design. The complex and unique nature of the present study compels me to rely on my judgment and the actual archival data. Thus, it is more justifiable to allow the coding categories to flow from the data rather than being based on the preconceived categories. The preconceived categories in previous studies on bilingual education such as the workable categories in Colin Baker's (1996) "Input-Output-Context-Process" model and Shen's (2012) "Framework of Foreign Language Education Policy" have afforded me with illuminating insights into ordering data to a chronological narrative and bringing similar subject matter together as determined by categorical tags or codes. However, those modern models of bilingual education, which were conceived long after the late Qing period, were not justifiable for providing explanations for the historical precedents. The application of the preconceived categories to the present study may limit the analysis scope and overlook the important categories hidden in the original archival data. Since the present study focuses on the interpretation of historical evidence concerning bilingual education in late imperial China rather than analyzing the linguistic features of the words or sentences including frequencies, distributional patterns, proportions and other statistical features in the textual data, the summative content analysis approach is not suitable to this study. Based on the reasons above, the conventional content analysis approach was adopted in the present study to allow new insights or coding categories to emerge from the data (Kondracki & Wellman, 2002).

3.7.3 The process of data analysis in the present study

As Merriam (1998) suggests, the data analysis process should not be completely separated from the data collection process. Data analysis immediately after the very first data collection trip would facilitate the follow-up stages of research design and data collection, particularly in the aspects of restructuring research focus, refining research questions and adjusting the previous coding scheme to interpret the data (Lincoln & Guba, 2000). The data analysis process in the present study is detailed in the following sections.

3.7.3.1 Analysis of the primary sources of data

After reviewing the collected data, translating the archaic Chinese sources of data into English²⁹ and choosing the conventional content analysis method as a primary approach to interpret the textual data, I started to develop a coding scheme based on the data. Specifically, I read the archival data word by word in order to derive the themes that were assigned to segment the whole text into many content-analytical units (Miles & Huberman, 1994; Morgan, 1993). Morse and Field (1995) maintain that the segmentation rules should be explicit before reviewing the data, and should serve the purpose of the study, which helps to organize the themes, answer the research questions, and facilitate the second coder to achieve similar results. Since the present study focuses on bilingual education in late imperial China, the initial coding labels are concerned with different aspects of bilingual education such as “the purpose of bilingual education” and “the proportion of Chinese and English language courses in the curriculum”. The initial coding labels came from my views based on previous research experiences and readings. Nevertheless, it does not mean that the directed content analysis was used in the study as I did not rely on preconceived categories in others’ research work but gained some insights from my previous research

²⁹ The archaic Chinese sources of data were translated into English because it facilitated the follow-up data analysis and English writing process. The data would be presented in English instead of Chinese.

work and prior knowledge in this field. Those initial coding labels would change when new codes emerged from actual historical evidence.

The textual data were subsequently examined line by line and the exact words from texts that captured the key concepts were highlighted for further analysis. Meanwhile, I also made notes of my first impressions, thoughts or initial analysis based on the words taken from the texts, during which the coding labels emerged. Some of the labels were similar to the existing coding labels in previous studies while some of the new labels flowed from the actual data. Subsequently, those emergent coding labels were sorted into sub-categories based on the relationship between different codes. After the sub-categories had been refined, depending on the relationship between subcategories, the larger number of sub-categories were combined into a smaller number of categories according to similarities between the sub-categories. For example, the related sub-categories like “students’ examination reports” and “teachers’ comments on students’ capabilities” in bilingual education were subsumed under a more general category “evaluation of bilingual education”.

After having formed categories in the textual data, I gave more examples for each category and identified the relationship between the categories based on the congruence, antecedents and consequences in order to report and interpret the research findings in a coherent manner. At this stage, the causality in historical events was located by way of deduction for the purpose of presenting a chronologically and logically coherent account of history and demonstrating the causal relationship between the historical events. During the process of data analysis, I also created a file to store “quotable quotes” in the primary data in order to keep the important data verbatim. It also helped to minimize the risk of data contamination because some personal bias might be involved when I evolved patterns and structures from the texts (Thorne, 2008).

The process of primary data analysis as well as the corresponding goals of each step in data analysis is presented in Table 2 on Page 141.

Table 2: Data analysis methods and objectives in the study

Analysis Methods	Analysis Objectives
1. During data collection, the textual data were organized by chronology.	1. To organize a chronology for further analysis.
2. The textual data were reorganized by the general-coding labels (e.g. the historical events).	2. To organize the similar subject matter.
3. The data were translated from archaic Chinese into simplified Chinese, and then into English verbatim if necessary.	3. To prepare for the further analysis and facilitate the thesis writing in English.
4. The textual data were examined line by line and the coding labels from the data that captured the key concepts were highlighted. The emergent coding labels were then sorted into the sub-categories based on the relationship between different sub-categories	4. To identify the themes concerning the bilingual education in the late Qing period from the textual data.
5. The sub-categories from multiple sources were combined in categories based on similarities between the sub-categories.	5. To organize those categories derived from the primary sources of data for further analysis.
6. More examples were given for each category and the relationship between categories was identified.	6. To report and interpret the research findings in a coherent manner according to the research questions;

3.7.3.2 Analysis of the secondary sources of data

When I analyzed the secondary sources of data, originally I attempted to employ the coding categories in primary data to the analysis of secondary data in order to examine the uniformity and variability between the primary sources and secondary sources. However, due to the proposed diversity and uniqueness of the secondary data, some new categories emerged from the data, particularly those categories concerning the political, economic, cultural and social contexts beyond bilingual education in late imperial China. Thus, I adopted the conventional content analysis approach for the second time to analyze the secondary sources and allow the categories to be derived from the data. Steps of the data analysis on secondary sources of data were similar to those taken in analyzing primary sources of data.

3.7.4 Comparing the primary and secondary sources of data

Howell and Prevenier (2001) maintain that historians make their interpretations on the certain episode of history by comparing multiple sources and sifting useful information for making inferences from the textual data. It is suggested that historians as researchers should keep a constant movement back and forth between primary and secondary sources to determine the meaning of findings and check the consistency between primary and secondary data (Rury, 1993).

Similarly, according to Woods and Catanzaro (1988), if two primary sources of data concur, it is confirmed that something actually happens in history and the data are historical facts. If only one primary source exists, the historiographer may conclude that the event “probably” occurs. If only secondary sources exist, without the support by primary sources, the historiographer may state the event is only a “possibility”. Howell and Prevenier (2001) argue that if two sources disagree on the particular historical event, the primary sources will

be preferable to secondary sources because the “eyewitness” reports generally possess high credibility. In the present study, throughout the data analysis process, I adopted a “constant comparative approach” (Maykut & Morehouse, 1994) to compare different sources of data. After analyzing the primary and secondary sources of data respectively, all the categories were closely examined and analyzed in a recursive process of category comparison, category reduction, category verification and further data analysis in order to identify the “discrepant data” (Donald, Jacob & Razavieh, 2002, p. 69) and present contradictions, inconsistencies, and omissions among different sources of data.

The use of “constant comparative approach” also serves the purpose of internal criticism of the sources to compare the primary and secondary sources in historical studies. Connors (1992) suggests all the sources be under internal criticism in the data analysis process. During the process, researchers need to examine whether there are biases and glosses in the data and seek more than one source to support their claim. The credibility of the data thus hinges on the triangulation of multiple sources, the concurrence in various primary sources of data in particular. During the constant data comparison process in the present study, broader thematic structures emerged. They offer possible answers to the research questions raised in Section 1.2, and the contradictions among the sources of data are left to further discussion in Chapter 7.

3.8 The trustworthiness of the study

Despite the fact that there is a widely agreed concession among the historians that the purely unbiased and perfectly valid data is not available in historical studies (Gay & Airasian, 2000), historians are convinced of the trustworthiness of historical research (Howell & Prevenier, 2011). The present document-based study primarily depends on “unobtrusive data gathered in isolation” (Birkby, 2012, p. 106), so the trustworthiness of the archival data

as well as the data interpretation is subjected to external and internal criticisms. The external criticism is related to sources evaluation, which has been discussed in the Section “Source Evaluation”, while the internal criticism refers to ensuring the validity and reliability of data interpretation, namely, reducing the bias or subjectivity in the process of data analysis. Specifically, there is a need to ask whether a faithful account has been given and what the position of the researcher is in the analysis. Different from quantitative studies which rely on objective testing measures of validity and reliability of the data, researchers in qualitative studies were required to ensure credibility of both sources of data and interpretation of data in other means (Eisner, 1991; Lincoln & Guba, 2000; Vogt, 1999). According to the post-positivist paradigm, there is no pure objective knowledge in any sources of data, so it is preferred to triangulate sources of data before drawing sound conclusions. Apart from data triangulation, other strategies such as journal keeping and expert peer debriefing are also adopted to test trustworthiness of research findings and interpretation (Gay & Airasian, 2000).

In order to enhance trustworthiness of the present study, I identified multiple primary and secondary sources for data triangulation, and I also kept a reflective journal throughout the data collection and analysis process to record my feelings, suppositions, insights and puzzles in interpreting the data. The reflective journal was also conducive to my verification of whether the data in the study were “corroborated in multiple sources or stated in a single source” and whether the source was “reliable or potentially biased” (Birkby, 2012, p.103). More importantly, as the journal recorded my personal emotions in the process of analysis, it was beneficial to remind me of the need to insulate my personal emotions from data analysis and keep the original archival data in multiple sources as the basis for further interpretation instead of employing my present-mindedness to interpret past events and people (Hatch, 2002).

Another strategy to develop trustworthiness of the present study was to turn to two experts in the field (who were not involved in the study) for peer debriefing. The two experts are professors in key universities in mainland China. Both of them have doctoral degrees in modern history of China and have rich experience of conducting historical studies in the education history of late imperial China. They are also familiar with the background of the present study and are proficient in archaic Chinese and English. I established a close relationship with the two professors in conferences and collaborated with them in previous research projects. They were pleased to accept my invitation to participate in the peer debriefing. The process of peer debriefing went in the following steps. Before the two experts started to analyze the data, I had communicated with them about the basic rules to segment the texts and categorize the data in order to make it convenient for future comparisons and discussions. The organized data were subsequently given to the experts for coding and categorizing. During the 3-year period of doctoral study, I sent altogether six folders of primary data to the experts. Since there were frequently some new data emerging, I also sent those new data to them and waited for their responses. After the experts had coded and categorized the data for each time, I compared their coding labels and categories with my coding labels to testify whether there were any differences in the analysis before determining the appropriate codes and categorizing labels from the archival data. Any corrective and constructive feedback and suggestions from peer debriefing were considered at this stage. The two external experts were also asked to check my translations (from archaic Chinese into English) that were used in the thesis in order to ensure the accuracy and completeness of my translated data.

3.9 Chapter summary

This chapter focuses on the research methods adopted in the study. Specifically, the chapter is a description and discussion of the research nature, the sources of data, the methods of data analysis as well as the ways of ensuring credibility of the study.

By nature of research, the present study falls into the category of historical research. Drawing on a wide range of archival data, the study aims to give an account of the historical development of bilingual education in late imperial China. The sources of data in the present study are primarily unpublished primary sources including memorials to the throne in the late Qing period, original reports on bilingual education practices in the premier government schools, imperial decrees, governors' manuscripts, personal diaries, private correspondences, contemporary periodicals and newspapers. The unpublished primary sources provide sufficient evidence and information for the issues of how and why bilingual education originated in late imperial China, how and why the policies in relation to education and western knowledge changed as well as the contextual factors affecting bilingual education in the late Qing period. A critical examination of the secondary sources in the study is also conducive to filling the gaps in primary sources, triangulating the sources to enhance credibility of research and providing the background beyond bilingual education in late imperial China.

The interpretation of archival data began in the process of data collection in the study. After reviewing the collected data, categorizing them according to different chronological periods and general-coding topics, the data analysis continued by following the steps of conventional content analysis method. Since the conventional content analysis method allows the categories to flow from the data, the primary sources of data were examined line by line to extract the codes, sub-categories, categories and themes. Those categories and

themes were later organized based on the congruence, antecedents and consequences to present the findings in a coherent manner.

In the present study, various methods were adopted to ensure the validity and reliability of research. All the sources of data were carefully examined and evaluated in terms of their originality, genesis and their authorial authority before analysis. Most of the unpublished primary sources in the present study possessed high credibility and were regarded as solid historical evidence in the study while the easily accessible primary sources as well as the secondary sources were examined critically to discover any bias involved in the data. Two strategies including reflective journal keeping and peer debriefing were also adopted to insulate the subjectivity from data analysis as much as possible, which helped to enhance the trustworthiness of data analysis in the study.

Under the aforementioned framework of historical research and conventional content analysis, the present study yields findings concerning the development of bilingual education policies and practices in late imperial China. The main findings will be detailed in Chapters Four, Five and Six.

Chapter Four

The Foreign Language Education in the First Two Decades of the Late Qing Period (1840-1860)

4.1 Chapter introduction

Having received a heavy blow in the First Opium War against Britain, the imperial China had to end its long-time “Closed-Door” policy and be open to the outside world. As Karl Marx stated, “(China’s) isolation having come to a violent end by the medium of England, dissolution must follow as surely as that of any mummy carefully preserved in a hermetically sealed coffin, whenever it is brought into contact with the open air” (Marx, 1853, p. 4) The “open air” in Marx’s words alludes to the arrival of many western diplomats, businesspersons and missionaries in China since the 1840s and their ideas about modern science and technology, foreign languages, western culture and religions. The “dissolution” process refers to the China’s institutional change in the post-Opium War period.

Two important socio-political factors provided a favorable pretext for the initial development of foreign language education in late imperial China. One factor was the increasingly frequent communication between indigenous Chinese inhabitants and western sojourners during the Opium Wars, which created growing demand for foreign languages to bridge their communicative gap. The other major factor was the Chinese people’s eagerness to learn from the West through foreign languages. The humiliating fiasco of China in the Opium Wars awakened some Chinese scholar-officials to recognize the large disparity in the power of military weapons between the western powers and China. In order to guard against the western invaders and strengthen the country, a few progressive Chinese scholar-officials called on all the young Chinese talents to acquire foreign languages as

important tools for deciphering and transferring western knowledge on modern science and military technology to China.

In this chapter, by interpreting relevant document-based primary and secondary sources of data, I will give a historical account of foreign language education in the first two decades of late imperial China. Since the Qing government was preoccupied with shaking off the disastrous effects of the Opium Wars and putting down the Taiping Rebellion³⁰ in the 1840s and 1850s, the provision of foreign language education was not in the hands of the Qing government but other important and powerful actors or agencies such as western mission societies. An important actor to promote the development of foreign language education was progressive scholar-officials and social elites in China. During the Opium Wars, they started to recognize the importance of foreign language education and modern science education to remedy the drawbacks of traditional Chinese education, and to confront the endangered situation of China during the western imperialism and colonization. Though no government policies on foreign language education were introduced in this period, a particular exploration into the social background of the Opium Wars would inform us of significant factors contributing to the emergence of bilingual education in late imperial China and the development of government-led modern education in the following period of late imperial China.

The rest of this chapter consists of three main sections. Section 4.2 presents a brief account of the foreign language education practices in China's early mission schools during the Opium Wars. Section 4.3 summarizes the proposals for foreign language education among

³⁰ **Taiping Rebellion** (太平天國運動) was a civil war in China from 1850 to 1864 between the Qing government and Taiping Heavenly Kingdom (a peasant organization that aimed to launch a fundamental transformation against Manchu rulers).

progressive Chinese scholar-officials in the imperial and provincial government. Section 4.4 describes the growing criticisms on the Imperial Examination in the first two decades of the late Qing period (Section 4.4).

4.2 The practices of foreign language education in China's early mission schools during the Opium Wars

4.2.1 The establishment of early mission schools in China

In the 19th century, with the growing expansion of western colonialism and imperialism, the evangelical revival in the English-speaking world led to a substantial number of overseas missionary activities in faraway places like China. Since the first British missionary Robert Morrison³¹ arrived in China to preach the Gospel in 1807, thousands of Protestants had immigrated to China with the aim of converting Chinese to Christianity. However, in accordance with the policies of “outlawing western religions” and “expelling the western missionaries” dated from Qing Dynasty, the Protestant missionaries were restricted from living and travelling in China except a very small area of Canton and Macao, resulting in their limited influence over the indigenous people (Guo, 2000).

The situation for the western missionaries changed dramatically after the outbreak of the Opium Wars. When China was defeated in the First Opium War and had to sign the *Treaty of Nanking* in 1842, the missionaries were granted permission to undertake preaching activities in five coastal cities in China including Canton, Amoy, Fuzhou, Ningbo and Shanghai. More than a decade later, when China was overwhelmed by the allied army of Britain and France in the Second Opium War and signed unequal treaties including the

³¹ **Robert Morrison** (1782-1834) was an Anglo-Scottish Protestant missionary who was notable for his preaching activities in China. During his time in China, he translated the whole Bible into Chinese and became a pioneering sinologist and translator.

Treaty of Tientsin and the *Convention of Peking*, the entire China was opened up for missionary activities (Johnstone, 1937).

Despite the fact that the western missionary activities gained legal permission to preach in China, those missionaries still encountered two enormous obstacles to fulfilling their proselytizing missions. One problem was language barriers between Chinese indigenous people and western missionaries. Since the vast majority of western missionaries were unable to speak Chinese, the only feasible way of undertaking their preaching activities was to cultivate some Chinese social elites to be firm Christian believers and convert their compatriots to Christianity. Basic English proficiency would thus be a prerequisite for potential Chinese Christian missionaries to read the Bible, understand Christian doctrines and then preach the word of God to others (Biggerstaff, 1961).

The other formidable obstacle to the propagation of Christianity was the difficulties in dispelling the deep-rooted doubts over Christianity in China. Because of the long-term “Closed-Door” policy, the country had been immersed in the Confucian culture for more than five millennia, resulting in its inherent resistance to any new ideas from other countries. In particular, the Imperial Examination, which focused on Confucian knowledge, was still the only route for Chinese social elites to work in the government and acquire a high social status in the initial period of Opium Wars. Foreign languages, western religions, and even advanced knowledge on modern science were thus difficult to be accepted and popularized in the mainstream society of China (Li, 2001).

In order to accomplish their objectives of proselytizing in China, those persistent western missionaries conceived the idea to propagate Christian doctrines through formal education. Mission schools were then established to teach Chinese children the Bible, to impart

practical knowledge to destitute people, and to help them acquire the basic survival skills in the society. Samuel Wells Williams³², one of the earliest American missionaries to China, placed great importance on establishing mission schools in late imperial China:

“Amid such a valley of dry bones as China, subsidiary means, like schools and hospitals, in which to teach and practice the principles of Christianity, are worthy of not a little care. ... I will not deny that too much stress and time may be given to these departments, but it is difficult to tell beforehand what will prove the most promising path.” (Williams, 1889, pp. 180-181)

Samuel Williams’ ideas of proselytizing through education gained the support of Calvin Wilson Mateer³³. In the First General Conference of the Protestant Missionaries of China, he aired his views on the subtle relationship between education and religion:

“Christianity and education are in themselves entirely distinct, yet they have such strong natural affinities that they have always been closely associated. ... The school is not the direct means for conversion, but it affords an admirable opportunity to secure that result — a result which is not only highly desirable itself, but essential to the right use of the education received.”
(Yates, 1878, p. 90)

It can be seen from Calvin Mateer’s essay that the *raison d’être* of those mission schools in late imperial China was to spread Christianity rather than cultivate young talents for China’s

³² **Samuel Wells Williams** (1812-1884) was an American linguist, official, missionary and Sinologist in the early 19th century. He was very fluent in Chinese and once worked for the American Board of Commissioners for Foreign Missions in China.

³³ **Calvin Wilson Mateer** (1836-1908) was a missionary to China under the support of the American Presbyterian Mission. During his 45-year missionary career in China, he presided over the translation of the Holy Bible, and founded Dengzhou College as one of the earliest modern institutes of higher education in China.

self-strengthening and modernization. Similarly, Gu Weijun (顧維鈞)³⁴, a famous diplomat in the Republic of China who had learning experiences in mission schools, also clarified the fundamental nature of those mission schools in his memoir:

“Apparently, the aim of a missionary school was to produce Chinese not with a view to what China needed as a nation, but what the missionary movement needed. What they wanted most to do in the way of general education was to disseminate [a] knowledge of Western science in order to make the individual better prepared to make a living without any reference to or appreciation of the needs and requirements of the country as a whole.” (Koo, 1976, pp. 36-37)

4.2.2 The early mission schools in China during the Opium Wars

4.2.2.1 The mission schools in Hong Kong

As stated in Section 4.2.1, the unequal treaties signed between China and the western powers legalized the western missionary activities, which gave rise to the emergence of many mission schools in China. According to Xiong’s (1994) statistics, up until 1860 more than 50 mission schools had been established in China, and more than 1,000 Chinese students had graduated from those schools. Among all the major cities where mission schools were located, Hong Kong, the first Chinese city ceded to be a crown colony in the Opium Wars, was the center of those mission schools in China.

In Hong Kong, the Morrison Education Society School (abbreviated as ‘Morrison School’) and Ying Wa College were two representative mission schools during the Opium Wars. The Morrison School was originally established in Macao in 1839 to commemorate the life and contributions of Robert Morrison. Three years later, the school moved to Morrison Hill

³⁴ **Gu Weijun** (‘Wellington Koo’) (1888-1985) was a famous Chinese diplomat in the Republic of China. He graduated from the mission university — Saint John’s University in 1908.

overlooking Victoria Harbour and became the first modern school in Hong Kong. As documented in the memoir of Charles Taylor (1860), a missionary of the American Southern Methodist Episcopal Mission, the main purpose of education in Morrison School was to teach Chinese children English and Christianity. The school remained there until 1849, when it had to be closed because of financial difficulties.

In contrast with the short-lived Morrison School, Ying Wa College is a mission college that survives the ups and downs of history and remains in Hong Kong till the present. Initially established in Malacca in 1818 by Robert Morrison, the college was moved to Hong Kong one year after the cession of Hong Kong in 1842. As embodied in the name of school “Ying Wa College” (or called ‘Anglo-Chinese College’ ‘英華書院’ in Chinese), its educational objective was to teach students English and Chinese languages, literature and wisdom as well as diffuse Christianity (Liu, 2001). The educational objectives of Ying Wa College indicated close integration of Confucian knowledge and western knowledge in the curriculum, which suggested the earliest practices of bilingual education in China. The bilingual education practices in Morrison School and Ying Wa College will be detailed in Section 4.2.3.

4.2.2.2 The mission schools in mainland China

The western missionaries also established a substantial number of mission schools in mainland China, particularly in the treaty ports opened after the First Opium War. In respect of the school scope, the number of students enrolled and the social influence, some representative mission schools in mainland China included Chongxin School, Foochow Sunday School, Shanghai Wenji Girls’ School, The Anglo-Chinese Academy, Foochow College, Ponasang Girls’ School and Foochow Yu Ying Girls’ School (Zhao, 1941).

The initial period of development witnessed a low enrollment of those Christian schools in China. During the Opium Wars, students from wealthy and middle-class families scrambled for government posts through the Imperial Examination and had no interest in studying in mission schools. Thus, the mission schools had to recruit students who came from poor families and could not afford expensive public schooling in the traditional Confucian academies. Those mission schools in mainland China were by nature similar to the “charity schools” because they waived all the tuition fees, lodging and boarding fees, and even gave students free food, water and other living necessities as incentives to study in the schools (Z. Li, 1987). Another plausible explanation for the relatively low enrollment at the mission schools was that those mission schools failed to win the recognition of the Qing government, and the graduates were unable to secure high positions in the imperial or provincial governments (Sang, 2015). Thus, most Chinese students preferred to attend the traditional academies or public schools for the Imperial Examination rather than the mission schools for an unforeseeable future.

The relatively low enrollment of those early mission schools compelled the western mission societies to seek effective ways to compete against the traditional Confucian academies and attract more students to the mission schools. Among all the “alluring” strategies, providing English education became the first choice to enhance the competitiveness of those mission schools since English education filled the void of traditional Confucian education and broadened students’ language skills in the job markets of the post-Opium Wars period (Gu, 2005). Bearing a market value, English education at the mission schools responded to the burgeoning demand for international communication in late imperial China, and advanced interests and influence of the western mission societies all over China.

4.2.3 The bilingual education practices at the mission schools during the Opium Wars

As the mission schools just gained a foothold in China and found it difficult to enroll Chinese students in their initial period of development, in reference to the level of education, most of them were secondary schools or primary schools (M. P. Zhang, 2012). Nevertheless, despite the low enrollment and relatively low level of education, English education in those mission schools was still the origin of formal foreign language education in mainland China. A detailed investigation of the education practices will advance our understanding of how English education began in China and what impact it exerted on the development of foreign language education in late imperial China.

4.2.3.1 Offering English language courses at the mission schools

Ample evidence has indicated teaching Chinese youths English was a long-term goal of the earliest Protestants and missionaries who travelled far away across the ocean to China in the early 19th century. As documented in the memoir of Eliza Morrison, the wife of Robert Morrison, on the day before Robert Morrison left for China to start his missionary career in 1807, he had been given a “Letter of General Instructions” by the London Missionary Society. The confidential letter introduced the missions of Robert Morrison to be accomplished in China, and teaching Chinese people English was included:

“We hope you will find an opportunity of exercising the profession of a mathematician, and delivering lectures on its various branches; and also of giving instructions in the English language, which must be an attainment of great value to many whose concerns lead them to hold intercourse with our countrymen who stately reside in China, or occasionally visit that empire.”

(E. Morrison, 1839, p. 96)

Not merely was providing English education an important task of the western missionaries' preaching activities, it also met China's buoyant demand for intellectuals with high foreign language proficiency. When the five treaty ports were open to international trade in 1842, a mounting number of foreign-invested enterprises, commercial banks, factories, and public service organizations sprang up in mainland China. As we noted in the memoir of Carl F. Kupfer, a missionary from the Methodist Episcopal Church, offering English language courses at the mission schools addressed the urgent demand for English translators and interpreters in various fields of China (Ji & Chen, 2007). In spite of the fact that the mission schools did not provide best Confucian education to the students or prepare them for the Imperial Examination, English language education provided by the western missionaries gave the students a definite advantage at job interviews in the foreign-related organizations. A good command of English would also be conducive to acquiring modern knowledge in China. Some far-sighted western missionaries such as Leander W. Pilcher pointed out that science education is the essence of western education. However, it will not exert effects to its fullest if students do not understand English (W. X. Gu, 2004 b).

Having been convinced of the necessity to offer English language courses at the mission schools, the western missionaries mulled over the way to design English language courses and devise effective teaching methods for the Chinese students, most of whom hardly had any contact with English since birth. As detailed in Gu's study (2003) on the teaching methods of the early mission schools in China, the method of "Level-based English language teaching", which was popular in Europe in the 19th century, was widely adopted to organize teaching activities. In contrast with "One Class" teaching mode in traditional Confucian academies, students at the mission schools were classified into different levels based on their age and English proficiency.

A classic example of “Level-based English language teaching” was the education practices of Ying Wa College in Hong Kong. Upon enrollment, based on the results of students’ English entrance test, they were classified into four classes: Class 1 (the advanced level), Class 2 and Class 3 (the intermediary level), and Class 4 (the beginners’ level). For students at the beginners’ and intermediary level, the English language courses were mainly concerned with teaching students basic English language skills such as learning English syllables, pronunciation, vocabulary, the choice of phrases, simple sentence structure, grammar, reading and writing English letters. Students at the advanced level were required to attend translation courses and senior-level English writing courses. The students in Class 1 also took content subjects such as the Bible, Astronomy, Geography, Christian Theology, Geometry, Mathematics and Philosophy (Liu, 2001). The curriculum for those students at the senior level reflected that the courses in Ying Wa College were not limited to English language courses or the courses on Christian doctrines, but also included a handful of introductory courses on western knowledge.

The English language education in those mission schools was also characterized by the practical courses. A classic example was that the students in the senior class of Morrison School were required to take both English-Chinese and Chinese-English translation courses. The translation exercises tested students’ command of English vocabulary and grammar, which also helped students memorize some English lexical chunks and collocations in the original translated texts, and facilitated their understanding of the extended meanings of words in certain language contexts (Zhang, 2011). Similarly, as documented in the ninth annual report on the education practices of Ying Wa College, English-Chinese translation was an integral component of English language courses:

“Students in the senior class concentrate their attention to translating some chapters of James Joyce’s book *Science Communication* into Chinese. Some (of

the top) students have already been accustomed to the task of English-Chinese interactive interpretation.”

(Ji & Chen, 2007, p. 320).

(‘高級班的學生目前正專心於把喬伊斯的〈科技對話〉中的部分章節譯成漢語，學生已習慣於口頭英漢互譯。’)³⁵

Specifically, during the translation exercises, those students were required to interpret the corresponding Chinese meaning of each word or phrase in the English texts, followed by analyzing the structure of original English sentences and presenting their translated version in Chinese.

It can be seen from the English education practices in Morrison School and Ying Wa College that the “Grammar-translation” method was a teaching method widely used in the English language classes, which accentuated the importance of reading, reciting the texts and analyzing grammar and syntax in the texts. As detailed in the fourth report of the Morrison Education Society about English language education practices of Morrison School, the students in the senior class were able to

“Resolve a paragraph into its constituent parts, pointing out the number of sentences and propositions, and these again into their elements, showing the office each word performs, and generally the reason why it is so employed.”

(‘The fourth annual report of the Morrison Education Society’, *Chinese Repository*, 1842, p. 553)

³⁵ In the thesis, providing a Chinese-written text after an English text means that the text is translated from original Chinese sources. For brevity, I will not indicate that a quotation is translated from Chinese sources in the thesis. More details of the original Chinese source are presented in ‘References’.

The “Grammar-translation” method was similar to the traditional teaching methods in the Confucian academies as both methods stressed the importance of memorization in learning. Thus, it helped the Chinese students adapt to learning foreign languages and, in the meantime, assisting teachers in checking students’ understanding in class.

4.2.3.2 The MOI at the mission schools during the Opium Wars

Apart from English language courses, the early mission schools in China also offered courses in rudimentary western knowledge such as physics, chemistry, astronomy, geography, mathematics and electronics (Zhou, 1897). Thus, there was a heated debate among the western missionaries over which language should be used as the MOI at the mission schools. Some missionaries such as Alvin P. Parker³⁶ highlighted the importance of CMI in facilitating students’ understanding of the lectures. As Chinese was the native language of Chinese students, CMI in class would make it easier for the students, particularly those at the lower level of education, gain rudimentary knowledge on modern science and technology (Parker, 1890). Alvin Parker’s viewpoints on the use of CMI at the mission schools got support from Calvin Wilson Mateer, who firmly adhered to the opinion that the use of students’ native language as the MOI would facilitate their understanding of Christian doctrines and thus promote the spread of Christianity throughout the country. A more convincing reason for using CMI at the mission schools was that the Chinese children, as the western missionaries found, were only interested in English language education not science education or Christian teachings. They were inclined to leave the mission schools and earn a decent pay from the employment market if they had a good command of English (Evans, 2003; Zhu, 1989). The missionaries’ experiences had therefore shown that EMI at

³⁶ **Alvin P. Parker** was an eminent American missionary from the Methodist Episcopal Church to China in the late Qing period. He was famous for his educational ideas and had been appointed as the chair of the General Conference of the Protestant Missionaries of China for nine times. His educational ideas later exerted a considerable impact on the implementation of the Guimao Education System (Hu, 1996).

the mission schools went contrary to their fundamental purpose of proselytizing, namely that to teach Chinese Christianity through their native language (Taylor, 1860).

The majority of western missionaries argued for EMI at the mission schools. W. B. Bonnell, the Principal of Shanghai Anglo-Chinese School, was of the opinion that EMI would avoid “information loss” in the translated textbooks and accurately convey the expertise in western science and technology to students. As China lacked first-class translated books on western knowledge in the 1840s and 1850s, using English as the MOI was a makeshift choice to transfer accurate western knowledge to the Chinese students.

The debate over the choice of MOI in China’s mission schools even lasted over two decades until the Self-Strengthening Movement. In the heated debate, Francis L. H. Pott, an influential American Episcopal missionary and the President of St. Johns University in China, listed some reasons for using EMI at the mission schools. The choice of EMI would avoid the confusion of Chinese-translated terminologies on modern science and technology. Choosing EMI for western content subjects would also help students acquire the cutting-edge knowledge as western science and technology developed rapidly and it took such a long time for a translated textbook to be ready for use (Yates, 1878). Francis Pott’s viewpoint above was emblematic of a gradual shift to EMI at the mission schools, which also corresponded to the early bilingual education practices of the premier government schools in China such as Peking Translation College and Fujian Naval College during the Self-Strengthening Movement.

However, back to the period of Opium Wars when most Chinese people had not accepted foreign languages, the mission schools combined EMI with CMI, and chose the MOI according to the content of subjects, the level of education and the students’ English

foundation. For instance, in Ying Wa College, the choice of MOI hinged on the level of education. For those students at the junior level, Chinese (the Fujian dialect)³⁷ was used as the MOI in all subjects while for those students at the senior level, English was used as the MOI for English, geography, history, algebra, modern science and technology (Ji & Chen, 2007). It can be seen from the choice of MOI in those mission schools that bilingual education (including both CMI and EMI for different subjects and students) emerged from the mission schools in China during the Opium Wars.

The practices of bilingual education in Ying Wa College were highly praised by Alvin P. Parker. Though he supported the use of CMI for most subjects, he also recognized the necessity of using English as the MOI for some sophisticated and specialized content subjects. In the article “The Place of the Chinese Classics in Christian Schools and Colleges”, he expounded his views on the benefits of CMI and EMI used in the bilingual curriculum of mission schools. As Chinese was the students’ mother tongue, CMI made it easier for those Chinese students in a junior class to understand lectures on science and mathematics. While for those students at the senior class, using English as the MOI would deepen their understanding of the up-to-date knowledge on modern science and technology, and provide them with a tool to explore western knowledge on their own (Parker, 1890, pp. 490-496).

4.2.3.3 Offering Chinese-related courses at the mission schools

Apart from English language courses and the content courses on western knowledge, the mission schools also ran some Chinese-related courses in their Anglo-Chinese curriculum (Evans, 1998). Although the early western missionaries intended to convert the Chinese to

³⁷ In the initial development of Ying Wa College, most of the students admitted were the descendants of Fujianese who were unable to speak Mandarin but only the Fujian dialect.

Christianity and control their minds, from the previous preaching experiences the missionaries realized the practical difficulties in dispelling Chinese skepticism over Christianity. A small number of Chinese children from the poverty-stricken areas were allured by the incentives provided by the mission schools. However, most of the Chinese at that time were the so-called “rice Christians” and were not yet fully convinced of Christianity. Some of them even viewed it as a shameful act to study at the mission schools and dared not tell their school experiences to their relatives (He & Zhong, 2004). In order to provide the students with a sense of comfort and improve the image of mission schools in Chinese minds, the western missionaries took a compromised approach to incorporating some Chinese-related subjects in the bilingual curriculum.

Another piece of compelling reason for offering Chinese-related courses was that the western missionaries intended to train a group of Chinese Christian missionaries to convert their fellowmen to Christianity in their native languages because they firmly believed the native language would facilitate the Chinese people’s understanding of Christianity (Scott, 2016). Thus, the Chinese-related courses, which included Chinese language courses and Confucian classics courses, constituted an integral component in the bilingual curriculum to develop students’ literacy of Chinese, reminding them not to learn English at the expense of Chinese.

The idea to offer Chinese-related courses in the bilingual curriculum was put into practice in those mission schools. Plentiful evidence has suggested that the mission schools taught English and Chinese in roughly equal measures. In Ying Wa College, for instance, although English language courses constituted a central element in the curriculum, the students at the junior class were also required to spend at least half a day learning Mandarin, and the students at the senior class were asked to read Confucian classics such as the “Four

Books”³⁸, I Ching (<易經>) and Classic of Poetry (<詩經>) in their spare time (Xiong, 1994). The Chinese education in Ying Wa College was similar to that of the traditional Confucian academies in China. As documented in *Chinese Repository*, in Ying Wa College, the students were asked to recite the classics with the book held behind the back, which was similar to the way of teaching in the Confucian academies.

The Anglo-Chinese bilingual curriculum at the mission schools during the Opium Wars had considerable effects on the development of foreign language education in China and the spread of foreign languages and modern science knowledge all over the Confucian society. This will be discussed in detail in the following section.

4.2.4 The effects of bilingual education at the mission schools during the Opium Wars

During the Opium Wars, the introduction and spread of Christianity to China was in some sense “protected” by the western sophisticated military weapons. In reality, what overcame Chinese was the power of western guns and gunnery rather than the power of western religions. In spite of the fact that the mission schools in China had been trying to conceal the true purpose of converting Chinese to Christianity by either waiving students’ tuition fees or offering Chinese-related courses, they still found it difficult to win the appropriate recognition of the Qing government and the scholar-officials in late imperial China. As one of the most famous scholar-officials and thinkers in late imperial China, Feng Guifen (馮桂芬) made a bitterly derogatory remark on those mission schools:

³⁸ The “Four Books” are Chinese Confucian classics texts emphasizing the core value and belief systems in Confucianism. The “Four Books” included *Great Learning* (<大學>), *Doctrine of the Mean* (<中庸>), *Analects* (<論語>) and *Mencius* (<孟子>).

“The British and French missionaries established charity schools to enroll impoverished children and provide them with free clothing and food. (Without a solid foundation in Confucian knowledge), the children were susceptible to foreigners’ dirty habits. After graduating from the schools, most of them undertook missionary activities in China. Their social status in China was even inferior to that of vagrants and businesspersons.³⁹”

(Feng Guifen: ‘On establishing a translation college in Shanghai’, *The Political Essays of Feng Guifen*, 1861, p. 250)

(‘英法兩國設立義學，廣招貧苦童稚，與以衣食而教督之，市兒村豎，流品甚雜，不特易於潤染洋涇習氣，且多傳習洋教，更出無業商賈之下。’)

In light of the social milieu against the mission schools during the Opium Wars, Feng Guifen’s disparaging comments above can be interpreted as a deep-rooted preconception or prejudice among the Chinese scholar-gentries towards the mission schools. In contrast with the Chinese scholar-officials, Charles G. Gordon⁴⁰, a British Army officer who helped the Chinese Imperial Army to put down the Taiping Rebellion, refuted the argument that the mission schools only produced vulgar children. He advised Li Hongzhang (李鴻章)⁴¹ to hire some graduates of the mission schools with high foreign language proficiency:

“Some Chinese students who graduate from the mission schools are fairly proficient in foreign languages. However, they are not afforded the opportunity to work in the government. Whom the Qing government prefers to employ is not the mission school students, but those westerners with a superficial knowledge of

³⁹ In the Confucian country, businesspersons had an inferior social status to literati, peasants and workers. It was not until the Self-Strengthening Movement that businesspersons were no longer at the low strata of society in China.

⁴⁰ **Charles George Gordon** (1833-1885) was a British Army officer and administrator. During the anti-Taiping rebellion campaign, he was an important helper to Li Hongzhang, an important military adviser in China.

⁴¹ **Li Hongzhang** (1823-1901) was a famous politician and diplomat in late imperial China.

the Chinese language and culture. It is much better to employ the Chinese students who acquire high foreign language proficiency and are willing to serve the country (China) than those westerners who understand a little Chinese. If the Chinese officials want to know what westerners talk about in diplomatic negotiations, they should employ the Chinese who are proficient in foreign languages and put them in the important positions of the Qing government. As for their moral conduct, it is better to make a judgment based on what they do rather than believe in hearsay.”

(Qiu, 1998, p. 4517)

(‘中國現有深通外國語言文字之人，中國大員並不重用。所用者，多非通才。須知中國通曉外國語言文字之人，必有能替中國辦事，較用洋人之通華語者，受益多矣。中國官員當知洋人之議論如何，是以華人既能通曉洋文，必得重用，以鼓勵之。至於該員等是否誠實，應察其所為之事，事可聽傳說之言。’)

As detailed in Section 4.2.2, the mission schools were not recognized by the Qing government or even not part of the government-led modern education system in late imperial China. Nevertheless, it does not suggest that the bilingual education practices of mission schools exerted no positive effects on the Confucian society.

Except for a small number of graduates at the mission schools who became missionaries in China, the majority of the graduates with high English proficiency became professionals in various fields such as commerce, government-affiliated organizations related to foreign affairs, and the banking industry (Zhang, 2011). It can be seen from a report titled “English-speaking Chinese” in *The North-China Herald and Supreme Court & Consular Gazette* that

some of the graduates from the mission schools became commercial elites with fluency in English:

“The young Chinese, who, whether from having been to Europe and America, or from having been educated in mission schools, are able to speak and write English with fluency. These young men are already an important factor in the commercial life of the Far East, and great things are expected of them.”

(‘English-speaking Chinese’, *The North-China Herald and Supreme Court & Consular Gazette*, 23/9/1882, p. 315)

Since the government-led modern education in late imperial China did not start until the Self-Strengthening Movement, the graduates from those mission schools accommodated the pressing need for China’s initial diplomatic communication after the outbreak of the First Opium War. Although the Qing government did not allow those mission school students to work in the Qing government, it had to employ a few graduates from the mission schools as none of the government officials understood foreign languages. As the translators or interpreters, mission school graduates such as Tang Tingzhi (唐廷植) played a critical role in bridging the communicative gap between the Qing government and the government of western powers in diplomatic talks (Lutz, 1971). Some of the graduates such as Yuan Dehui (袁德輝) were also engaged in translating numerous western books and newspapers, which accelerated the absorption of modern western knowledge in China and laid the basis for the upcoming Self-Strengthening Movement (Zhang, 2011).

Another far-reaching positive impact of the mission schools was their contributions to the development of foreign language education and modern science education in China. Some graduates such as Sun Xianhui (孫顯惠) were employed as foreign language teachers in the newly established government schools during the Self-Strengthening Movement (Ji & Chen,

2007). They were employed to alleviate the serious shortage of faculty in subjects of foreign languages and western knowledge, which in some sense curbed the high expenditure on employing foreign teachers in the modern schools. The bilingual education practices at the mission schools also provided an instructive model for the government schools. Some government schools copied the model of education in classifying students according to their foreign language proficiency, designing the Anglo-Chinese bilingual curriculum and adopting the “Grammar-translation” method to organize teaching activities. The significant approach of those mission schools to combining foreign language teaching with content knowledge learning was also borrowed by the government schools.

The development of bilingual education at the mission schools was also essentially complementary to traditional Confucian education in late imperial China. Due to China’s long-term “Closed-Door” policy and the deep-rooted influence of Confucianism, education in the conventional Chinese academies was mainly concerned with the Confucian moral teachings and inevitably paid scant attention to practical knowledge on modern science and technology. By comparison, students at the mission schools were required to take a wider range of western content subjects, which equipped them with advanced knowledge on modern science and technology. Foreign language education in the early mission schools was initially, among the conservative scholar-officials in China, blamed for developing students’ deviant behaviors. However, with the growing full-scale encroachment of western powers, an increasing number of the progressive Chinese scholar-officials realized the practical benefits of foreign language education and called on the Chinese to learn from the West, which paved the way for the educational modernization in China during the Self-Strengthening Movement.

4.3 The calling for foreign language education among the progressive Chinese scholar-officials during the Opium Wars

It was not until the First Opium War that the Chinese scholar-gentries recognized a considerable disparity in the power of military weapons between China and the western powers. The humiliating failure of the Opium War awakened the Chinese scholar-officials and social elites to turn their eyes to the rapid development of modern technology in the West. They challenged the traditional Confucian worldview⁴², encouraged the Chinese to learn from the West in modern military technology and armaments. As foreign languages were direct carriers of western knowledge, foreign language education became an integral component of modern education in late imperial China.

4.3.1 Lin Zexu's "Translation Project" during the Opium Wars

It is important to explore Lin Zexu's⁴³ "Translation Project" in order to investigate why and how the ideas of foreign language education came up in the minds of those progressive Chinese scholar-officials. Although the "Translation Project" was not directly tied to any formal or informal foreign language education in China, it was the first attempt of a Chinese scholar-official to approach foreign languages and western knowledge (Li & Dai, 1978; Su, 2015). The "Translation Project" facilitated the introduction of western knowledge to China and more importantly, demonstrated the close relationship between the grasp of foreign languages and the understanding of western wisdom, which awakened more scholar-officials in China to make their suggestions for learning foreign languages in the subsequent historical period. Thus, the significance of Lin Zexu's "Translation Project" should not be

⁴² **The conservative Confucian worldview** refers to the conventional view held by the ruling Chinese elites that China was the center of the World and all the other countries were inferior to China.

⁴³ **Lin Zexu** (林則徐) (1785-1850) was a scholar-official who was famous for his heroic act of confiscating and burning the opium from the British merchants in Humen Town, Canton. He was also the first scholar-official in late imperial China who realized the necessity of learning from the West.

overlooked or underestimated if we are to pursue a comprehensive investigation of the very root of bilingual education in China.

4.3.1.1 The background of Lin Zexu's "Translation Project"

Lin Zexu's "Translation Project" resulted from his awareness of the great disparity in the military power between China and Britain as well as his eagerness of learning from the West. In the period of technological innovation, economic and military expansion from the 17th century to the First Opium War in 1840, with the help of the Industrial Revolution, Western Europe made tremendous advances in the military strength. By contrast, the Qing rulers still held the conventional Sino-centric view⁴⁴, ignored the western development and even depreciated western scientific and technological innovations as the "diabolic tricks and wicked crafts" (‘奇技淫巧’), which resulted in the enormous disparity in the military power between China and the western countries.

The Chinese ignorance of other countries was also mirrored in their limited geographic knowledge. It was not until the breakout of the First Opium War that Emperor Daoguang (道光皇帝) knew that Britain was not a neighboring country to Russia. Likewise, none of the scholar-officials in the imperial and provincial governments had knowledge of the western geography. As documented in Lin Zexu's memorial dated March 29, 1839, the Chinese officials were all "shocked by the sophisticated military arms of a country called 'Britain', but they had no knowledge of Britain, even including where it was located"⁴⁵.

⁴⁴ **The Sino-centric view** is an ideology that China is the center of the world. In the pre-modern age, the Chinese scholars viewed China as the most advanced and civilized country in the world, and viewed foreign countries as uncivilized places .

⁴⁵ It was translated from Lin Zexu's memorial 'On embargoing the foreign ships to China', in *A Collection of Lin Zexu's Memorials*, 1965, p. 649. The original text is "震於英吉利之名，而實不知其來曆".

The limited knowledge of western geography, military and technological development put China at a disadvantage in the Opium Wars. Yao Ying (姚瑩), a famous historian in late imperial China, attributed China's defeat in the Opium Wars to the shortage of western military intelligence and other valuable information:

“The westerners spent a few decades gathering detailed information on China, which helped them to gain a comprehensive knowledge of China. By contrast, none of the Chinese cared about western affairs. As a result, the fate of China's failure had been decided before the War broke out.”

(Yao Ying: *Dong Mingwen Houji* (vol. 8), 1911, p. 6)

(‘中國地利人事，西夷日夕探習者已數十年，無不知之，而吾中國曾無一人留心海外事者，不待兵革之交，而勝負之數已較然矣。’)

During the campaign to suppress the opium trade, Lin Zexu also could not gain accurate and up-to-date information on the West. The unsuccessful “tea trade” plan before the First Opium War was an epitome of his limited knowledge on the West. When Lin Zexu came to Canton to halt the British opium trade in 1839, he heard that British would die within a few days if they no longer drank Chinese tea (Lin Zexu: A Diplomatic Note to the Great Britain). Therefore, he initially requested the British merchants to forfeit opium stores in exchange for tea. When the request was declined, he advised Emperor Daoguang to ban the opium trade with the British and wipe out all the British. Having heard the rumor that British would not launch large-scale wars in China because they could not bend their knees in the land battle⁴⁶, Lin Zexu underestimated the British military strength and failed to formulate a

⁴⁶ The rumor went that the foreigners did not excel in the land battle because their feet and waists were bound and they could not straighten their legs. (Lin Zexu: ‘A memorial on assembling the crowd to kill the British colonizers’, in Qi Sihe’s *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Daoguang)* (1836-1850), p. 432)

detailed plan for the war, thereby leading to the fiasco in the First Opium War (Huang, 2013).

In the initial period of Opium Wars, most imperial officials in the Qing government, who had been perennially immersed in the Sino-centric view, were unwilling to acknowledge China's inferiority in military power to the West, with Lin Zexu as an exception. During the campaign to suppress the opium trade and the First Opium War, he reflected on his decisions, and found that lack of latest information on the belligerent country was a root cause of China's disadvantage in the trade talk and the war. Thus, in order to collect military intelligence of the British and make provision for national defense, Lin Zexu launched a "Translation Project" in 1839 to translate western books on modern science, law and technology into Chinese. The "Translation Project" will be detailed in the sections that follow.

4.3.1.2 Organizing a translation team

As a scholar-bureaucrat who only received Confucian education and did not understand foreign languages, Lin Zexu was unable to translate the English texts on his own. Thus, he formed a translation team for the task. As documented in E. C. Bridgman's article titled "Crisis in the Opium Traffic" in *Chinese Repository* in June 1839, Lin Zexu hired four translators including Yuan Dehui (袁德輝), Ahmeang (阿孟), William Botelho (林阿適) and Liang Zhi (梁植). All of them were proficient in English and Chinese, and had overseas educational experiences in mission schools (Lin, 1985). However, as the graduates from the mission schools were looked down upon by most of the Chinese scholar-officials in the 1840s and 1850s, the Qing government viewed the four translators as peddlers and menial servants who assumed "dubious identities" (Huang, 2013, p. 82). Due to the officials' disbelief at the translators' identities, the Qing government gave no financial support to the

“Translation Project”, which forced Lin Zexu himself to finance the Project based on his salaries. The unsupportive imperial attitudes towards the “Translation Project” did not undermine Lin Zexu’s confidence. With an intense eagerness and curiosity about the West, he attached more importance to the translators’ English proficiency than their identities, and paid them decent wages (Ji & Chen, 2007).

Apart from the four translators, some foreigners including the American missionaries Elijah C. Bridgman and Samuel W. Williams and the western businesspersons like William Hunt were also employed to examine the translated texts. Lin Zexu also invited a few Chinese scholar-gentries including Yu Zhengxie (俞正燮), Liang Tingtuo (梁挺橈), Chen Yaozu (陳耀祖), Wen Wenbo (溫文伯) and Zhang Weiping (張維屏) to examine whether the translated texts were intelligible to Chinese readers and coherent in Chinese (Chen, 2013).

4.3.1.3 The content of the “translated texts”

The translated texts, in terms of their content, can roughly be divided into two categories: (1) books on western knowledge; and (2) English reports on British opium trade, British military weapons and its preparations for the Opium Wars.

The first type of texts encompassed a wide range of western knowledge including modern law, western trade and geography. The translated books consisted of influential western monographs such as Emeric de Vattel’s *Law of Nations*, A. S. Thelwall’s *The Iniquities of the Opium Trade with China* and Hugh Murray’s *Cyclopedia of Geography*. As shown in an American missionary’s report on the “Translation Project”, Lin Zexu purchased almost all the tellurions, the compass maps, the world map available in China, a large number of western books on world geography, encyclopedia and dictionaries in Canton for translation

(Lin, 2000), which showed his considerable enthusiasm for enlightening the Confucian China with modern knowledge.

The second type of texts were reports on China in the English newspapers or journals such as *Canton Press*, *Canton Register* and *Chinese Repository*. The western missionaries in China published those English newspapers or journals in order to gather in-depth and real-time information on China. Specifically, the English newspapers and journals were primarily concerned with China's tea production and trade, the campaign to suppress opium trade, the comparative strengths of China's Imperial Army, the local rebellions and the British army in mainland China.

Those English newspapers and journals in late imperial China advanced the westerners' understandings of how to establish effective communication with the indigenous Chinese inhabitants. They also offered the western colonizers a direct access to China's military intelligence, thus gaining an enormous advantage in the "information battle" preceding the First Opium War. Having recognized the value of intelligence in the war, Lin Zexu advised the Chinese military officers to offset the "information disadvantage" by reading the translated English newspapers and journals carefully.

Under the leadership of Lin Zexu, the team translated those English newspapers and journals into Chinese, bound them together into a book collection in chronological and thematic order, and named it as "Macao Newspapers" (<澳門新聞紙>) or "Macao Monthly News" (<澳門月報>)⁴⁷. The 100,000-word news book collection consisted of five volumes — "On China" ('論中國'), "On Tea Trade" ('論茶葉'), "On Suppressing Opium" ('論禁

⁴⁷ The translated news book was named as "Macao Newspaper" or "Macao Monthly News" because all the English newspapers were collected in Macao.

煙’), “On Military Tactics and Preparations” (‘論用兵’) and “On the Western Countries” (‘論夷情’).

Macao Monthly News also contained some reports on the westerners’ experiences of learning Chinese, which captured Lin Zexu’s special attention to the importance of learning foreign languages to a country at war. As detailed in the report dated June 20, 1840, the westerners had long realized the necessity of learning Chinese to get knowledge of China:

“It is an important and long-term task for us (the foreigners living in China) to read Chinese books, write Chinese characters and even understand Confucian knowledge to the same extent that the knowledgeable Chinese scholar-officials reach. Although it is difficult for us to learn Chinese, all of us shall try to resolve the difficulties.”

(The Association of China’s Modern History, 1954, pp. 483-484)

(‘我等外國人，若欲讀中國之書，寫中國之字，致能如飽學之本地人，乃系一件最重長命之事。學習中國人之言語，雖系一件極難之事，然我等亦當要盡心設法清除阻塞。’)

The westerners’ firm resolution and commitment to learning Chinese further inspired Lin Zexu to accentuate the importance of learning foreign language in absorbing modern western knowledge. The implementation of his significant “Translation Project” also awakened other Chinese scholar-officials to identify the inextricable link between the command of foreign languages and the acquisition of western knowledge, and to acknowledge the key role of foreign languages in China’s modernization and self-strengthening (Ji & Chen, 2007).

4.3.1.4 The positive impact of Lin Zexu's "Translation Project"

Although Lin Zexu's "Translation Project" was, in a strict sense, not a government initiative, the Project received many positive comments from the scholar-officials in the imperial or provincial governments. Jin Anqing (金安清), a well-known military strategist in late imperial China, favorably commented on the Project as "a crucial way to keep abreast of the development abroad and gain military intelligence from the West"⁴⁸. Likewise, Wang Tao (王韜), a famous thinker and politician in late imperial China, also appreciated the significance of translating western newspapers:

"All the western political affairs, whether they are significant events or unimportant personal anecdotes, are all printed in newspapers. Thus, if we hope to get a wide and deep knowledge of the West, the first step is to translate the English news reports into Chinese. It will extend our knowledge of the West if we keep on this for long."

(Wang Tao: *Tao Yuan Wen Lu Wai Bian*, 1897, p. 79)

(‘西人凡於政事，無論巨細，翻載日報。欲知洋務，先將其所載各條一一譯出。日積月累，自然漸知其深。’)

The "Translation Project" had profound significance in enriching Chinese knowledge of the world geography and extending their understanding of the West. For a long time, largely influenced by the traditional Sino-centric view, the Chinese people viewed China as the center of the world and were ignorant of western geographical knowledge. By way of translating the western geography books such as Hugh Murray's *Cyclopedia of Geography*,

⁴⁸ The original Chinese version of the quotation is "能中其窺要，而洋人旦夕所為，纖悉必獲聞". It was translated from Jin Anqing's *A Biography of Lin Zexu* (cited in the chapter of 'The Opium Wars' in *A Collection of Historical Records on the Modern History of China*, 1954, pp. 257-258.)

Lin Zexu and his translation team expanded the Chinese geographical view and enhanced their understanding of western customs and traditions.

Apart from broadening the Chinese geographic perspectives, the “Translation Project” also facilitated the spread of knowledge on the international law, with which the Chinese were able to defend their rights in the mounting international conflicts. For instance, one of the translation works was Emeric de Vattel’s legal treatise *The Law of Nations*. As mentioned in the treatise, any country had the right of banning imported goods from the other countries, and the contraband goods would be confiscated or burned down if they were found in the country. The detailed legal provision in *Law of Nations* in some sense legalized Lin Zexu’s heroic act of destroying the opium at Humen before the First Opium War, thereby winning the increasing support from the social elites in China.

A more significant impact of Lin Zexu’s “Translation Project” lies in his far-reaching proposal for building a strong navy and making modern military weapons. By reading the extensive translated reports on western military strength, Lin Zexu recognized the importance and urgency of manufacturing sophisticated arms to strengthen China’s coastal defense. On October 11, 1840, Lin Zexu submitted his constructive suggestions for national defense to Emperor Daoguang that

“Modern warships and gunnery are essential to China’s coastal defense. Since it takes us a long time to improve our military equipment, we must make full preparations beforehand. ... Guangdong is such a desirable place of international commerce, so Customs of Canton has collected tariffs as much as 30 million taels of silver⁴⁹ during the last two decades (from the Year of Daoguang until

⁴⁹ A tael was a former Chinese monetary unit based on the value of standard silver.

now). ... If 10 percent of the tariffs had been drawn to make cannons and build warships, it would have been enough to guard against the western invaders, not resulting in the current difficult situation for coastal defense.”

(Lin Zexu: ‘A memorial on handling the foreign affairs’, *The Collection of Lin Zexu’s Memorials*, p. 676)

(‘即以船炮而言，本為防海必需之物，雖一時難以猝辦，而為長久計，亦不得不先事籌維。。。且廣東利在通商，自道光元年至今，粵海關已征銀三千餘萬兩。。。若前此以關稅十分之一制炮造船，則制夷已可裕如，何至尚形棘手。’)

After Lin Zexu had been dismissed from the Qing government⁵⁰, in the letters to his friends Yao Chunmu (姚椿木) and Wang Dongshou (王冬壽) on September 3, 1842, he attributed China’s military defeat in the Opium Wars to its inferior military weapons:

“The failure of the Opium Wars does not go beyond my expectation since there is a large gap in naval power (including warships, gunnery and armies) between China and Britain. As our coastal defense has been broken through by the British army, how can our defense in the regions of Yangtze River and other inland rivers stop them? ... Comparing the power of military weapons in both sides, we can see that British cannons can fire as far as 3 miles⁵¹ and destroy our defence while our cannons cannot even reach the enemies. It shows the disparity in the power of military weapons between Britain and us. Concerning military skills, British cannons, like volley of rifle fire, can fire continuously while our cannons can only fire off and on. ... From my perspectives, to guard against British invaders

⁵⁰ See Page 180 for the reasons for Lin Zexu’s dismissal.

⁵¹ 10 lis are equivalent to 3 miles.

requires us to be armed with potent weapons, to acquire good military skills, and to demonstrate our bravery and team spirit in the war.”

(Lin Zexu: ‘A letter to Yao Chunmu and Wang Dongshou’, *The Collection of Private Correspondences*, pp. 195-197).

(‘剿夷而不謀船、炮、水軍，是自取敗也。沿海口岸防之已不勝防，況又入長江與內河乎？。。。彼之大炮遠及十裏內外，若我炮不能及彼，彼炮先已及我，是器不良也。彼之放炮，如內地之放排槍，連聲不斷，我放一炮後，須輾轉移時，再放一炮，是技不熟也。。。徐嘗謂剿夷有八字要言，器良、技熟、膽壯、心齊是已。’)

On the evidence of Lin’s memorial to the throne and the private correspondence with his friends, it would appear that Lin Zexu was the first Chinese scholar-official to realize the importance of developing modern military technology and to conceive the idea to “learn from the West to guard against them”⁵² (Wei, 1842, p. 1). It was pitiful that Emperor Daoguang and those conservative officials in the Qing government who had bitter contempt for western knowledge regarded Lin’s suggestions as gross nonsense and took no prompt actions. Nonetheless, Lin’s suggestions as well as his “Translation Project” exercised growing influence on the minds of some progressive and patriotic scholar-officials and social elites in late imperial China. They called on the mass of Chinese intellectuals to stop reciting the outmoded Confucian classics and to learn western military technology (Shen, 2007). The “Translation Project” also inspired the Chinese scholar-officials to learn foreign languages for deciphering western knowledge and surmounting language obstacles to diplomatic communication. Thus, the Chinese scholar-officials put forward a few concrete

⁵² The original text is “師夷長技以制夷”.

proposals for offering foreign language courses in the government schools in the last few years of the Opium Wars.

The next section details some concrete proposals of those representative scholar-officials for military westernization, alongside their contributions to the initial development of government-led foreign language education in late imperial China.

4.3.2 The calling for military westernization and foreign language education in China during the Opium Wars

Lin Zexu's "Translation Project" opened a door for the Chinese to absorb western knowledge, thereby altering their perspectives upon the West. Greatly shocked by the western colonizers' military superiority in the Opium Wars, some progressive Chinese scholar-officials and social intellectuals started to re-examine and compare the strength of China and the West, and to explore a new path of China's self-strengthening after the Opium Wars. Having reflected on the Opium Wars, a consensus on military westernization in China was achieved among the progressive scholar-officials in China. According to the statistics in Fairbank and Liu's (1985) study, during the Opium Wars, at least 66 progressive scholar-officials aired their views of learning advanced military technology from the West. In light of China's endangering situation after the Opium Wars and the rising patriotic emotions from the Chinese people, it may not be difficult to understand why Lin Zexu's suggestions for building a modern navy could secure solid support from the progressive scholar-officials in the imperial and provincial governments.

The earliest supporter for Lin Zexu's ideas in late imperial China was Wei Yuan (魏源), one of Lin Zexu's good friends and the then Prefect of Jiangsu Province. In 1841, as a scapegoat to the failure of the First Opium War, Lin Zexu was dismissed from the Qing

government and sent into exile to Xinjiang. On his way to Xinjiang, when Lin Zexu travelled past Jiangsu Province, he delivered all the confidential documents on western geography and military power he had collected to Wei Yuan, advising him to compile those documents into a book. In order to fulfil Lin Zexu's expectation, Wei Yuan spent a year compiling an influential book called *An Illustrated Gazetteer of Maritime Nations* (<海國圖志>), in which the detailed plan for military westernization was formulated.

The first part of the book, which was based on the translated version of Hugh Murray's *Cyclopedia of Geography* alongside the maps of western countries in the previous annals such as *History of Ming Dynasty* (<明史>), imparted western geographical knowledge to Chinese readers. The second part detailed Wei Yuan's suggestions for China's coastal defense:

"If we intend to guard against western colonizers, we should start by gaining a wide range of knowledge of the West. To know more about the West, we should establish a particular organization to translate western books. ... The westerners enjoy an overwhelming superiority over China in their warships, firearms and methods of training the navy ... In my humble opinion, western specialists (from France and the United States) and technicians should be employed to build modern warships and make firearms. Western captains in warships should also be employed to teach Chinese how to navigate warships and fire cannons."

(Wei Yuan: *An Illustrated Gazetteer of Maritime Nations*, 1842, pp. 1-4)

(‘欲制外夷者，必先悉夷情始。欲悉夷情者，必先立譯館，翻夷書始。。。夷之長技一戰艦；二火器；三養兵練兵之法。。。行取佛蘭西、彌利堅二國各來夷目一二人，分攜西洋工匠至粵，司造船械，並延西洋舵師，司教行船演炮之法。’)

It can be seen from Wei Yuan's suggestions above that "learning from the West to guard against the western colonizers" became a fundamental approach to consolidating China's coastal defense. Contradictory as the approach seemed literally, it was possibly the only viable way for China to avoid falling prey to the western colony as China lagged far behind the West in military defense and had to learn from its enemy.

Wei Yuan's far-reaching suggestions also accentuated the importance of foreign language education in China, as a critical tool to translate western texts on military technology and communicate with western specialists. In the book, examples of other countries were cited to reveal the strong tie between learning foreign languages and acquiring western knowledge:

"British established Anglo-Chinese schools and employed Chinese teachers to teach them Chinese. They also translated Confucian classics, maps of China and China's topography. Having overcome the language barrier, British gained a thorough knowledge of China."

(Wei Yuan: *An Illustrated Gazetteer of Maritime Nations*, 1842, p. 18)

(‘(英人)建英華書院，延華人為師，教漢文漢語，刊中國經史子集、圖經地志。更無語言之隔，故洞察中國情形虛實。’)

Having recognized the benefits of learning foreign languages, Wei Yuan proposed to establish a special translation school in Canton to teach students how to translate western books in order to collect western military intelligence and fight against western colonizers (Wei Yuan, 'On military defense', 1842). The close link between foreign language learning and the acquisition of modern knowledge was later expounded in the proposals of other progressive scholar-officials such as Feng Guifen (馮桂芬), a famous thinker and a historical records compiler in late imperial China.

As a witness of the history, Feng Guifen explained the reasons why China was overwhelmed by the West in the Opium Wars in his two seminal articles titled “On making modern weapons” (<制洋器議>) and “On learning from the West” (<采西學議>). The ignominious defeat partly resulted from the Chinese scholar-officials’ ignorance of western knowledge:

“The Chinese scholars (such as Gu Yanwu) in late Ming and early Qing Dynasty had no knowledge of the West. In reality, many Chinese people heard of a place called “the West” as some books on western geography such as *Record of Foreign Land* had been circulated throughout China. However, the Chinese scholars might not read the books. Even if they read the books, they were not convinced of what the books said. By contrast, in these years westerners have been devoted to exploring the essence of modern science including Mathematics, Mechanics, Perspective Drawing, Optics and Chemistry. Western geography books also detail information of the mountains, rivers, customs, and products in hundreds of countries. It is evident that our Chinese cannot be as good as them in these aspects.”

(Feng Guifen: ‘On learning from the West’, *The Political Essays of Feng Guifen*, 1861, p. 37)

(‘顧氏炎武不知西海，夫西洋即西海，彼時已習於人口，《職方外紀》等書已入中國，顧氏或未見，或見而不信，皆未可知。此外如算學，重學，視學，光學，化學等，皆得格物至理；輿地書備列百國山川、阨塞、風土、物產，多中人所不及。’)

Feng Guifen also criticized that all the Chinese intellectuals were preoccupied with the outmoded Confucian education for passing the Imperial Examination and thus few of them were willing to study modern knowledge:

“It is a long-established tradition that all the Chinese intellectuals spend their life on useless eight-legged essays⁵³, fixed-style poems and calligraphy for passing the Imperial Examination. Although the Imperial Examination falls short of clear and rigorous standards to select candidates, most of the candidates who have flunked the Examination are loath to apply for other jobs but continue preparing for the Imperial Examination.”

(Feng Guifen: ‘On making modern weapons’, *The Political Essays of Feng Guifen*, 1861, p. 42)

(‘夫國家重科目，中於人心久矣，聰明智巧之士，窮老盡氣銷磨於時文、試帖、楷書無用之事，又優劣得失無定數，而莫肯徙業者，以上之重之也。’)

Apart from reflecting on China’s military defeat in the Opium Wars, Feng Guifen also made specific suggestions for developing modern education in China. In the article “On learning from the West”, he proposed that a priority of the educational reform be placed on foreign language education and modern science education in the years ahead:

“If we want to learn from the West, we should firstly establish translation schools in Guangdong and Shanghai, and employ western teachers to teach Chinese students foreign languages. ... As a basic academic discipline in western knowledge system, mathematics should be a compulsory subject to all students in the school. Thus, both western and Chinese teachers who excel in mathematics should be hired in the school. ... The students should also be taught how to use sophisticated and effective machines to replace the traditional farm implements and darning tools to boost the production efficiency and benefit our life.”

⁵³ **Eight-legged essay** (‘八股文’) was a fixed style of essay writing, an integral component of the Imperial Examination in Ming and Qing Dynasty.

(Feng Guifen: ‘On learning from the West’, *The Political Essays of Feng Guifen*, 1861, pp. 37-39)

(‘今欲采西學，宜於廣東、上海設一翻譯公所，聘西國課以諸國語言文字。。一切西學皆從算學出。。。今欲采西學，自不可不學算，或師西人或師內地人之知算者俱可。。。又如農具、織具，百工所需，多用機輪，用力少而成功多，是可資以治生。’)

In comparison with Wei Yuan’s half-baked ideas of establishing a translation school in China, Feng formulated a more detailed plan for the translation school. In the article “learning from the West”, he pointed out that the translation school should consist of two major departments, namely the Department of Foreign Languages and the Department of Western Books Translation. The former was established to teach students foreign languages while the latter was more like a practice site where teachers and students were engaged in translating western books to alleviate the shortage of textbooks on modern science in China.

Feng Guifen also suggested that only talented students not over 15 years old be eligible for admission to the translation school as they were not too old to learn foreign languages. In order to attract more students, the translation school was suggested to draw insights from the mission schools and provide free food and water to students as the incentives to their study. There was no concrete evidence to suggest any direct relationship between Feng Guifen’s plan and the follow-up establishment of a few government foreign language schools in the 1860s. However, there were striking similarities in the educational objectives and the students’ enrollment between Feng’s proposal and the actual education practices of the foreign language schools such as Peking Translation College established in the Self-Strengthening Movement.

Despite the fact that Feng Guifen appreciated the enormous value of western education to the Chinese students, as a scholar-official who had been immersed in the traditional Confucian culture for a long time, he also suggested that traditional Confucian education should not be removed from the curriculum in modern schools. Instead, he argued for the combination of the two types of education in China and advised the Chinese to study Confucian classics and ethics for shaping their character and to acquire western knowledge for strengthening the country. In the article “On making modern weapons”, he acknowledged the possibilities for offering two radically different types of courses in China’s modern schools:

“Today, the students are suggested to devote half of their energy and time to learning modern science and technology. Those students who excel in this field should be encouraged to continue their learning in modern science. Those who fail in western subjects are allowed to learn eight-legged essays, fixed-style poems and calligraphy for passing the Imperial Examination. If the modern schools offer the two types of curriculum, who will not be willing to do so? Someone with extraordinary talent will even have the ability of acquiring the two types of knowledge and have spare capacity to study Confucian classics and politics.”

(Feng Guifen: ‘On making modern weapons’, *The Political Essays of Feng Guifen*, 1861, p. 42)

(‘今令分其半以從事於制器尚象之途，優則得，劣得失，劃然一定，而仍可以得時文、試帖、楷書之賞，夫誰不樂聞？且其人有過人之稟，何不可以餘力治文學、講吏治。’)

As an early educational reformer in late imperial China, Feng Guifen represented the voices of those pioneering progressive Chinese scholar-officials in transforming the Confucian

education system and content in China, and exploring a new path for China's modern education. Feng's ideas for educational modernization in China were also part of the larger picture where competing educational ideas were battling during the Opium Wars. On the one hand, owing to the civilians' long-standing pursuit for the Imperial Examination, the traditional Confucian education still enjoyed a status relatively higher than other types of education in the first two decades of the late Qing period. On the other hand, the progressive scholar-officials and social intellectuals realized the limitations of the Imperial Examination and Confucian education, which facilitated the introduction of new educational ideas to the old country. Under the influence of modern education in mission schools and Japan's spectacular rise by developing western education, the ideas for modern science education spread to a larger community of the scholar-officials in late imperial China. The proposals for developing modern education in China provided no off-the-shelf answers to the complex relationship between modern education (including foreign language education) and traditional Confucian education (including Chinese language education). However, the proposals laid a solid basis for the concrete educational plans devised in the Self-Strengthening Movement that followed.

4.4 The growing criticisms on the Imperial Examination and the declining status of traditional Confucian education

Another factor contributing to the emergence of foreign language education was the increasingly harsh criticisms on the Imperial Examination in the late Qing period. As the only system to select intellectuals for state bureaucracy, the Imperial Examination played a central role in disseminating Confucian ethics and worldviews throughout the traditional Chinese society, which was viewed as the last formidable fortress to traditional Confucian education (Ko, 2017). Thus, the growing criticisms on the Imperial Examination indicated

the declining status of traditional Confucian education, and opened up more opportunities to develop western education and foreign language education in China.

The criticisms centered on two major problems of the Imperial Examination including the outdated examination content and widespread cheating phenomena in the examination. Regarding the content, the Imperial Examination primarily checked students' understanding of the Confucian classics, and assessed their ability to write eight-legged essays (Elman, 2000). For its particular focus on Confucian classics, the Imperial Examination, despite its significant contributions to the promotion of cultural unity in China, was criticized for ignoring practical technical knowledge, stifling students' creativity and generating many obedient officials-to-be who dared not defy authority or introduce institutional changes in China (Yuchtman, 2017).

A classic example of criticizing the Imperial Examination was Wang Maoyin's (王茂蔭)⁵⁴ commentary on China's traditional education. In the memorial "On producing talents for China" (<振興人才以濟實用折>), he identified the main problems of traditional education and the Imperial Examination, and predicted their damaging consequences for educational quality in late imperial China:

"Recently, most students have been engrossed in eight-legged essays rather than current affairs and practical knowledge. If the situation develops in this manner, the students may grow complacent about their beautiful lines and poetic words in essays and not pursue practical knowledge. This is not the "down-to-earth"

⁵⁴ **Wang Maoyin** (王茂蔭) (1798-1865) was a famous economist in late imperial China. During the Taiping Rebellion, he put forward many strategies for the anti-rebellion movement. Later he was appointed the Censor in the Qing government.

attitude they should have in learning. ... In the future, students should be encouraged to acquire practical knowledge to make contributions to the country.”

(Wang Maoyin: ‘On producing talents for China’, *The Imperial Records of Qing Dynasty*, 95 (2), pp. 8549-8550)

(‘近來文風日盛，留心經濟者固不乏人，第恐沾染時習，以文章風雅自詡，不思講求本務，殊非崇實黜華之道。。。嗣後益當奮勉砥礪，求為有用之學，以備國家腹心幹城之造。’)

Apart from an overemphasis on impractical eight-legged essays, the Imperial Examination was also criticized for its overemphasis on the candidates’ calligraphy in the marking process. Chen Kangqi (陳康祺), a well-known thinker in late imperial China, criticized that:

“Over the last few decades, when examiners mark papers, what they have focused on is not the content of examinees’ essays, but whether the examinee can write the regular script. On account of the special marking criteria on students’ calligraphy, the successful candidates’ essays have been the vague articles without much in-depth thought.”

(Chen Kangqi: ‘Why the Imperial Examination focused on the regular script?’, *Yan Xia Xiang Sheng Lu*, 11, pp. 3-4)

(‘近數十年，殿廷考試專尚楷法，不復問策論之優劣，以致空疏淺陋。’)

Chen Kangqi’s derogatory remarks on the marking criteria of the Imperial Examination were in agreement with the opinions of Liang Zhangju (梁章鉅)⁵⁵. He revealed that, according to the selection criteria, the best candidate was selected from the ones with the

⁵⁵ **Liang Zhangju** (1775-1849) was a famous scholar-official in Qing Dynasty. He was a famous poet and essayist who composed more than 70 poems or essays to reflect the dramatic changes in China during the Opium Wars.

first-class calligraphy. An important reason for attaching the highest importance to calligraphy, as Liang pointed out, was that “it is easier for examiners to select essays with better handwriting at the first glance, so they do not need to read the essays carefully”⁵⁶.

Another strident criticism on the Imperial Examination was the widespread cheating acts in the examination, and a paucity of effective measures to monitor examinations and punish the cheaters. As documented in Chen Kangqi’s article “The Cheating Behaviors in the Imperial Examination”, cheating was quite rampant in the Imperial Examination throughout China. Some of the cheaters surprisingly passed the examination and became officials in the imperial and provincial government.

In reference to the cheating behaviors, some examinees brought tiny versions of texts they were supposed to memorize into the examination room, sewing the texts into their clothing or the soles of their shoes and copying the “hidden” texts in the examination. A more serious cheating behavior was that many students even bribed the examiners, requesting them to divulge the examination content beforehand. Despite the candidates’ anonymous examination papers, the bribed examiners were able to recognize the “special” examinees’ handwriting and then gave them a high grade (Xu Ke: ‘The cheating behaviors in the Imperial Examination’). Some students drew some circles on the examination paper as a secret signal to tell the reviewers who the examinee was (Xu Ke: ‘The bribery behaviors in the Imperial Examination’).

⁵⁶ The original Chinese source was “策文必詳細研求，而字跡則一望而得，是亦避難就易一端”. It was translated from Liang Zhangju’s essay “Calligraphy as an important marking criterion in the Imperial Examination”, in *Tui An Sui Bi*, 6, pp. 15-16.

From the mid-Tang dynasty to 1905, the Imperial Examination had always been a major path, even the only one before 1840, to power and prestige in China. Nevertheless, the Imperial Examination was subjected to the growing attack and criticisms in the late Qing period when China opened its door for new educational ideas and modern civilization. By way of comparing western modern education and traditional Confucian education, some Chinese scholar-officials and social elites were aware of the outdated content of traditional education and its harmful effects on China's adaptation in the era of rapid military and technological development in the mid-19th century. A rising number of cheating cases in the Imperial Examination also posed serious challenges to the equality of the Examination System, which was criticized to favor the wealthy family and deprive the poor of their opportunities to become government officials. For this reason, some children from the impoverished family gave up the traditional route to bureaucracy and sought alternatives to social and economic mobility. Foreign language education, alongside rudimentary modern science education, became one of the means by which the marginal group of Chinese were able to work in foreign-invested industry or diplomatic organizations in China and thus acquired a high social status. It is within this wide socio-political context that the gradual acceptance of foreign language education in the mainstream society of China can best be understood.

4.5 Chapter summary

This chapter traced the historical development of foreign language education in the first twenty years of the late Qing period and painted the historical backdrop for the emergence of government-led foreign language education in the following period. During the Opium Wars, the Qing government faced constant external threats of western imperialists and internal rebellions. It can thus be understood why foreign language education was not a

priority on the government agenda and why the Qing government formulated no explicit or even implicit government policies on foreign language education during the two decades.

Although there was no government provision of foreign language education during the Opium Wars, the strong need for foreign language education arose from the society to communicate with western businesspersons, politicians and missionaries and to learn advanced western military technology. The rise of mission schools in coastal places raised the curtain of foreign language education in China and provided an instructive model for the follow-up government schools in the Self-Strengthening Movement. The emergence of foreign language education at the mission schools was also a response to the deep yearning among the progressive scholar-officials for superior western knowledge, which further encouraged the spread of modernization ideas and promoted the development of foreign language education in late imperial China. Another notable catalyst for foreign language education was the growing criticisms on the Imperial Examination and traditional Confucian education. The criticisms made it possible for modern education and foreign language education to be accepted by China's scholar-officials as the alternatives to address new problems in the modern era. Standing from a holistic perspective, foreign language education emerged from a period of confusion and innovation when the traditional Confucian thought of education was challenged and modern educational ideas and proposals came to the fore.

A noteworthy issue in this chapter was the relative status of traditional Confucian education (including Chinese language education) and modern western education (including foreign language education). There was no doubt that traditional Confucian education still had a superior status to western education in the 1840s and 1850s, but an increasing number of Chinese scholar-officials and social elites gradually recognized the practical value of

modern education. Bearing the respective advantages of Confucian and western education in mind, both the western missionaries and the scholar-officials proposed to combine the two types of knowledge and help Chinese students achieve the literacy of both Chinese and a foreign language, thus initiating bilingual education in late imperial China. It was in some sense surprising that the western missionaries and the scholar-officials in the Qing government, who should have mutually exclusive interests, found a shared ground in their propositions for bilingual education in China. The social consensus provided a solid foundation for the gradual and sustainable development of bilingual education in the upcoming Self-Strengthening Movement since 1861.

Chapter Five

The Bilingual Education Policies and Practices in the Self-Strengthening Movement (1861 to 1894)

5.1 Chapter introduction

After China had been defeated in the Opium Wars, the Qing government was forced to sign a series of treaties with the western powers, and cede its territories such as Hong Kong Island and Kowloon to Britain (Lovell, 2012). Through the treaties, the western powers grabbed long-term political and economic profits including large war indemnity from China, extraterritoriality, rights of free trade, freedom of preaching Christianity in China, and curtailment on tax revenues for foreign ships (Deng, 2004). By contrast, China fell into the trap of a semi-colonial and semi-feudalistic country and was hit by the heavy political and economic crisis. It could be predicted that China would follow the trend of colonization in Asia in the 18th and 19th century and become a total western colony like British India if no fundamental changes took place (Fong, 2015 b).

At the critical historical moment, the Chinese imperial governors realized the necessity of training translators or interpreters to facilitate increasing diplomatic talks between China and the West. Apart from overcoming the language barrier in diplomatic talks, the Qing government also decided to implement an educational reform in 1861 to cultivate intellectuals in the field of modern science and technology and to lessen the disparities in military technology between China and the West. The reform was called the Self-Strengthening Movement.

To implement the educational reform during the Self-Strengthening Movement, the Qing government established two types of modern schools. The first type of schools was foreign language colleges such as Peking Translation College⁵⁷ (京師同文館), Shanghai Foreign Language College (上海廣方言館) and Canton Foreign Language College (廣州同文館). The second type of schools was modern technical colleges such as Fujian Naval College (福建船政學堂), Tianjin Naval College (天津水師學堂) and Tianjin Military College (天津武備學堂).

Due to the absence of policy documents on the development of bilingual education in this historical period, it is necessary to reconstruct the government policies of bilingual education from the education practices in the premier government schools. Among those modern schools established in the Self-Strengthening Movement, Peking Translation College and Fujian Naval College were the premier government schools and the earliest schools to initiate bilingual education in late imperial China. Thus, it is important to investigate the bilingual education practices in these two premier government schools in order to examine government attitudes towards bilingual education and reconstruct the government policies on bilingual education in the Self-Strengthening Movement. Section 5.2 presents a historical account of the bilingual education practices in the first modern school in China — Peking Translation College. The account included the background of its establishment, student enrollment, the fierce debate over incorporating western knowledge in the curriculum, curriculum design, teacher employment and management, and actual results of bilingual education at the College. Section 5.3 presents a detailed account of the bilingual education practices in the first modern technical school in China — Fujian Naval College in the aspects of its socio-political background, the division of

⁵⁷ It was also called “Tongwen Guan” in some studies such as Lackner & Vittinghoff (2004).

academic disciplines at the College and curricular characteristics. The two prime examples of bilingual education practices in the premier government schools show how foreign languages and western content subjects were taught in government schools, what the relationship between western subjects and Chinese-related subjects was in the curriculum, and how the practitioners attempted to enhance the effectiveness of bilingual education in schools. The investigation of the education practices will also reveal how foreign languages were used to achieve the fundamental goals of producing intellectuals to communicate with westerners and to absorb superior technology from the West during the Self-Strengthening Movement.

5.2 The bilingual education practices at Peking Translation College

5.2.1 The establishment of Peking Translation College

Peking Translation College was established at the beginning of the Self-Strengthening Movement when a group of progressive scholar-officials in the Qing government, provincial governors and social elites started to reflect on the military defeats of the Opium Wars and realized the considerable disparity in the power of military technology between China and the western countries. However, before gaining knowledge of western military technology and communicating with the West, it was necessary to establish a foreign language school to train interpreters and translators in late imperial China. It provided Chinese with an important means of accessing western knowledge. It also satisfied China's urgent demand for translators in treaty negotiations, as stipulated in the *Treaty of Tientsin*, the English version of treaty would be the only one having legal effect:

“All official communications addressed by the Diplomatic and Consular Agents of Her Majesty the Queen to the Chinese Authorities shall, henceforth, be written in English. They will for the present be accompanied by a Chinese version, but, it is understood that, in the event of there being any difference of meaning

between the English and Chinese text, the English Government will hold the sense as expressed in the English text to be the correct sense.”

(Article L., *The Treaty of Tientsin*, 1858)

Thus, the proposal of establishing Peking Translation College was formulated in the initial period of the Self-Strengthening Movement to address the Qing government’s urgency in treaty negotiations after the Opium Wars. In the following section, the complicated socio-political background and the rationale of establishing Peking Translation College will be detailed.

5.2.1.1 The establishment of Zongli Yamen

In 1860, when China lost to the allied British-French Army in the Second Opium War, Emperor Xianfeng (咸豐皇帝) fled to Rehe in order not to be captured by western army officers (Song, 2008). In Rehe, he issued an order to appoint Yi Xin⁵⁸ (奕訢) as the “Minister of Foreign Affairs” (‘欽差便宜行事全權大臣’) to be responsible for negotiating with western envoys about signing treaties in the post-war period (Huang, 2006).

Through constant communication with westerners and continuous in-depth reflections over the failure of Imperial Defending Army in the Opium Wars, Yi Xin recognized the comprehensive strength of western countries and the necessity of military modernization in China to guard against further encroachment from western attackers. On January 13, 1861, Yi Xin, Gui Liang⁵⁹ (桂良) and Wen Xiang⁶⁰ (文祥), submitted a jointly-signed memorial to propose the establishment of an office in charge of foreign affairs in Beijing. The Foreign

⁵⁸ **Yi Xin** (1833-1898) (奕訢) was also called Prince Gong ‘恭親王’. He was an important policymaker of foreign affairs in the late Qing period.

⁵⁹ **Gui Liang** (1785-1862) was the grand scholar of the Qing government and the father-in-law of Yi Xin.

⁶⁰ **Wen Xiang** (1818-1876) was the senior deputy minister of the Board of Revenue and Population.

Office was also called Zongli Yamen (總理衙門), or “the Ministry of Foreign Affairs” in late imperial China (‘A memorial on handling the affairs after the Opium Wars’). The main responsibility of Zongli Yamen was to facilitate increasingly frequent communication between the Qing government and foreign ambassadors to China after the Opium Wars (Rudolph, 2005). In terms of the political system in late imperial China, Zongli Yamen was only a department of the Qing government that made suggestions on foreign affairs to the emperor who made final decisions through imperial edicts. Nevertheless, as China was confronted with the external threats in the late Qing period, Zongli Yamen was a powerful and influential agency in the Qing government.

Yi Xin was appointed the head of Zongli Yamen because of his affinity to Empress Dowager Cixi (慈禧太后), who had been the de-facto controller of late imperial China since 1861. After Emperor Xianfeng passed away on August 22, 1861, it should have been Zaichun (載淳) (Emperor Tongzhi 同治皇帝) to take charge of all the affairs in China. However, the five-year-old child emperor was too young to handle the complex internal and external affairs, and thus Empress Dowager Cixi, Emperor Tongzhi’s mother, seized the opportunity to assume the highest power in the Qing government after the Xinyou Coup d’état⁶¹. Because of the help Cixi had obtained from Yi Xin in the coup d’état, she rewarded him by appointing him to be the head of Zongli Yamen, which was equal to Foreign Minister in power.

⁶¹ **Xinyou Coup d’état** (辛酉政變) was a power conflict between Empress Dowager Cixi and the eight regents in the Qing government in 1861. As a low-ranked empress, according to the imperial rule in Qing Dynasty, Cixi should not have supreme political power in the Qing government. However, with the help of Yi Xin, she acquired the highest power in the imperial court.

5.2.1.2 *The establishment of a foreign language school in Peking*

Apart from founding Zongli Yamen as the Ministry of Foreign Affairs, the memorial on January 13, 1861 also suggested establishing a foreign language school in China for the sake of removing linguistic barriers between Chinese governors and foreign diplomats. Specifically, the memorial said:

“It is imperative to know about the temperament of foreigners before carrying out negotiation with foreign countries. However, we can neither converse with them, nor read their languages, and we know very little about the situations of foreign countries. Thus, how can we expect them to make compromises? The Russian Language School⁶² was established to teach people languages and that decision had a far-reaching significance. Although it has long since existed as an empty structure and the mastery of the language by its students was far from accomplished, it seems that the Russian Language School should be used as a development model for other foreign language schools.”

(Yi Xin: ‘A memorial on handling with the affairs after the Opium Wars’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Xianfeng) (1850-1861)*, 71, p. 318)

(‘查與外國交涉事件，必先識其性情。今語言不通，文字難辨，一切隔膜，安望其能妥協！從前俄羅斯館文字，曾例定設立文館學習，具有深意；今日久視為具文，未能通曉，似宜量為鼓舞，以資觀感。’)

⁶² **The Russian Language School** was established in 1708 to train translators for the growing diplomatic communication between China and Russia in the early 18th century. It was viewed as the predecessor of Peking Translation College (Morse, 1918).

The linguistic barrier between Chinese officials and foreign envoys could also be confirmed by Qi Rushan's memoirs on the situation when the Chinese officials were at a disadvantage in diplomatic talks after the Opium Wars:

“It was a normal practice that the imperial governors frequently communicated with western envoys. Most of the western envoys understood Chinese quite well while none of the Chinese officials understood foreign languages. Every time when the Chinese officials finished their speech in meetings, the western envoys had already understood their meanings. According to the diplomatic custom, the speech of Chinese officials needed to be translated at first. It thus gave the western envoys sufficient time to consider their reply to the Chinese officials' speech. By contrast, when the western envoys made their speeches, the Chinese officials knew nothing about foreign languages. Thus, they had to listen to the translation carefully and did not have enough time to consider their responses.”

(Qi, 1989, p. 34)

(‘衙門中當然常有與外國人當面商議的事情，外國使臣多懂中國話，而中國官員都不懂外國話，每逢會議，衙門大臣說完一段話時，該公使已經懂得很清，但仍由翻譯官翻成洋文，這是體制，可是外國占了大便宜了，因為公使聽到中國官員說的一套話，他早明瞭話中的意思，於翻譯官再翻譯的時候，他早斟酌所說的話，中國官員又一字不懂，他譯成中國話傳回來之後，中國官員就得立刻回答，就是臨時斟酌也不能太久。’)

Another important reason for training translators and interpreters for the Qing government was the harms of hiring Tongshi (通事) to act as translators in diplomatic talks between Chinese scholar-officials and western diplomats. In the article “On learning from the West” (<采西學議論>) in 1861, Feng Guifen (馮桂芬), who was a compiler in Beijing's Hanlin

Academy and later served as a private secretary and adviser to Li Hongzhang, the Viceroy of Liangjiang in the 1860s, directed harsh criticisms over those Tongshi:

“Those who understand foreign languages are called ‘Tongshi’. The Tongshi are mostly the frivolous empty-headed men who have no means for making a living and are despised by their countrymen. Being crude, rash, shallow and evil-minded, the Tongshi idle away their life. In reality, those so-called “translators” have a flimsy foundation in foreign languages, and only understand some numbers and simple colloquial words. How can you expect them to understand western knowledge? It is thus dangerous to hire them as interpreters since their translations may lose original meanings and lead to serious diplomatic conflicts.”

(Feng Guifen: ‘On learning from the West’, *The Political Essays of Feng Guifen*, 2, pp. 16-19)

(Translated by Teng & Fairbank, 1979, p. 51)

(‘今之習於夷者曰通事，其人率皆市井佻達遊閑，不齒鄉裡，無所得衣食者始為之，其質魯，其識淺，其心術又鄙，聲色貨利之外，不知其他，且其能不過略通夷語，間識夷字，僅獲目數名與俚淺文理而已，安能其留心學問乎？。。。寄耳目於蠢愚謬妄之通事，詞氣輕重緩急，轉輾傳述，失其本旨，幾何不以小嫌釀大釁。’)

Greatly influenced by Feng Guifen’s suggestions, in the memorial concerning the establishment of Peking Translation College on August 20, 1862, Yi Xin maintained that it should be essential to develop foreign language education in China to bridge the communicative gap between Chinese and western diplomats. In order to persuade the emperor to accept his proposal, he cited concrete examples of other countries to illustrate the importance of foreign language education in a country:

“It has been your courtiers’ idea that if we would like to familiarize ourselves with the circumstances of various countries, we must master their languages, so that we will not be misinformed and deceived. Other countries have invested huge sums of money in employing Chinese to translate and explain Chinese texts. By contrast, there are no Chinese so far who are well-versed in foreign languages and thus it would be impossible to gain any detailed information about other countries.”

(Yi Xin: ‘A memorial on the establishment of Peking Translation College’, *Beginnings and End of the Preparations for Dealing with Foreign Affairs* — *Tongzhi Reign*, 8, pp. 342-343)

(‘臣等伏思欲悉各國情形，必先諳其言語文字，方不受人欺蒙。各國均以重資聘請中國人講解文義，而中國迄無熟悉外國語言文字之人，恐無以悉其底蘊。’)

When it comes to the education model of the premier foreign language school, in both memorial on January 13, 1861 and on August 20, 1862, Yi Xin and his colleagues explicitly stated that the newly built foreign language school should model on the Russian Language School (俄羅斯文館). In response to growing trade talks with Tsarist Russia in the northeastern China, the Russian Language School was set up in 1708 to train Russian interpreters and translators (Morse, 1918). According to historical records, 24 students from the “Eight Banners” family⁶³ were admitted to the Russian Language School, and a graduation examination was held every five years. Those who obtained an excellent mark in the graduation examination would be conferred an official title and government posts. They would be dispatched to work in the Council for Tribal Affairs (理藩院) or in the

⁶³ The “**Eight Banners**” was the basic military organization of Manchu society and represented the Manchu identity in Qing Dynasty after the Manchu Nurhaci established his imperial regime over China in 1644. The “Eight Banners” involved “Bordered Yellow Banner”, “Plain Yellow Banner”, “Plain White Banner”, “Plain Red Banner”, “Bordered White Banner”, “Bordered Red Banner”, “Plain Blue Banner”, and “Bordered Blue Banner”.

northwestern frontiers where Russian interpreters or translators were urgently needed (Biggerstaff, 1861)

As there were few original records on education practices in the Russian Language School (Ji & Chen, 2007), it is difficult to examine its actual educational quality. However, according to the memoir of W. A. P. Martin, the educational quality in the Russian Language School was far from satisfactory:

“For many years there had been native professors but no students (in the Russian Language School). At the time of its incorporation in the School of Interpreters (Peking Translation College), the only link connecting it with the past was an old professor who knew no Russian. He brought no students and no books, and was himself promptly superseded by a native of Russia, leaving of the ancient school as its contribution to the common stock nothing but a name, or rather *nominis umbra*.”
(Martin, 1966, p. 295)

It was unsurprising that the Russian Language School had many inherent problems in its education practices since it was difficult to establish a foreign language school in the period when the Qing government adopted a “Closed-Door” policy, adhered to superiority of the Chinese language and despised foreign languages. Nevertheless, the education practices of the Russian Language School still played an important role in removing resistance and opposition from the conservative officials in the Qing government when Peking Translation College was established. The founding of the Russian Language School proved that establishing a foreign language school was in reality not a new initiative proposed from the progressive scholar-officials during the Self-Strengthening Movement, but a continued tradition inherited from the previous historical period. Thus, it can be understood why the proposal of establishing Peking Translation College was officially approved on January 20,

1861 by the imperial court without obstacles. After a year of preparation, Peking Translation College was founded in June 1862 within the compounds of the Ministry of Education at the Dongtangzi Alley (東堂子胡同) in Beijing.

5.2.2 The division of academic disciplines

Despite the fact that Peking Translation College modeled on the Russian Language School, it does not suggest that Peking Translation College totally copied its model because the social milieu had changed dramatically in different historical periods of Qing Dynasty. Before the establishment of Peking Translation College, the top priorities for Yi Xin, the de-facto administrator of the College, were the division of academic disciplines and the choice of foreign languages to be taught in the foreign language college.

Among various foreign languages, English was chosen as the preferred foreign language at the college, and thus the Department of English was set up in 1862. There were four main reasons why English became the preferred foreign language at Peking Translation College. The first reason was that after the Opium Wars, the British Empire acquired a high status in China's diplomatic relations and exerted strong influence on China. The *Treaty of Nanking* and *Convention of Peking* accelerated Sino-British communication in various fronts, and created an urgent need for training English interpreters and translators to overcome the communicative barrier between Chinese officials and British diplomats. As previously mentioned, the English version of treaties was the only legal one for the British. Thus, learning English was conducive to facilitating diplomatic communication between China and the West, and helped to avoid being disadvantaged when they signed treaties with British diplomats.

The second reason was that English was also an important tool for international communication since the 1850s when Britain expanded its overseas markets in Asia. Even for some countries that did not use English as the first national language, they still chose the English version as the standard form in the treaties with China. For instance, as stipulated in Article 50 of the Sino-Danish *Treaty of Tientsin* signed on July 13, 1863, all the diplomatic documents between China and Denmark shall be written in English.

The third reason was that the administrator of Peking Translation College found it difficult to offer other foreign language subjects in the first few years since establishment as the college had insufficient faculty. Thus, the college administrators decided to set up the Department of English as an instructive model. Students would study other foreign languages such as Russian and French when teachers who understood those languages were employed at Peking Translation College (Yi Xin: ‘A memorial on the establishment of Peking Translation College’).

The choice of English as the preferred foreign language in the initial years of Peking Translation College was also attributed to the prevalence of English in the world and the practical value of English education in the job market during the Self-Strengthening Movement. In an essay named “It is imperative to learn western languages” (<宜習西文說>) written by Yang Xuanqing (楊選清), the importance of learning English in China was highlighted:

“Up until today, most people in North America, Australia, India and the overseas islands speak English. As Britain is the center of commerce in the world, English is also a main language for commerce between people from different countries. If we master English, we are even able to communicate with foreigners from the upper-class society in the world. Thus, English can be viewed as a lingua franca in the world.”

(Yang Xuanqing: ‘The importance of learning western languages’, in Zheng Zhengduo’s *Selected Articles in the Late Qing Period*, p. 573)

(‘至今日，而北美洲、澳洲、印度國及海外群島，大半悉用英文。英國商務之盛，甲於天下。商賈往來，咸以英文為便。人苟能操斯語，雖遍走環宇，自可以所到之處，與士大夫晉接，即謂英文為五洲之官話，誰曰不宜？’)

A few years later, in order to satisfy the increasing communication needs between China and foreign countries, departments of other foreign languages were set up in succession. In 1863, the Department of French was added at the college. In the same year, the previous Russian Language School was subsumed under Peking Translation College and became the Department of Russian. Eight years later, the Department of German was also set up to satisfy the demand for German interpreters in response to increasing diplomatic talks with Germans in the Jiaodong Peninsula in China (*Register of Peking Translation College*, 1888). In 1897, when the Sino-Japanese diplomatic communication as well as academic exchanges between the two countries increased after the Sino-Japanese Naval War, the Department of Japanese was also set up at Peking Translation College (*Statutes of Peking Translation College and Their Amendments*, 1898). Students at Peking Translation College were encouraged to learn other foreign languages. According to the school regulation in 1895, students were asked not only to learn English, but also other foreign languages:

“The original objective of foreign language education is to help students acquire a wide range of world knowledge, not just knowledge of a country. Since Britain is the first country to establish commercial communication with China, it can be understood that students spend much time learning English. However, the students fail to realize the importance of French as more than half of diplomatic documents and correspondence are in French. Apart from English and French, other foreign languages are also important to students. We learn German

weaponry and manufacturing by reading German books, and we handle the Sino-Russian border dispute by examining Russian documents. If we want to know more about those countries, is it not urgent to learn those foreign languages?"

(‘Rules and Regulation of Peking Translation College’, 1895, p. 1)

(‘查學習洋文言語，原期博考周知，廣為儲才，豈可囿於一國？吾華人士以通商風氣開自英國，遂爾偏重英文，豈知外洋文牘往還，強半以法文為止。此外如德國之武備、製造，宜由圖冊訪求，俄界之廣輪交錯，宜以方言稽考，何一非當今急務？’)

5.2.3 The evolution of bilingual education at Peking Translation College

5.2.3.1 The enrollment of students

It was relatively smooth to establish Peking Translation College, but in the initial years of its development, the college administrators found it difficult to recruit students for the foreign language school. In *Statutes of Peking Translation College* attached to the memorial on the establishment of Peking Translation College on August 20, 1862, it set clear criteria for students’ selection:

“The students at Peking Translation College are selected according to the following criteria: (1) students should come from ‘Eight Banners’ family⁶⁴; (2) students should be intelligent enough to learn foreign languages; (3) students should be studying the Manchu language; (4) the age of proposed students should be around 15. Two or three students from each Banner will be selected according to the admission requirements above.”

⁶⁴ The students were those who were not offered hereditary official positions.

(Yi Xin: 'A memorial on the establishment of Peking Translation College', *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 8, pp. 342-343)

(‘應又八旗滿蒙漢間散內，擇其資質聰慧、現習清文者，年在十五歲上下者，每旗各保送二三名，由臣等酌量錄取，挨次傳補。’)

The admission requirement demonstrated the administrators' understanding of the starting age of learning foreign languages. Students who were much older than 15 years old and missed the golden time for learning English were not allowed to study at Peking Translation College. As shown in Yi Kuang's memorial "On enrolling students of Manchu and Han ethnicity" (<請推廣招考滿漢學生折>) dated January 29, 1886, the administrators of Peking Translation College believed that the children who were below 13 years old were also not suitable to foreign language education or science education because they did not have a solid foundation in Chinese.

It is evident from the admission requirements that in the initial development period of Peking Translation College, the source of students was only limited to "Eight Banners" imperial members and their descendants. The practice of only admitting children from the "Eight Banners" family can also be confirmed by the memoir of Qi Rushan (齊如山): "In the first few years of Peking Translation College, the students were all bannermen"⁶⁵ (Qi, 1989, p. 37). The practice of only enrolling students from the "Eight Banners" family can be interpreted as a continuum of the enrollment tradition of the Russian Language School (Guo, 1999). It was also an ethnic discrimination against students with Han ethnicity as the Qing government initially restricted equal access of the Han people to modern education

⁶⁵ The original text is "在設立最初幾年的時間，所有的學生都是旗人".

(Ji & Chen, 2007). However, the restriction in the source of students broke off in 1867 when the Department of Modern Mathematics and the Department of Astronomy were added to Peking Translation College. The milieu of expanding the source of students at the College will be detailed in Section 5.2.3.2.

Modeling on the Russian Language School, each department of Peking Translation College admitted only 24 students at most (Yi Xin: ‘A memorial on making slight modifications on *Statutes of Peking Translation College*’). As described in Qi’s memoir, most students from the “Eight Banners” family were in fact loath to study foreign languages at the College. The low motivation for learning foreign languages impaired the educational quality at Peking Translation College in its initial period of development.

The reasons why Peking Translation College was not widely accepted in the beginning interlocked with the deep-rooted negative social attitudes towards foreigners and foreign languages as well as the long-term influence of the Imperial Examination. According to Qi Rushan’s memoir (1989) on the Chinese attitudes towards Peking Translation College in the 1860s and 1870s, the college was viewed as a place where teachers taught students some crooked means or dishonest practices, and the students were likely to go astray after graduating. Thus, most families had a deep-rooted view that foreign languages were inferior to Chinese, and the parents did not allow their children to be admitted to foreign language schools. Students who studied foreign languages in modern schools would also be looked down upon by their family and fellow compatriots (Zeng, 1982).

In contrast to the negative attitudes towards foreign language education, the children in most families were engrossed in preparing for the Imperial Examination that focused on reciting traditional literary classics and writing “Eight-legged Essays”. Under the strong

social trend of the Imperial Examination, it was thus natural that in the initial period of the Self-Strengthening Movement, students might throw their grave doubts on the value of learning foreign languages that were not tested in the Imperial Examination, and few of them were willing to apply for a place at Peking Translation College.

In order to attract children to choose Peking Translation College, Yi Xin decided to give a variety of monetary and material incentives. Apart from paying students three taels of silver as daily subsidies and awarding students monthly stipends based on their monthly tests, the excellent graduates were also eligible for working in the Qing government:

“Every three years⁶⁶ the students are examined by Zongli Yamen. According to the rule of the Russian Language School, students who graduate with merits are awarded by posts of the seventh, eighth and ninth rank in the Qing government.”

(Yi Xin: ‘A memorial on making slight modifications on *Statutes of Peking Translation College*’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 8, p. 1561)

(‘臣等擬請每屆三年，由臣衙門堂官自行考試一次，核實甄別，按照舊例，優者授為七、八、九品官等。’)

Probably because of the difficulties in admitting sufficient students to the College, there was almost no rigid entrance examination, which led to the poor quality of students in the initial years of Peking Translation College. As Qi Rushan commented, “most of the earliest students at the College were good-for-nothing descendants of the ‘Eight Banners’ family. They do not study hard”⁶⁷ (Qi, 1989, p. 32). The source of students changed in 1867 when the Department of Astronomy and the Department of Modern Mathematics were founded

⁶⁶ The normal period of education at Peking Translation College was three years.

⁶⁷ The original text is “最初的學生，多是不成器的子弟，也都不好好用功”.

after a six-month fierce debate between progressive and conservative scholar-officials. The following section will detail the influential debate in the Qing government.

5.2.3.2 A fierce debate over the establishment of the Department of Astronomy and the Department of Modern Mathematics

Five years after the establishment of Peking Translation College, in the memorial dated December 11, 1866, Yi Xin proposed that the Department of Astronomy and the Department of Modern Mathematics should be set up at the College. Specifically, in the memorial Yi Xin elucidated the importance of popularizing expertise in modern mathematics and astronomy in order to strengthen the country:

“The reason why westerners can produce machines and military arms, their superior navigation and battle skills is that they have expertise in mathematics and astronomy. ... Our Chinese are, in terms of intelligence and wisdom, not inferior to the westerners. Thus, China will be on a right track for self-strengthening if we can acquire expertise in modern science and explore the essence of modern technology.”

(Yi Xin: ‘A memorial on adding the Department of Astronomy and the Department of Modern Mathematics at Peking Translation College’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 46, pp. 1945-1946)

(‘因思洋人製造機器、火器等件，以及行船、行軍，無一不自天文、算學中來。。。華人之智巧聰明不在西人以下，舉凡推算格致之理，制器尚象之法，鉤河摘洛之方，倘能專精務實，盡得其妙，則中國自強之道在此矣。’)

One month later, in the memorial dated January 28, 1867, Yi Xin maintained that learning modern mathematics and astronomy was crucial to exploring the essence of western knowledge:

“What China should learn from foreigners is not merely the skills of shipbuilding and making firearms, but the principles behind them. It only serves its practical use to purchase western military weapons, but a grasp of the principles will help us explore the essence of western knowledge. One should be able to distinguish between expediency and far-reaching strategy, which is crystal-clear in its own right.”

(Yi Xin: ‘A memorial on the request for establishing the Department of Modern Mathematics and the Department of Astronomy at Peking Translation College’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 46, pp. 1982-1984)

(‘中國所當學者，固不止輪船、槍炮一事，即以輪船、槍炮而論，雇買以應其用，計雖便而法終在人；講求以徹其源，法既明而用將在我。蓋一則權宜之策，一則久遠之謀，孰得孰失，不待辨而明矣。’)

In the same memorial, Yi Xin also refuted the opposing views from some conservative scholar-officials⁶⁸ in the Qing government, and defended his proposal in the following aspects. To begin with, Yi Xin asserted that expertise in modern astronomy and mathematics was the basis of western knowledge. It provided an access for Chinese to manufacture modern military weapons on their own:

“The suggestion for recruiting students of astronomy and mathematics is (not meant to be deliberately unconventional or unorthodox, or to look up to

⁶⁸ The representatives of the conservative scholar-officials in the Qing government were Wo Ren (倭仁) and Zhang Shengzao (張盛藻).

foreigners as having better mathematics than us Chinese); it is because foreigners manufacture machines on the basis of mathematics. Since everyone in China is learning to build ships and make firearms, if foreigners are not invited to communicate the principles or if they hide a card up their sleeve, it is the Chinese who will suffer eventually.”

(Yi Xin: ‘A memorial on the request for establishing the Department of Modern Mathematics and the Department of Astronomy at Peking Translation College’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 46, pp. 1982-1984)

(‘此次招考天文、算學之議，蓋以西人制器之法，無不由度數而生，今中國議欲講求製造輪船、機器諸法，苟不藉西士為先導，俾講明機巧之原，製作之本，竊恐師心自用，徒費錢糧，仍無裨於實際。’)

Yi Xin also challenged the opposing view of the conservative officials that acquiring western knowledge would lose Chinese identity. He found that modern science and technology originated from Chinese ancient wisdom:

“When we study western knowledge, we find that it originates from nowhere else but China. Since foreigners have the habit of thinking, they can do away with what is old and bring about what is new. The same is true of expertise in astronomy and mathematics and of other things too. ... In ancient China, even farmers and garrison soldiers had some astronomical knowledge. However, it was only because in some dynasties astronomy was banned that fewer and fewer people understood it.”

(Yi Xin: ‘A memorial on the request for establishing the Department of Modern Mathematics and the Department of Astronomy at Peking Translation College’,

The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi)
(1862-1874), 46, pp. 1982-1984)

(‘查西術之借根，實本於中術之天元，彼西土目為東來法，特其人性情縝密，善於運思，遂能推陳出新，擅名海外耳，其實法固中國之法也。天文、算學如此，其餘亦無不如此。。。古者農夫、戍卒，皆識天文，後世設為厲禁，知者始鮮。’)

In the defending memorial, Yi Xin also cited the examples of the western countries and Japan to illustrate his central argument that the absorption of modern science and technology knowledge was crucial to the rise of countries:

“In the last few decades, western countries have been deep into shipbuilding and have been learning from one another, pushing their technology further and further ahead. Japan has recently dispatched people to study English and the shipbuilding skills in the United Kingdom, and in the near future, they will make achievements. ... If a tiny country like Japan knows how to strive for self-strengthening, it would be a shame in the fullest sense for China to hold tight on to stereotypes, conventional mindsets and not to bestir ourselves.”

(Yi Xin: ‘A memorial on the request for establishing the Department of Modern Mathematics and the Department of Astronomy at Peking Translation College’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi)* (1862-1874), 46, pp. 1982-1984)

(‘查西洋各國，數十年來，講求輪船之制，互相師法，製作日新。東洋日本近亦遣人赴英國學其文字，究其象數，為仿造輪船張本，不數年後亦必有成。。。若夫日本，蕞爾國耳尚知發憤為雄，獨中國狃於因循積習，不思振作，恥孰甚焉！’)

In the memorial above, Yi Xin provided detailed and convincing explanations for founding the Department of Astronomy and the Department of Modern Mathematics at Peking Translation College. His solid-grounded argument, supported by ample evidence, convinced the emperor to believe and accept his proposal.

On March 5, 1867, an imperial edict was issued to withdraw the conservative officials' opposition to founding the Department of Astronomy and the Department of Modern Mathematics at Peking Translation College. Specifically, the imperial edict stated, "expertise in astronomy and modern mathematics is important knowledge for Chinese scholar-officials, not the diabolic tricks and wicked craft"⁶⁹ (Emperor Tongzhi⁷⁰: 'An imperial edict on the memorial of Zhang Shengzao'). The edict stressed the importance of knowledge of modern astronomy and mathematics to China, and criticized the conservative scholar-officials as narrow-minded officials that had a limited view of the modern world.

Nevertheless, the imperial edict did not stop the opposition from the conservative officials who had persistently been calling for abandoning the proposal of incorporating the Department of Astronomy and the Department of Modern Mathematics at Peking Translation College. Some conservative scholar-officials such as Wo Ren (倭仁)⁷¹, Yu Lingchen (於凌辰), Chong Shi (崇實) and Yang Tingxi (楊廷熙), respectively submitted their memorials to expound on the negative consequences of imparting western knowledge to students. Other conservative scholar-officials started to spread rumors about Peking Translation College in the society. Rumor had it that "the devil is crafty with many tricks, tricking the imperial court into setting up Peking Translation College. The Grand Council

⁶⁹ The original text of the imperial edict is that "原以天文、算學為儒者所當知，不得目為機巧".

⁷⁰ Empress Dowager Cixi issued the edicts in the name of Emperor Tongzhi from 1861 to 1874.

⁶⁸ **Wo Ren** (1804-1871) was a grand academician in late imperial China and the teacher of Emperor Tongzhi.

is thoughtless with few plans, planning only to tempt good bannermen to take aliens as teachers.”⁷² (*Weng Tonghe's Diary*, 1989, p. 519).

Despite the conservative officials' vehement opposition, the imperial court insisted on adding the Department of Astronomy and the Department of Modern Mathematics at Peking Translation College. In 1867, two important imperial edicts (one was on April 23 and the other one was on June 30) were issued to reiterate the importance and urgency about setting up the two departments at the College. It was stated in the imperial edicts that Empress Dowager Cixi ordered Wo Ren, who firmly believed in the superiority of traditional Confucian academies to modern schools⁷³, to establish another school to compete against Peking Translation College. Specifically, Wo Ren was ordered to

“Enroll several students, set up another college on a different site, and act as the administrator of the college. Thus, students at the college, together with those at Peking Translation College, can learn from each other and make progress.”

(Emperor Tongzhi: ‘An imperial edict on requesting Wo Ren and others to establish another school’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 48, p. 2032)

(‘請倭仁酌保數員，另行擇地設館，由倭仁督飭講求，與同文館招考各員互相砥礪，共收實效。’).

The imperial edict was an impartial and encouraging order to Wo Ren himself to found a college to compete with Peking Translation College. However, in reality the edict put Wo Ren in a dilemma as he stated in the following memorial:

⁷² The original Chinese text is that “鬼計本多端，使小朝廷設同文館；軍機無遠略，誘佳弟子拜異類為師”.

⁷³ See Wo Ren's “Memorial on prohibiting the Manchu and Han Jurens from studying modern mathematics and astronomy” dated March 20, 1867 for details.

“I request that no college should be set up on a different site with myself as the administrator. I am no expert in astronomy and mathematics, and neither do I know any teachers who are knowledgeable in astronomy and mathematics.”

(Wo Ren: ‘A memorial on having no personnel who were proficient at modern mathematics and astronomy’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 48, pp. 2035-2036.)

(‘今同文館既經特設不能中止，則奴才前奏已無足論，應請不必另設館、由奴才督飭辦理；況奴才並無精于天文、算學之人，不敢妄保。’)

Having read Wo Ren’s memorial, Empress Dowager Cixi replied on the same day:

“Wo Ren claimed that he did not know any teachers who were knowledgeable in astronomy and mathematics, but he shall take careful note all the time so that he can recommend whoever qualifies once such persons should appear. Also, he shall set up a college for teaching western subjects in order to achieve the intended goal.”

(Emperor Tongzhi: ‘An imperial edict on answering Wo Ren’s memorial’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 48, p. 2036)

(‘倭仁現在既無堪保之人，仍著隨時留心，一俟諮訪有人，即行保奏，設館教習，以收實效。’)

The responses from the imperial court suggested strong determination from Empress Dowager Cixi to add the subjects of modern mathematics and astronomy to the modern schools in China. She even hoped to establish more than one college specializing in western knowledge and asked the conservative officials to set up another college to compete with Peking Translation College.

After the imperial edict was issued on April 25, 1867, there were still a few memorials from some conservative governors to oppose offering subjects of modern mathematics and astronomy to students who had passed the Imperial Examination. In particular, Yang Tingxi's memorial on June 23, 1867 was strongly worded. It attacked Yi Xin and other progressive officials' viewpoints, and even criticized Empress Dowager Cixi's support for Peking Translation College as "being against the heavenly principles, clashing with the will of people, and contrary to public opinion"⁷⁴ (Yang Tingxi: 'A memorial on closing Peking Translation College in order not to be against the heavenly principles'). Yang Xingti asserted, "The foreigners, who were the invaders to China (during the Opium Wars), are the crafty people who will not impart the essence of modern technology to Chinese but make profits from the modern schools"⁷⁵ (Yang Tingxi: 'A memorial on closing Peking Translation College in order not to be against the heavenly principles').

A week later, in the imperial edict dated June 30, 1867, the imperial court adhered to its original viewpoints, denounced Yang Tingxi's memorial as being absurd and overflowing with foolish and tedious words. The imperial court insisted that setting up the two departments was completely out of practical needs of China (Emperor Tongzhi: 'An imperial edict on no need of discussing Yang Tingxi's memorial').

The harsh tone in the imperial edict showed strong determination and support of Empress Dowager Cixi for transferring western knowledge to China. It also put an end to the six-month debate between progressive and conservative scholar-officials over founding the

⁷⁴ The original text is that "不當於天理，不洽於人心，不合於眾論".

⁷⁵ The original text is that "夫洋人詭譎百出，所為狡焉思逞，侵凌中國者，方將以輪船機器罔中窮之利，斷不肯以精微奧妙指示於人".

Department of Astronomy and the Department of Modern Mathematics at the College. The progressive scholar-officials won in the influential dispute and the two departments were successfully added to the College in 1867.

The founding of the two departments also resulted in expanding the source of students for Peking Translation College. As the quality of “Eight Banners” students at Peking Translation College was far from satisfactory, Yi Xin decided to expand the source of students. In the memorial dated January 28, 1867, he stated that:

“Previously, only those who achieved bureaucracy through the Imperial Examination were allowed to study at Peking Translation College. It is suggested that the College should expand the source of students. All the Hanlin bachelors, imperial compilers, official assistants in the Qing government, and the officials outside the capital who are below the fifth rank can apply for places at the College. Those officials in the provincial and prefectural government should not be over 30 years old. However, for those officials who are over 30 years old but are interested in Mathematics and Astronomy, they are also eligible for admission.”

(Yi Xin: ‘A memorial on the request for establishing the Department of Modern Mathematics and the Department of Astronomy at Peking Translation College’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 46, pp. 1982-1984)

(‘前議專取舉人，恩、拔、副、歲、優貢，及由此項出身人員，今擬推廣，凡翰林院庶起士、編修、檢討，並五品以下由進士出身之京外各官，俾充其選 … 至京外衙門諮送此項人員，務須擇其年在三十以內者，方可諮送。如有平日講求天文、算學，自願來館學習，藉資印證以精其業者，其年歲亦可不拘。’)

Although the establishment of the two departments at Peking Translation College gained imperial support, few students chose to study in the two departments. The rumors disseminated by the conservative scholar-officials, together with the Chinese people's preoccupation with the Imperial Examination, had a negative impact on the enrollment of students. As stated in Yi Xin's memorial "On recruiting students for learning modern astronomy and mathematics" (‘請欽定招考天文算學各員折’) on July 3, 1867:

“Few students who had passed the Imperial Examination sent their applications to the newly established departments at Peking Translation College. ... Among the 98 applicants, 26 students were not present at the entrance examinations.”

(Yi Xin: ‘A memorial on selecting students for the study on modern astronomy and mathematics’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 49, pp. 30-31)

(‘正途投考者寥寥。。。共計投考正雜各項人員 98 名，已到者 72 名，先經投考臨時未到者 26 名。’)

In order to overcome the difficulty of student enrollment, Zongli Yamen selected top students from Shanghai Foreign Language School and Guangdong Foreign Language School to take subjects of modern mathematics and astronomy at Peking Translation College⁷⁶. Up until 1899, 65 top students from Shanghai Foreign Language School and Canton Foreign Language School filled up the vacancy of students at Peking Translation College (Hao, 2013). William Martin, the head of teachers, praised those students from Shanghai and Canton as being “intelligent and efficient learners” (Zhu, 1983, p. 203), and

⁷⁶ See Yi Xin's memorial "On selecting the top students in Shanghai Foreign Language College and Guangdong Foreign Language College to take the entrance examination at Peking Translation College" dated on October 12, 1867.

pointed out that their arrivals enhanced the overall quality of students at Peking Translation College.

When the westernization ideas gradually spread all over the country at the later stage of the Self-Strengthening Movement, an increasing number of applications for admission were sent to the College⁷⁷. According to the historical study conducted by Xiong (2011), the number of applications has increased by 20 times within two decades from 1867 to 1887. It led to the adjustment in the number of students in 1895: “the Department of English has 50 places of admission while the Department of French and the Department of Russian have 20 places of admission respectively. For the Department of German, only 20 students at most can be admitted”⁷⁸ (*Statutes of Peking Translation College and Their Amendments*, 1898, p. 44). Peking Translation College did not issue a definitive rule on the number of students in the Department of Astronomy and the Department of Modern Mathematics. However, as stipulated in the imperial edict in August 1896, the total number of students should not be more than 120 as the number of residential halls could not accommodate the increasing number of students (*Statutes of Peking Translation College and Their Amendments*, 1898, p. 49).

5.2.4 The bilingual curriculum at Peking Translation College

From its inception in 1862 to being incorporated into Imperial Peking University in 1902, the scope of bilingual curriculum at Peking Translation College had undergone dramatic changes during the four decades. In the first six years (from 1862 to 1867), Peking Translation College only offered three foreign language subjects including English, French

⁷⁷ See Yi Kuang’s memorial “On enrolling the Manchu and Han students in the Peking Translation College” dated January 29, 1886.

⁷⁸ The original text is “英文館以五十名為率，法文、俄文館以二十五名為率，德文館以二十名為率”.

and Russian. Since the founding of the Department of Astronomy and the Department of Modern Mathematics in 1867, the curriculum expanded and included a wide variety of western content subjects, which transformed the College from a language school to a technical college that imparted knowledge on modern science and technology to students (*Rules and Regulation of Peking Translation College*, 1897). During the Self-Strengthening Movement, China lacked both teachers who were able to teach western content subjects and the corresponding terminologies of modern science and technology. Most western content subjects, therefore, had to be taught by western teachers with foreign languages as the MOI (*Register of Peking Translation College*, 1879). It signaled the beginning of bilingual education in late imperial China.

Despite slight changes in the curriculum during the 35 years (till 1902), there were basically two types of curriculum: a “Five-year Curriculum” (‘五年課程表’) and a “Eight-year Curriculum” (‘八年課程表’). The “Five-year Curriculum” targeted students who were slightly older and unable to learn foreign languages (*Register of Peking Translation College*, 1879: 21) and the students only acquired western knowledge from translated books (*Register of Peking Translation College*, 1879, p. 21). The “Five-year Curriculum” included the following main courses.

Year 1: Introduction to mathematics and physics, Traditional Chinese

Mathematics (Jiu Zhang Suanfa 九章演算法), algebra.

Year 2: Quaternion equation, elements of geometry, plane trigonometry,

Spherical trigonometry.

Year 3: Introduction to sciences, chemistry, gravitational calculation.

Year 4: Calculus, navigational calculation, astronomical calculation.

Year 5: International law, wealth of nations, astronomical calculation, geography, metals and minerals.

(Register of Peking Translation College, 1867, 1879, 1898)

The “Eight-year Curriculum” targeted the teenage students who were required to take foreign language subjects before taking western content subjects. The main courses of the eight-year curriculum each year were:

Year 1: Literacy, words and sentences, easy books.

Year 2: Easy books, practice of grammar, translating informal notes.

Year 3: Maps of all nations, history of all nations, translating selected texts.

Year 4: Introduction to mathematics and physics, algebra, translating government documents.

Year 5: Sciences, elements of geometry, plan trigonometry, spherical trigonometry, and practice of translating books.

Year 6: Machinery, calculus, navigational calculation, practice of translating books.

Year 7: Chemistry, astronomical calculation, international law, practice of translating books.

Year 8: Astronomical calculation, geography, metals and stones, the wealth of nations, practice of translating books.

(Register of Peking Translation College, 1867, 1879, 1898)

Both the “Five-year Curriculum” and “Eight-year Curriculum” included courses on modern science and technology and courses on western law and politics. The “Five-year Curriculum” also included courses on Chinese traditional science such as *Jiu Zhang Suanshu*. It can be seen from the curriculum design that Peking Translation College was not a purely westernized school as the conservative scholar-officials criticized but included a few subjects of Chinese traditional science.

As shown in the “Eight-year Curriculum”, foreign language courses enjoyed a high status in the bilingual curriculum. Foreign language courses were viewed as the preparatory courses for courses on Astronomy and Mathematics. In order to understand western knowledge, the students were required to focus on foreign language learning in the first two years. Even when they started to acquire content knowledge since the third year, they were required to keep on learning foreign languages without interruption (*Register of Peking Translation College*, 1879; Wu, 1933).

The high status of foreign language education at Peking Translation College was also reflected in *Statutes of Peking Translation College and Their Amendments* in 1898:

“The subjects offered at Peking Translation College center on foreign languages. Only if a student is fluent in foreign languages is he allowed to take western content subjects. Recently, there have been those who are studying several subjects simultaneously and by so doing result in ostensibly wide but not expert knowledge. There are even worse cases where students skip subjects of foreign languages and take western content subjects, which violates the original intention of the establishment of this institution. From now on, students are required to learn foreign languages at first. After they pass language examinations, they can take only one western content subject.”

(*Statutes of Peking Translation College and Their Amendments*, 1898, pp. 7-8)

(‘館中功課以洋文、洋語為要，洋文、洋語已通，方許兼習別藝。近來有一人兼習數藝者，難免務廣而荒。且有不學洋文、洋語，僅習別藝，殊失當日立館之本意。嗣後諸生務令先學洋文、洋語，洋文、洋語通後，亦只准兼習一藝。’)

In terms of the content of foreign language courses, students at Peking Translation College should study the letters, pronunciation, collocation and meaning of words in foreign language courses:

“Students learn letters of words to distinguish one from another at first, and then they learn how to pronounce the letters and make distinctions between voiceless consonants and voiced consonants. Later they are taught the collocation of words to grasp multiple meanings of the words.”

(New Statutes and Decrees of Qing Dynasty in the Guangxu Period (1875-1908), 100, p.1152)

(‘先考其字母以別異同，次審其音，以分輕清濁之殊，次審其兼通互貫，以識其名物象數之繁。’)

Apart from the western subjects, the whole curriculum also included a few Chinese-related subjects. According to *Register of Peking Translation College* (<同文館題名錄>) in 1879, Chinese was also an integral part of students’ daily academic schedule:

“Although the Chinese-related subjects are not listed in the curriculum, students should never give up learning Chinese and Confucian classics. The beginners should dedicate half a day’s time to learning Chinese language and Confucian classics every day, and the students at a higher level of Chinese should practise writing essays.”

(Register of Peking Translation College, 1879, pp. 19-23)

(‘至漢文經學，原當始終不已，故於課程並未另列。向來初學者每日專以半日用功於漢文，其稍進者亦皆隨時練習作文。’)

The importance of Chinese was also highlighted in the college statutes. As stipulated in *Statutes of Peking Translation College and Their Amendments* in 1898,

“Every day when foreign language courses end, students shall start Chinese courses. At the end of every month, Chinese teachers and assistant controllers at the College review students’ test papers on Chinese. If a student is found not to study Chinese, the assistant controllers shall impose a heavy punishment on him. ... Except for the Dragon Boat Festival, the Mid-autumn Day and the Spring Festival, the students are required to register for their attendance in Chinese courses. When foreign teachers spend their summer holidays and go to church on Sunday, except the two days’ holiday every month, all the students shall study Chinese at the College.”

(*Statutes of Peking Translation College and Their Amendments*, 1898, pp. 1-6)

(‘俟洋文功課完時，即習漢文。每月月底將各學生漢文功課，由漢教習呈由幫提調察核，倘有學生不往學漢文者，即由幫提調將該學生懲辦。。。各學生除午節、秋節、年節放學時免其畫到外，其每年夏月洋教習息伏期內，及每月外國禮拜洋教習不到館之日，除准兩日假期外，各學生均令在館學習漢文。’)

Attaching importance to Chinese-related subjects also shows the curriculum designers’ rationale of handling the relationship between foreign languages and the Chinese language at the college. As stipulated in *Rules and Regulations of Peking Translation College* (1871),

“Although the primary objective of education at the College is to teach students foreign languages, a solid foundation in Chinese is conducive to learning foreign languages. Thus, students shall concentrate on learning both foreign languages and Chinese.”

(*Rules and Regulation of Peking Translation College*, 1871, p.2)

(‘設立同文館原為學習洋文，然必通曉漢文者，方能於洋文得力。漢洋自應一體專心分學。’)

There was no concrete evidence to confirm the choice of MOI for western content subjects at Peking Translation College except for Biggerstaff's (1961) secondary source of evidence that Chemistry was evidently taught in French before 1888. Nevertheless, it can be inferred from the teacher employment and the textbooks choice at Peking Translation College that foreign languages could be the MOI for western content subjects. In fact, after the Department of Astronomy and the Department of Modern Mathematics were founded in 1867, the College frequently imported original textbooks from western countries as China lacked books or teaching materials on western knowledge in the 19th century. As shown in Yi Xin's memorial "On requesting the French academies to send textbooks on western knowledge to Peking Translation College" dated November 23, 1872, Peking Translation College had close communication with universities in France. The French universities sent textbooks on modern science and technology to Peking Translation College. As an exchange, the College sent back some Confucian classics to the French to meet the need of sinologists in France.

In addition to theoretical lectures, the bilingual curriculum at Peking Translation College also included practical courses and internships. For instance, in order to enhance students' translation skills and improve their listening comprehension, the College dispatched students to the Ministry of Foreign Affairs to observe meetings between Chinese diplomats and foreign envoys (Wu, 1933). As stipulated in *Statutes of Peking Translation College* in 1862, after observation, the students were required to record what they had heard in the meetings and then to submit their observation forms to the Ministry of Foreign Affairs for verification and reference. Apart from observing diplomatic meetings and talks, students were also engaged in other translation practices such as working as intern translators in the Ministry of Foreign Affairs, proofreading the translated documents and translating western

textbooks on foreign languages, geography, chemistry, anatomy and physiology. Students who chose the “Eight-year Curriculum”, for instance, were required to spend the final two years (Year 7 and Year 8) translating western books at Peking Translation College (Biggerstaff, 1935).

It can be concluded that the bilingual curriculum at Peking Translation College consisted of foreign language subjects, western content subjects with foreign languages as the MOI and the Chinese-related subjects taught by Chinese teachers. The inclusion of western subjects and Chinese-related subjects in the general bilingual curriculum imposed demanding requirements for the specification of teachers’ duties and the strict management rules on teachers’ behaviors in and out of class in order to maximize the effectiveness of bilingual education at the College. In the following section, the account of teachers’ employment and management at Peking Translation College will be detailed.

5.2.5 Teacher recruitment and management

Compared to student enrollment, a more urgent and thorny problem for the college administrators was the difficulty in finding suitable teachers for Peking Translation College.

Upon the establishment of Peking Translation College, Yi Xin had originally planned to select teachers from businesspersons in two important treaty ports in late imperial China — Guangdong and Shanghai — since people there had frequent commercial talks with foreigners. On January 13, 1861, in the memorial “On handling the affairs after the Opium Wars” (<通籌善後章程折>), Yi Xin proposed that the Qing government should

“Ask the governors of Guangdong and Shanghai to select businesspersons who are both honest and reliable, understand English and French, and then have them

dispatched to Beijing to be teachers. Each of the governors in the two provinces is asked to send two teachers and bring foreign textbooks to the College.”

(Yi Xin: ‘A memorial on handling with the affairs after the Opium Wars’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Xianfeng) (1850-1861)*, 71, p. 318)

(‘廣東、上海商人，有專習英、法、美三國文字語言之人，請飭各省督撫挑選誠實可靠者，每省各派二人，共派四人，攜帶各國書籍來京。’)

The imperial court approved of the memorial and then issued an edict to the Viceroy of Liangguang ⁷⁹ and the Governor of Jiangsu ⁸⁰, ordering them to select suitable businesspersons as the teachers at Peking Translation College. However, as stated in the memorial “On the establishment of Peking Translation College” on August 20, 1862,

“The Guangdong authorities claimed that they had no one suitable for the position, while the Shanghai authorities claimed that they did have people available, but the foreign language proficiency of those people was mediocre, and they asked for exceedingly high pay.”

(Yi Xin: ‘A memorial on the establishment of Peking Translation College’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 8, p. 342)

(‘廣東則稱無人可派，上海雖有其人，而藝不甚精，價則過巨。’)

Since it was impossible to hire sufficient teachers in China who were able to teach western subjects, the administrators had to employ foreigners as teachers at Peking Translation

⁷⁹ Guangdong belonged to the region of Liangguang (‘兩廣’). Thus, the Viceroy of Liangguang was the head of administration in Guangdong Province.

⁸⁰ Shanghai belonged to Jiangsu Province (‘江蘇省’). Thus, the Governor of Jiangsu was the head of administration in Shanghai.

College. As what Yi Xin argued against the opposition from conservative scholar-officials in the memorial dated April 23, 1867, the choice of employing foreign teachers at Peking Translation College also helped to fulfill the fundamental goal of the Self-Strengthening Movement, namely learning from the West:

“The purpose of hiring foreign teachers is to get to know the strengths and weaknesses of foreign countries so that we can know our adversaries as well as ourselves. Although we wish to build ships and make firearms by ourselves, we still have no idea where to start. If we have scholars who can understand foreign languages and read foreign books, to study those books and to translate the essence of them into Chinese, we can eventually teach ourselves and do not have to hire foreigners.”

(Yi Xin: ‘A memorial on discussing Wo Ren’s memorial and stating my viewpoints’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 48, pp. 2029-2031)

(‘請用洋人，原欲窺其長短以收知彼知此之效。並以中國自造輪船、槍炮等件，無從入手，若得讀書之人旁通其書籍、文字，用心研究，譯出精要之語，將來即可自相授受，並非終用洋人。’)

The primary objective of Peking Translation College was to train Chinese translators and interpreters and impart rudimentary knowledge on western science and technology to Chinese students. Thus, in order to facilitate communication between teachers and students, the College originally had a requirement for teacher recruitment that foreign teachers should have a good command of Chinese (*New Statutes and Decrees of Qing Dynasty in the Guangxu Period (1875-1908)*). Thomas Francis Wade, a British diplomat and sinologist, recommended his fellow compatriot John S. Burdon to be a teacher at Peking Translation College. Burdon was proficient in Chinese and was thus able to shoulder teaching

responsibilities at the College. Subsequently, Zongli Yamen invited him to an interview and found that he was honest, reliable and “only eager for the pay not government official titles”⁸¹ (*Statutes of Peking Translation College*, 1862, p. 4). After having passed the interview, Burdon was asked to teach English to the Chinese students. However, he was not allowed to preach or spread religious ideas in class, which indicated the strict restriction on propagating Christianity in modern schools in the late Qing period (*Statutes of Peking Translation College*, 1862).

One year later, the Department of French and the Department of Russian were set up at Peking Translation College. In the memorial dated May 6, 1863, Yi Xin and his colleagues explained their way of selecting French and Russian teachers:

“On separate occasions, the French diplomat Kleczkowski and Russian minister Balluseck recommended A. E. Somorrenberg and A. Popoff. Somorrenberg was a French missionary, so when Kleczkowski recommended him we had strong objections and turned down his recommendation. Later on Kleczkowski argued repeatedly that, although Somorrenberg had been a missionary, he was no longer preaching and he was honest and reliable enough for the position of teacher. We then ordered him to come to the office for an interview, during which we found he had no bad habits of a missionary. On that occasion, we reached an agreement with him that he would be strictly prohibited from preaching and that if he were to be found doing so he would be sacked immediately. ... As for Popoff, he used to be an interpreter working in the Russian embassy. Last year, this man came to Zongli Yamen on several occasions and we met him each time. We found that he was not a very crafty man and that it would be appropriate if we employed him as a teacher.”

⁸¹ The original text is “只圖薪水，不求官職”.

(Yi Xin: 'A memorial on adding the Department of French and the Department of Russian at Peking Translation College', *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 15, pp. 656-658)

(‘茲據法國哥士耆、俄國把留捷克，陸續函薦，頗不謂然，當即力卻。嗣經哥士耆再三刨辨，據稱司默靈雖屬教士，現在並不傳教，且其人尚誠樸可充斯席。臣等令其來署面見，尚無傳教士習氣，因與切實言定，若到同文館，斷不准其傳教，一涉此弊，立即辭回。。。至俄國柏林向充該館翻譯官，此人上年因公來臣衙門多次，臣等均曾接見，人尚不十分狡詐，以之教習學生，似尚無大流弊，因與把留捷克訂定。’)

As shown in the memorial above, the employment of French and Russian teachers at Peking Translation College relied on the help of French and Russian ambassadors to China who intended to help Chinese overcome linguistic barriers and facilitate bilateral communication between the Qing government and their own. Similar to the employment of John S. Burdon, the French and Russian teachers were also not allowed to spread western religious ideas in class, which suggested the Chinese officials' attitudes towards western missionaries. Despite the fact that some western missionaries were employed as language teachers or teachers of western content subjects in China's modern schools (Z. Li , 1987), they were not allowed to convert Chinese students and their behaviors in class were supervised by Chinese administrators (*Statutes of Peking Translation College and Their Amendments*, 1898).

After the Department of Astronomy and the Department of Modern Mathematics were founded in 1867, Peking Translation College developed from a language school offering

elementary and secondary-level foreign language subjects into a “multidisciplinary and comprehensive institution of higher learning” (Hao, 2013, p. 52). It thus necessitated an increasing number of western teachers and specialists to teach western content subjects. In accordance with Yi Xin’s memorial “A request for establishing the Department of Modern Mathematics and the Department of Astronomy” dated December 11, 1866, the main task of hiring foreign teachers was left to Robert Hart. Robert Hart was a British diplomat to China in the 1950s and served as the Inspector-General in China’s Imperial Maritime Customs Services from 1863 to 1911. During the late Qing period, the custom was the main source of income for the Qing government. Thus, Robert Hart was viewed as the controller of China’s economy lifeline and exerted huge influence over China’s internal affairs including the modernization project. Because of Robert Hart’s close relationship with diplomats of foreign countries and the acquired high prestige in China and the West, he was a suitable person to seek foreign teachers for Peking Translation College and the de facto sponsor of the College (Oleary, 2006).

During the 36-year development of Peking Translation College (1862-1898), one of the most notable foreign teachers was William A. P. Martin, a general teacher at Peking Translation College from 1869 to 1902. William Martin, who graduated from Indiana College in 1846, came to China as a missionary from the American Presbyterian Church. Because of his high Chinese proficiency that he had acquired while working in Ningbo, Zhejiang Province for almost ten years, he obtained the opportunity to serve as an interpreter for the United States minister William B. Reed, and to negotiate the *Tientsin* with the Chinese diplomats. He later served as an official interpreter for Anson Burlingame, the American Minister to China (M. P. Zhang, 2016). In 1865, William A. P. Martin was hired by Peking Translation College as an English language teacher and a

teacher of international public law. Four years later, he became the headmaster of Peking Translation College, and stayed in the position for 25 years (*Register of Peking Translation College*, 1898). When Peking Translation College was subsumed under Imperial Peking University in 1898, William A. P. Martin was appointed as the general teacher for western content subjects until his retirement in 1902 (Wu, 1933).

Apart from William A. P. Martin, altogether 51 foreign teachers were employed by Peking Translation College. Specifically, there were 14 teachers of the English language, 12 teachers of the French language, 10 teachers of the German language, 3 teachers of Chemistry, 3 teachers of Astronomy, 3 teachers of Natural Sciences, 4 teachers of Medicine and 2 teacher of the Japanese language (*Register of Peking Translation College*, 1898). Most of the foreign teachers had rich experience in teaching Chinese students as they had served as teachers at the mission schools before they worked at Peking Translation College. The foreign teachers also had specialized knowledge in an academic discipline and some of them had doctoral degrees in western universities (Tian, 2009). The name list of the main foreign teachers employed at Peking Translation College is shown in Table 3 on Page 235.

Table 3: The name list of the main foreign teachers employed at Peking Translation**College**

Name	Subject	The year being employed
Rev. J. S. Burdon	English	1861
Rev. Smorrenberg	French	1862
A. Popoff	Russian	1862
J. Fryer	English	1863
Dr. W. A. P. Martin	English	1864
M. A. Billequin	Chemistry	1866
E. Lepissier	French	1866
M. J. O'Brien	English	1867
Dr. C. Waeber	Russian, German	1870
C. Vapereau	French	1870
Dr. J. Dudgeon	Medicine, Physiology	1872
N. Titoushkin	Russian, German	1872
W. N. Hagen	German	1872
J. P. Cowles	English	1874

A. Th. Piry	French	1876
L. Rocher	French	1876
M. Harrington	Astronomy	1877
Dr. Fritsche	Astronomy	1877
H. B. Morse	English	1878
C. H. Oliver	Astronomy, Physics	1879
S. M. Russell	Astronomy	1879
H. Pander	Russian, German	1881
W. Hancock	English	1884
Dr. S. W. Bushell	Physiology, Medicine	1884
C. C. Stuhlmann	Chemistry	1894

(Source: H. B. Morse: *The International Relations of the Chinese Empire*, 1918, VOL: III;

W. A. P. Martin: My memory of Peking Translation College, in *Education Journal*, 1907, 27 (4), pp. 215-231)

Peking Translation College also hired some Chinese teachers for the Chinese-related subjects. As stated in Yi Xin's memorial on February 25, 1867, it was essential to hire

Chinese teachers in the “westernized college” to teach students Chinese and impart “oriental” knowledge to the students in order to prevent them from being assimilated to the western culture (Yi Xin: ‘A memorial on inviting Xu Jiyu as the Chancellor of Peking Translation College’).

Specifically, according to the statistics in *Register of Peking Translation College* in 1898, from its inception in 1862 to 1898 when the College was forced to discontinue due to the Boxer War, 29 Chinese teachers with Han ethnicity were employed to teach Chinese-related subjects. The employment of a large number of Han teachers suggested the importance of Chinese Mandarin in sharpening students’ translation and interpretation skills at Peking Translation College. Under the considerable influence of the Confucian culture and the promotion of “National Language Movement” in the late Qing period, Chinese Mandarin was a widely used language in both Chinese bureaucratic agencies and the mass of society (Yujiro, 2016). Thus, it replaced the Manchu language⁸² as the main native (Chinese) language subject at Peking Translation College, which was also conducive to the cultivation of Chinese proficiency for “Eight Banners” descendants and the formation of national identity. As stated in the memorial “On inviting Xu Jiyu as the Chancellor of Peking Translation College”, employing Chinese teachers also helped to strike a balance between western and Chinese teachers, which prevented the College not from becoming a westernized college.

In addition to teachers of Chinese-related subjects, some Chinese teachers were employed to teach western content subjects. For instance, Li Shanlan (李善蘭)⁸³ was employed as a

⁸² The Manchu language was the mother tongue for the emperor and the Manchu families.

⁸³ **Li Shanlan** (1811-1882) (李善蘭) was a famous Chinese mathematician in Qing Dynasty. He made a remarkable contribution to the development of mathematics in China in the 19th century.

teacher of mathematics at Peking Translation College. After the curriculum of Peking Translation College expanded in 1867 and an increasing number of foreign teachers became main teachers at the College, some Chinese⁸⁴ were hired as teaching assistants or translation teachers (翻譯官) (*Register of Peking Translation College*, 1879, 1887, 1898). They were responsible for instructing students and giving language help to students at the College when foreign teachers were away from school and when foreign teachers had communicative barriers with the students. The role of Chinese teaching assistants was mentioned in *Statutes of Peking Translation College and Their Amendments* in 1898, “when foreign teachers spend their 40-day holiday in summer, Chinese teaching assistants (as deputy teachers) shall teach students foreign languages at the College as usual”⁸⁵ (p. 17). When Chinese teaching assistants were not in class on time for various reasons, the employed translators in Zongli Yamen shall replace those teaching assistants to be foreign language teachers⁸⁶ (*Statutes of Peking Translation College and Their Amendments*, 1898).

In summary, it can be seen from the description of teachers’ employment and duties at Peking Translation College that an international faculty team was organized with the expansion of curriculum at the College. The faculty team was made up of the foreign teachers of foreign language subjects and western content subjects, the Chinese teachers of Chinese-related subjects, the Chinese teaching assistants and the translation teachers of western subjects.

⁸⁴ Most of them were graduates of the College such as Hu Yulin 胡玉麟 and Wang Zhongxiang 王鐘祥.

⁸⁵ The original text is “現在各洋教習歇伏，計須四十餘日，方能回館。各副教習自官照舊盡心教導各生洋文”。

⁸⁶ The original text is “著該館翻譯官暫行幫教”。

The western and Chinese teachers at Peking Translation College had frequent communication with each other as they needed to hold meetings and discuss teaching content and pedagogy. As shown in Yi Xin's memorial on hiring two Chinese teachers Zou Boqi (鄒伯奇) and Li Shanlan (李善蘭) to the school, "the Chinese teachers should communicate with the western teachers frequently and exchange views on teaching to make progress in teaching"⁸⁷.

In order to supervise teachers' behaviors and enhance the efficiency of bilingual education, Peking Translation College organized a special managerial team. The team was made up of a general director ('總辦'), high-level secretaries ('章京'), controllers ('提調') who were responsible for managing all the general affairs at Peking Translation College, and assistant controllers ('幫提調') who were incumbent on handling the documents and internal affairs at Peking Translation College. As stipulated in both *Statutes of Peking Translation College* in 1865 and *Statutes of Peking Translation College and Their Amendments* promulgated in 1898, "every Chinese teacher at Peking Translation College, in terms of their work ethic and behaviors in class, shall be supervised by assistant controllers at any time"⁸⁸ (p. 2).

The managerial team also rewarded teachers based on their educational results in order to arouse the teachers' enthusiasm in teaching and ensure the quality of bilingual education at Peking Translation College. As confirmed in Yi Kuang's (奕劻)⁸⁹ memorial dated December 15, the excellent foreign teachers were rewarded with honorary official ranks:

"William Martin, the general teacher at Peking Translation College, came to serve as a teacher of English translation in the fourth year of the Tongzhi reign, and was

⁸⁷ The original text is "正好與所延西洋教習，討論切磋，以期互有進益".

⁸⁸ The original text is "同文館漢教習各員，功課勤惰，應由幫提調等隨時稽查".

⁸⁹ Yi Kuang was the successor to Yi Xin as Minister of Foreign Affairs since 1884.

promoted to the post of general teacher in the seventh year of the Tongzhi reign. A. Billequin, a teacher of chemistry and C. Vapereau, a teacher of French, both came to work at Peking Translation College in the tenth year of the Tongzhi reign. The three teachers had the highest seniority and worked hard in their teaching. We hereby request the court to award them honorary official ranks as an incentive and encouragement.”

(Yi Kuang: ‘A memorial on awarding the foreign teachers the titles’, *The Westernization Movement II*, p. 65)

(‘同文館總教習丁韪良，於同治四年到館充英文翻譯教習，同治七年升授總教習之任，化學教習畢利幹、法文教習華必樂，均於同治十年到館，資格最深，館課亦能勤慎，擬請賞給虛銜，以昭激勸。’)

5.2.6 The assessment methods

In order to examine the effectiveness of bilingual education at Peking Translation College, as stipulated in *Statutes of Peking Translation College* in 1862, the College had three types of assessment: monthly examinations, seasonal examinations and annual examinations. Specifically, with respect to monthly examinations, subject teachers were asked to prepare examinations to test students on the first day of each month and the examination results were recorded for later reference for award and punishment. Seasonal examinations were held on the first day of February, May, August and November. Similar to monthly examinations, the teachers adopted similar criteria when preparing examination papers. However, the only difference between monthly and seasonal examinations lay in the reviewing process. Administrators and authorities of Peking Translation College reviewed monthly examination papers and then put the examination papers in archives. According to the examination arrangement, an annual examination was held before the tenth day of the tenth month every year. Apart from normal monthly, seasonal and annual examinations, a

graduation examination was held after students had finished their three-year study at Peking Translation College (*Statutes of Peking Translation College and Their Amendments*, 1898).

As stated in the memorial dated December 22, 1865, the annual examination in foreign languages consists of three parts:

“In the first part, the students are required to translate diplomatic notes of foreign countries into Chinese. In the second part, the students are asked to translate parts of the treaties (Chinese version) into foreign languages. ... As the students may only understand foreign languages but are not good at using foreign languages to complete real-life tasks, they need to finish the third part of examinations. In the third part, the students translate Chinese sentences⁹⁰ into foreign languages and report their translations to the foreign teachers. Subsequently, the foreign teachers (who are also proficient in Chinese) re-translate the students’ sentences into Chinese. Finally, the administrators of Peking Translation College compare the original Chinese sentences with the translated sentences from the foreign teachers, and make an assessment of students’ performance in the third part of examinations based on the accuracy of translations.”

(Yi Xin: ‘A memorial on making slight modifications on the *Statutes of Peking Translation College*’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 37, pp. 1560-1561)

(‘初次考試，將各國配送洋字照會令其譯成漢文；覆試將各國條約摘出一段，令其翻成洋文。。。複恐各學生於外國文字雖能通曉，而語言未必嫻熟，因再行復試，由臣等密出漢話條字，按名交該學生等令其翻成外國言語，隔座向外國教習侍講，再令外國教習將學生言語譯漢，寫明兩相核對。臣等將三次試卷

⁹⁰ The sentences were made by the administrators of Peking Translation College.

條子，合併比較，其翻譯各文雖未能通體貫串，亦尚有相符之處。外國言語亦多吻合。自應分別優劣，照章辦理。’)

From today’s perspective, the foreign language examination (particularly the third part of annual examinations) was relatively complicated and not fair enough to assess students’ foreign language proficiency and translation skills since meanings might be lost during the complex process of translation. However, since the Chinese administrators of Peking Translation College did not understand foreign languages, this assessment method was adopted at the College.

The difficulty of examination for western content subjects increased as the curriculum of Peking Translation College expanded in 1867. Since foreign teachers taught the western content subjects and prepared the examinations, questions in the examinations of mathematics, physics, and astronomy were presented in foreign languages (*Register of Peking Translation College*, 1879, 1898; ‘Weng Tonghe’s diary’, 17/10/1895). It thus suggested the wide use of foreign languages as the MOI in the western content subjects of Peking Translation College.

The award and punishment scheme of students at Peking Translation College hinged on their examination results, which in some sense enhanced the students’ motivation for learning foreign languages. For instance, according to the *Statutes of Peking Translation College* in 1862, the College adopted an elimination system:

“When the newly-admitted students study at Peking Translation College for three months, they are required to sit for an examination in order for Zongli Yamen to decide their future. Those who stay on will be screened again when a full year’s study is completed and those students who have insurmountable difficulties in

learning western languages will be persuaded to quit the College. Subsidies to the new students will, upon the completion of the first year's study, be paid when they pass the screening examination and are permitted to stay on for further study.”

(Yi Xin: ‘A memorial on the establishment of Peking Translation College (with the drafted Statutes)’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 8, pp. 343-346)

(‘對剛到館中學習的學生，待學滿三個月後，由各教習出題對其進行考試，再由總理衙門決定其去留。凡留下者，待學習期滿一年，再行甄別，如確實對學西洋文字有困難的學生，即行撤換。新生的補助金，在一年後，經過考試決定可繼續留下學習後再發。’)

The award scheme at Peking Translation College also hinged on students' performance in different types of examinations. As shown in *Statutes of Peking Translation College and Their Amendments*,

“The stipends depend on students' performance in examinations. Specifically, stipends are classified into four levels. Students of the first class are awarded 15 taels of silver every month. Students of the second class are awarded 10 taels of silver every month. Students of the third class are awarded six taels of silver every month while students of the fourth class are awarded three taels of silver every month.”

(*Statutes of Peking Translation College and Their Amendments*, 1898, p. 16)

(‘向來各學生膏火分四等：上等，每月十五兩；二等，每月十兩；三等，每月六兩；四等，每月三兩。’)

For the award and punishment plan of graduates, as stipulated in *Statutes of Peking Translation College* in 1862,

“Students who obtain high scores in graduation examinations are awarded the scholar-officials of the seventh, eighth or ninth rank depending on their graduation examination results. Students who fail in the examination are downgraded to a lower class and prepare for a re-examination.”

(Yi Xin: ‘A memorial on the establishment of Peking Translation College (with the drafted Statutes)’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 8, p. 346)

(‘優者授為七八九品等官，劣者分別降格留學，俟考定等第。’)

5.2.7 Evaluations of bilingual education at Peking Translation College

In light of the considerable disparity in the social context between the 21st century and the late Qing period, it may be unfair to give a definitive judgment of the results of bilingual education in the school from today’s perspectives. It may also be difficult to examine the effectiveness of bilingual education in late imperial China since educational experience was not a single variable accounting for graduates’ achievements. Thus, it is more appropriate for us to consider comments from the insiders and outsiders on the bilingual education practices at Peking Translation College.

A few news reports made positive comments on the educational results of Peking Translation College. For instance, on February 21, 1878, a news article titled “Reviewing *Register of Peking Translation College*” (<閱同文館題名錄書後>) published in *Shen Pao* (<申報>) spoke highly of the bilingual education practices at Peking Translation College:

“It has been more than a decade since Peking Translation College was established. The College has cultivated many students who achieve excellent academic results, and later they become teaching assistants, translators and entourages of Chinese diplomats abroad. Thus, it can be confirmed that the College is in the ascendant

and students there make progress day by day. ... Students at the College firstly learn the pronunciation, forms and meanings of foreign languages, and then they acquire modern knowledge in a wide array of fields such as mathematics, astronomy and physics. Some students who have spare capacity also study medicine. ... The intelligent students make considerable progress within a few years, and even some slow students can absorb the essence of modern knowledge through their efforts. ... Therefore, it is an effective way to establish a school (Peking Translation College) to cultivate talents for China.”

(‘Reviewing *Register of Peking Translation College*’, *Shen Pao*, February 21, 1878)

(‘同文館自創設以來，於今已十數年。其中因學業已成、可充副教習及可作翻譯等官足以隨欽使出洋者已有數人，即在館諸學生莫不焉有日上之勢。。其學業先從語言入手，然後由語言而文字，由文字而義理，由是而算學天文、機器程法之類，莫不兼宗條貫，由漸而知，旁及於醫道，亦不遺餘力。。天姿（資）敏捷者不過數年可以收效，即鈍者亦將涵濡漸漬，以默化潛移而底於成。。。故謂同文一館，其所以裕人之才以儲他日國家之用者，其效為甚捷也。’)

The positive comments on the bilingual education practices of Peking Translation College can also be confirmed by Yi Kuang’s (奕匡) memorial dated December 15, 1885:

“It has been over twenty years since Peking Translation College was founded by Zongli Yamen. The foreign teachers teach students foreign languages and impart knowledge on astronomy, mathematics, chemistry and medicine to the students, which facilitates the development of modernization in China. For years, the teachers fulfill their duties and the students make rapid progress in their academic study. It can be seen from the graduates’ employment prospect that the education

practices of bilingual education at Peking Translation College achieve the success. Some graduates become entourages and interpreters of Chinese diplomats abroad and some take up important posts in many departments of the coastal provinces. Apart from the daily instruction, the teachers also translate foreign books into Chinese, which demonstrated their diligence and work ethic.”

(Yi Kuang: ‘A memorial on awarding the foreign teachers the titles’, *The Westernization Movement II*, 1961, p. 64)

(‘竊臣衙門設立同文館以來，迄今二十餘年，所有延請外國教習，指授學生各國語言文字以及天文、算學、化學、醫學等項，冀於洋務有裨。歷年以來，洋教習均能始終不懈；各學生等因而日有起功，或隨帶出洋充作翻譯，或升遷外省即調赴沿海各處差委者已不乏人，實屬著有成效。其各教習訓課之餘，兼能翻譯各項書籍，勤奮尤為可嘉。’)

However, some people had different views on the results of bilingual education at Peking Translation College. On March 11, 1890, Zhanshi Zhirui (詹事志銳), an official in the Grand Council of the Qing government, criticized that Peking Translation College overlooked the cultivation of students’ oral foreign language proficiency:

“It has been years since Peking Translation College was founded. A large number of top students in different provinces have been dispatched to the College. However, few students become interpreters of Chinese ministers who need to travel abroad. Many people argue that ‘the students are proficient in written languages but are poor in speaking. When they translate Chinese ministers’ dialogues into foreign languages, the foreigners cannot understand their translations.’ According to my observation, when the foreigners have a face-to-face dialogue with students, they found it difficult to understand what the Chinese students mean. The reason for the communicative barriers between Chinese

students and foreigners is that the students lack interpretation practices at Peking Translation College. Thus, they do not understand the colloquial foreign languages or recognize different accents of a foreign language. In contrast with the (western) translators, they are slow at interpreting the (westerners') speech and their translation lack fluency."

(The Association of Chinese Historians, 1961, p. 69)

(‘同文館之設，曆有年矣，各省拔尤而送到之人為數多矣。(然)而，出洋大臣奏帶同文館學生充當翻譯者，卒不多見，僉謂‘學生文字雖精，語言不熟，每有臨時傳述，而洋人茫然不解者。’奴才曾經試驗，令其與洋人對面交談，誠有不解之時。推原其故，蓋學生專習文字，一旦托之言語，只能按書翻譯，多有與土音方言不合之處，較之專習語言者，應答駁詰，殊欠爽利。’)

In reality, inadequate training for oral language was a common problem of foreign language education in modern foreign schools during the Self-Strengthening Movement. Zhong Tianwei (鐘天緯), a graduate from Shanghai Foreign Language School (a brother school to Peking Translation College), argued that all the foreign language schools in late imperial China attached importance to students' written language training but overlooked the development of students' oral language:

"Pronunciation is the important part of western languages. A western language is filled with vocal varieties. If you only rely on rote learning but do not communicate with westerners, you will not be a qualified translator or interpreter in the future. In order to address the problem of overlooking students' spoken language training, the foreign language schools are suggested to employ western teachers to communicate with Chinese students in western languages and the teachers should not be allowed to speak Chinese in class."

(Xue, 2011, p. 233)

（‘洋文最重聲音。西人言語之間，抑揚高下，變化萬端，若僅恃記誦，而不與西人晤對，將來即不能司舌人之職。宜另請教習一人，專與諸生操西語晤談，不准雜一華語，以藥同文館方言館重文字而輕言語之弊。’）

Some people also criticized that the actual education practices of Peking Translation College ignored Chinese language education and Confucian education in the initial years of its development. As mentioned in an imperial edict in March 1863, it was found that when the foreign teachers went to church on Sunday, the students did not abide by the rules to learn Chinese at the College (The Association of Chinese Historians, 1961).

The neglect of the Chinese language in the initial education practices of Peking Translation College led to the amendment to the college statutes in 1898. In the eight-article *Statutes of Peking Translation College and Their Amendments* in 1898, two articles were of direct relevance to Chinese language learning:

“Article 1: As translations are presented in Chinese, students will find it difficult to translate foreign texts if they have no solid foundation in Chinese. The students at the advanced level who are not proficient in Chinese shall be downgraded to the elementary level of class to learn Chinese in the morning and continue their foreign language learning in the afternoon.”

(*Statutes of Peking Translation College and Their Amendments*, p. 7)

（‘第一條 各館翻譯以漢文為本，漢文未能明順，故翻譯洋文多有不通之處。嗣後查看前館學生有漢文未能明晰者，著仍令歸後館學習漢文，午後再學洋文（第一條）’）

“Article 7: Students at the elementary level of class shall study Chinese in the morning⁹¹ and foreign languages in the afternoon. Recently, some students are found not to come to class until noon, and they do not study Chinese in class, which violates the *Statutes*. ... In the future, all the students shall register for attendance on time. If students do not come to class on time, they shall be punished.”

(*Statutes of Peking Translation College and Their Amendments*, p. 8)

(‘第七條：後館學生向例早晨學習漢文（自春分起限十點鐘，自秋分起限九點鐘到館），午後學習洋文。近來竟有午刻始行到館，並不學習漢文，殊屬有違館規。。。嗣後當面畫到。如逾時不到，即照章辦理（第七條）’)

Another major criticism is on the level of education at Peking Translation College. After China was defeated in the Sino-Japanese Naval War in 1895, many scholar-officials expressed their doubts over the effectiveness of bilingual education at Peking Translation College. Some scholar-officials such as Chen Qizhang (陳其璋) criticized that the College was by level of education similar to primary schools in western countries, but not a real higher institute with clear and thorough division of academic disciplines and well-defined educational objectives. In reality, the College was a mixture of both primary education, secondary education and tertiary education as students’ foreign language proficiency was enormously diverse, and the College lacked central planning for the transition across the different levels of education (Chen Qizhang: ‘A memorial on making changes to the curriculum of Peking Translation College’).

⁹¹ Students were required to come to class at 10 a.m. since the Spring Equinox and come to class at 9 a.m. since the Autumn Equinox.

In summary, the main problems of the bilingual education practices at Peking Translation College were the neglect of students' oral foreign language proficiency, the imbalance between foreign language education and Chinese education in the bilingual curriculum, and the absence of central planning for the transition across different levels of education. However, since the development of bilingual education was at the embryonic stage, those problems were in fact the natural results of initial attempts of bilingual education in late imperial China. Those problems also provided lessons to policymakers and practitioners in the following historical period to remedy the drawbacks in previous education practices. In the following section, the positive consequences of bilingual education at Peking Translation College will be summarized.

5.2.8 The positive consequences of bilingual education at Peking Translation College

Compared to other premier modern schools such as Fujian Naval College, Peking Translation College cultivated relatively fewer intellectuals (Ji & Chen, 2007). Nevertheless, it was the first government-funded modern school that provided bilingual education in mainland China. It made significant contributions to the training of interpreters, translation of western textbooks, introduction of advanced knowledge on modern science and technology into the country, and provision of the educational prototype to other modern schools in late imperial China.

Peking Translation College was established for training interpreters to overcome communicative barriers in China's diplomatic communication after the Opium Wars. During the 36-year development (1862-1898), the bilingual education practices at Peking Translation College served the original and fundamental educational purpose. The College cultivated many influential diplomats and translators that played significant roles in China's

diplomacy in late imperial China and early Republican period (Yi Kuang: ‘A memorial on selecting top students from Peking Translation College to be translators or interpreters in the Qing government’). According to the statistics in Ji and Chen’s (2007) historical study, more than 30 graduates from Peking Translation College became translators of China’s embassies to foreign countries such as the United Kingdom, France, Germany, Russia, the United States, Japan and Peru.

Some graduates also became the first generation of diplomats in China. The representative diplomats were Wang Fengzao (汪鳳藻), Zhang Deyi (張德彝), Yin Chang (蔭昌), Hu Weide (胡惟德), Yang Sheng (楊晟), Yang Zhaoyun (楊兆璽), Yang Shu (楊樞), Liu Shixun (劉式訓), Lu Zengxiang (陸增祥), Sa Yintu (薩陰圖) and Wu Zonglian (吳宗濂). Because of the limited availability of relevant historical records, it was difficult to assess the performance of those translators, interpreters and diplomats in the international arena. Nevertheless, it was undeniable that those translators, interpreters and diplomats who graduated from the College filled the void in China’s diplomacy and made the first step forward in China’s international communication.

Apart from being translators, interpreters and diplomats, 65 graduates of Peking Translation College took up important posts in the imperial and provincial government (Hao, 2013). For example, Ma Tingliang (馬廷亮), a graduate from Peking Translation College in 1898, served as a committee member in the Department of English Translation in the Imperial Publishing House. Cheng Lin (承霖), a graduate from the College in 1898 who had translated *Chemical Chemistry* as a guiding textbook in Chemistry, became the director of Tianjin Machinery Bureau.

Peking Translation College also cultivated a large number of bilinguals who became headmasters, language education teachers, teachers of content subjects and teaching assistants in other modern schools. Those graduates satisfied the urgent demand for teachers in the modern government schools established after the Opium Wars and facilitated the introduction and gradual popularization of western knowledge to China. As shown in *Register of Peking Translation College* in 1898, for instance, 15 graduates became teachers in the schools such as Hunchun Russian Language College and Tianjin Military College in 1898.

Admittedly, we should not attribute those graduates' achievements only to the bilingual education they received at Peking Translation College as their employment prospects were also related to their efforts after graduation and the opportunities they obtained. However, given the communicative obstacles between the Qing government and western powers, the bilingual education at Peking Translation College helped to cultivate translators and diplomats who played essential roles in facilitating Sino-western communication after the Opium Wars.

Another positive consequence of the bilingual education at Peking Translation College was its significance in changing the social attitudes towards foreign languages and western knowledge in late imperial China. Despite conservative scholar-officials' opposition to foreign languages and western knowledge, the relatively stable development of the bilingual education practices at Peking Translation College gradually altered people's attitudes towards bilingual education. When the progressive scholar-officials won the debate against the conservative counterparts over the setting up of the Department of Modern Mathematics and the Department of Astronomy in 1867, the College expanded its source of students and offered education to the Han scholar-officials. Thus, the idea to learn

foreign languages and acquiring western knowledge was gradually accepted by the social elites, most of whom had found it difficult to climb up the bureaucracy ladder through the Imperial Examination and desired for a new path for social mobility (W. A. P. Martin, 1907).

Two socio-political factors played important roles in changing the social attitudes towards foreign languages and western knowledge. One essential factor was the supporting attitude from Empress Dowager Cixi, who had the highest power in the bureaucratic system of late imperial China since 1860s. Having realized the necessity of western knowledge to resist foreign intrusions and safeguard the feudalistic control over China, Empress Dowager Cixi gave her consent over the establishment of Peking Translation College and the curriculum expansion in 1867. In the highly centralized society in late imperial China, the consent from the highest policymaker afforded effective protection for the development of Peking Translation College and exerted a considerable impact on changing people's attitudes towards foreign languages and western knowledge.

The other important factor is the alluring incentives of Peking Translation College to attract students. As stipulated in *Statutes of Peking Translation College* in 1862, the excellent students would be awarded the academic titles and the opportunities to work in the government. It was thus relatively easier for students to improve their social status than standing out through the fierce Imperial Examination, which was a crucial factor for the growing number of student enrollment during the 36 years of development. The practice of awarding excellent students academic titles and government posts as incentives to their study was also copied in other modern schools such as Fujian Naval College, which will be detailed in the following section.

5.3 The bilingual education practices at Fujian Naval College

Apart from the urgency of training translators to overcome the communicative barrier in treaty negotiations and diplomatic talks, the Qing government also learned from the Opium Wars that there was a considerable disparity in the power of military weapons between China and the West. Thus, it was urgent to establish military technical colleges in order to acquire western science and technology knowledge, strengthen the military power of China and change the Chinese minds from traditional Confucianism to modernity. Among those modern military technical colleges, Fujian Naval College — or named Foochow Arsenal College (Biggerstaff, 1961) and Fuzhou Navy Yard College (Shen, 2007) — is regarded as the premier government school and a major force for the diffusion of western knowledge and languages in late imperial China.

There were two main reasons why Fujian Naval College was the premier government school in late imperial China. Firstly, Fujian Naval College was the first modern science and technology school in China, which provided a model for the subsequent modern military and technical schools such as Tianjin Naval College. Secondly, during its 45-year lifespan (1866 to 1911), it cultivated a large number of prominent bilinguals who became experts on various fronts — for example, the first group of modern navy leaders in late imperial China such as Ye Zugui (葉祖圭), Sa Zhenbing (薩鎮冰), Huang Zhongying (黃鐘瑛) and Liu Guanxiong (劉冠雄); famous high-ranking navy officers including Liu Buchan (劉步蟾), Deng Shichang (鄧世昌) and Lin Taizeng (林泰曾); shipbuilding experts like Wei Han (魏翰); experts in the field of mining and metallurgy such as Chi Zhenquan (池貞銓); astronomers like Gao Lu (高魯); experts in aircraft manufacture like Zeng Yijing (曾貽經), and “Father of China’s Railway” Zhan Tianyou (詹天佑). Fujian Naval College also cultivated many intellectuals in the domain of social sciences, including famous

translators like Yan Fu (嚴複)⁹², Wang Shouchang (王壽昌)⁹³, Chen Jitong (陳季同)⁹⁴, and well-known diplomats such as Luo Fenglu (羅豐祿), Jiang Chaoying (蔣超英); and Gao Erqian (高爾謙) (Shen, 2007).

Notably, the role of Fujian Naval College in nurturing prominent bilinguals and imperial China's modernizers appears to have been more significant during the Sino-Japanese Naval War in 1895 and the years after the Republic of China was founded in 1912. Biggerstaff (1961) found that most naval officers and modernization contributors during late imperial China and the early Republic of China were all educated at Fujian Naval College, and all the other military technical schools established in the late Qing period and the Republic of China modeled on Fujian Naval College.

Compared to other modern schools in China established in the Self-Strengthening Movement, Fujian Naval College has been widely acknowledged by contemporary scholars as the premier government school with “the longest period of administration, the largest number of graduates, the highest quality of graduates and the greatest influence in late imperial China” (Dong, Dan & Chen, 2007, p. 22). Graduates from the College made special contributions to China's breakthroughs in science and technology from the 1870s to the 1910s as they built the first steel armor cruiser, the first torpedo frigate, the first fuel-servicing station for ships, and the first shipboard airship (Shen, 2007). Within the field of language education, Fujian Naval College was also a representative school that witnessed

⁹² **Yan Fu** (1854-1921) was the first Chinese who introduced western science and knowledge to China and translated Darwin's classic *Theory of Natural Selection*.

⁹³ **Wang Shouchang** (1864-1926) was the translator of Alexandre Dumas' literary classic *The Lady of the Camellias*.

⁹⁴ **Chen Jitong** (1851-1907) was a renowned translator of many classical Chinese literary works like *Liao Zhai Zhi Yi* (聊齋志異).

the earliest practices of bilingual education in mainland China, integrating foreign language education with the absorption of western knowledge on modern science and technology.

Since Fujian Naval College was an important site for the earliest practices of bilingual education in government schools in the late Qing period, the development of bilingual education in the premier college was the barometer of the Qing government's attitudes towards foreign languages and western knowledge, which helped us reconstruct the government policies of bilingual education in the Self-Strengthening Movement. A number of key questions concerning the nature and purpose of bilingual education at Fujian Naval College emerge. Why was the college established? Who were the key "actors" in promoting bilingual education at Fujian Naval College? What were the socio-political factors behind the establishment of the College? What were the characteristics and innovations of bilingual education practices at the College in the aspects of curriculum design, educational management, teaching methods, teacher employment and educational assessment? What was the impact of bilingual education at the College on late imperial China? A thorough investigation of the bilingual education practices at Fujian Naval College will also illuminate our understanding of the Chinese imperial and provincial governors' attitudes towards bilingual education as well as the social milieu in the historical period when western languages started to spread over China as a linguistic means of absorbing superior western knowledge.

5.3.1 The establishment of Fujian Naval College

5.3.1.1 The background to the establishment

The reasons why Fujian Naval College was established in late imperial China were so complex that it is necessary to sketch the socio-political background before analyzing the factors contributing to the establishment of Fujian Naval College.

Reflections on China's failure of the Opium Wars

The idea to establish Fujian Naval College emerged primarily from the need for China's coastal defense. During the Opium Wars, western colonizers seized the control of coastal China through their sophisticated gunboats and cannons in order to sustain their political and commercial interests in China (Fairbank, 2006 b). The humiliating failure in the Opium Wars led to Chinese awakening and realization of the importance of military technology in coastal defense, particularly among some enlightened and progressive scholar-officials in the Qing government. Therefore, the plan of developing military technology and consolidating the coastal defense system became a priority in the agenda of the Qing government in post-war China (Shen, 2007). In the 1860s when the Taiping rebellion was vigorously suppressed by the allied armed forces of Chinese imperial and western troops, there was a temporarily and relatively stable internal political situation in China, which gave the Qing government an invaluable opportunity to reflect on the Opium Wars (Reilly, 2004). The power of western weaponry in the Opium Wars came as a shock to most scholar-officials in the Qing government who had been immersed in the "Sino-centric" view. They realized the important link between developing military technology and maintaining the control in China, and thus they took proactive steps to strengthen the military power of China against western invaders and safeguard their rule over the country (Leibo, 1985).

The rise of progressive officials in imperial and provincial government

As mentioned in Section 4.3, during the Opium Wars, a group of progressive scholar-officials and social elites realized the necessity of learning from the West and formulated their proposals for transferring western technology and developing modern education in China. However, none of those proposals was a concrete plan to link foreign language education with modern technical education. Nor did those proposals fully convince the

emperor of the benefits of transferring western technology to China. In fact, it was not until the commencement of the Self-Strengthening Movement in 1861 that the plan of developing foreign language education and modern technical education became a priority of the agenda in the Qing government.

In the 1860s, in response to the call for modernization in the Self-Strengthening Movement, some Chinese scholar-officials such as Zuo Zongtang (左宗棠)⁹⁵ regarded “shipbuilding” as an integral component of self-strengthening and modernization. In his memorial to the throne on June 25, 1866, Zuo emphasized the importance of developing shipbuilding industry in China to repel western invasion:

“In my humble opinion, if we want to strengthen our coastal defense, we must establish a modern navy. For establishing a modern navy, the top priority is to establish a dockyard for building warships. ... At the critical moment, achieving supremacy over sea is essential to the war. In the battle for sea supremacy, the westerners have sophisticated military weapons while we do not have. If we compare the military power of China and the West, the Westerners steer a modern ship to cross the river while Chinese row a raft; the westerners ride a horse, but we only ride a donkey in the wars. How can we guard against the western colonizers?”

(Zuo Zongtang: ‘A memorial on developing the shipbuilding industry in China’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi)* (1862-1874), pp.279-281)

⁹⁵ **Zuo Zongtang** (1812-1885) was the General-governor of Fujian and Zhejiang Province (閩浙總督) from 1863 to 1866.

(‘臣愚以為欲防海之害而收其利，非整理水師不可；欲整理水師，非設局監輪船不可；彼此同以大海為利，彼有所狹，我獨無之，譬猶渡河，人操舟而我結筏；譬猶使馬，人跨駿而我騎驢，可乎？’)

Apart from the need for coastal defense, in the memorial Zuo Zongtang also mentioned that building modern ships facilitated the regeneration of traditional Chinese industry and protection of the commercial interests of Chinese businesspersons. After the Opium Wars, a growing number of western trade ships sailed along the inland rivers in China without any obstacles. In contrast to the conventional Chinese trade boats that took many days for goods shipping, British ships delivered goods from north to south China at a surprising speed, which made it easier for British merchants to achieve a competitive advantage over traditional Chinese businesspersons in the south. The arrival of British traders boosted prices of original commodities in the north of China and dramatically increased the prime costs of commodities for Chinese businesspersons. Also, the inferiority in the speed of goods delivery for Chinese trade ships made it difficult to compete against western traders in selling goods at a lower price, which led to gradual bankruptcy of the national industries such as the traditional textile industry. Therefore, from either the need for coastal defense or the perspective of protecting national commercial interests, it was necessary for Chinese to build modern ships and gain naval supremacy.

In the memorial, Zuo Zongtang also addressed some practical challenges for developing shipbuilding industry in late imperial China, including difficulties in purchasing the facilities of shipbuilding from the West and employing western technicians and teachers to teach Chinese how to build modern ships (Leibo, 1985). The detailed suggestions made in the memorial showed that Zuo Zongtang’s plan was not half-baked ideas for modernizing China, but a comprehensive scheme for China’s modernization in the shipbuilding industry.

In reality, Zuo Zongtang was not the only supporter for developing modern shipbuilding industry in late imperial China. Many governors in the Qing government also supported the plan of transferring western military technology for self-strengthening. As detailed in Section 5.2, during the initial stage of the Self-Strengthening Movement, there was a fierce debate over importing western science and technology among imperial governors, particularly towards the plan of founding the Department of Astronomy and the Department of Modern Mathematics at Peking Translation College in 1867 (Ji & Chen, 2007). As an important member of the progressive scholar-officials, Yi Xin adhered to the view that establishing modern schools and importing western advanced science and technology were essential to the future of China. Although Yi Xin did not directly participate in the process of establishing Fujian Naval College, his strong desire to import western science and technology contributed in large measure to the final victory of the progressive officials in the debate. Thus, the voice of supporting learning modern maritime technology from the West secured an overwhelming majority in the Qing government (Zhang, 2011).

5.3.1.2 The establishment of the premier naval college in Fuzhou

Although the progressive officials' idea of modernizing the coastal defense system had been widely acknowledged in China, the Qing government was confronted with practical challenges of over-relying on western facilities, technicians and specialized skills in shipbuilding and navigation (Fan, 2009). It was originally suggested by Robert Hart, the Inspector of Chinese Imperial Maritime Customs from 1863 to 1911, and Thomas Francis Wale, the Counselor of the British Embassy to China in the 1860s, that the Qing government should purchase western weapons to equip the Chinese Navy. However, as the imperial China was struggling with its financial difficulties due to imperial members' extravagant lifestyles and endless war indemnity, the Qing government could not spend much money

purchasing western weapons. Instead, Zuo Zongtang proposed that China should build its own battleships and establish a Chinese Navy Yard (Leibo, 1985). In a memorial dated December 11, 1866, Zuo further elucidated the importance of establishing a dockyard and a naval college:

“Purchasing western ships is only an expedient for us. In contrast, establishing a dockyard will bring eternal benefits to China because in the shipyard Chinese will learn how to use machines to build modern ships on their own. It is also necessary to establish a naval college, employ (western) teachers who can speak Chinese and foreign languages to teach our Chinese students English, French, mathematics, design and drawing.”

(Zuo Zongtang: ‘A memorial on establishing Chinese Navy Yard and Fujian Naval College’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, p. 285)

(‘茲局之設，所重在學造西洋機器以成輪船，俾中國得轉相授受，為永遠之利，非如雇買輪船之徒取濟一時可比；開設學堂，延致熟習中外語言文字洋師，教習英法兩國語言文字、演算法、畫法。’)

As mentioned in Zuo’s memorial, western languages, primarily English and French, were regarded as essential tools for acquiring expertise in shipbuilding and navigation at Fujian Naval College. Thus, foreign languages were the core subjects in the naval college. Specifically, Zuo Zongtang proposed that:

“At the college, all students are required to learn English or French, and study mathematics. Only when students reach the required linguistic and cognitive threshold level are they likely to draw design sketches based on textbooks, acquire the skills in shipbuilding and navigation.”

(Zuo Zongtang: ‘A memorial on establishing Chinese Navy Yard and Fujian Naval College’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, p. 286)

(‘藝局之設，必學習英法兩國語言文字，精研算學，乃能依書繪圖，深明製造之法，並通船主之學，堪任駕駛。’)

After identifying the educational objectives of the naval college, the next question was to choose a suitable location for the college. In light of its convenient transportation routes (the port facing the sea), flat and fertile lands, Mawei Port (located in Fuzhou, Fujian Province) was chosen as the ideal location for the dockyard — Chinese Navy Yard. Regarding the naval college, it was also recommended by Zuo Zongtang that the College should be built in the dockyard since students would have more opportunities to have hands-on practices of shipbuilding and navigation if they studied close to the dockyard and put what they had learnt in classrooms into practices. The picture of Fujian Naval College is presented in Appendix A.

Despite strong opposition from some conservative scholar-officials, Zuo Zongtang’s memorials received approval from Empress Dowager Cixi. The task of establishing the premier naval college thus became a priority in the Qing government agenda in 1867. In the imperial edict on December 30, 1866, Empress Dowager Cixi spoke highly of Zuo’s proposal and insisted on establishing the naval college despite constant criticisms and oppositions from the hardcore scholar-officials:

“The proposal of establishing a dockyard and a naval college is an integral plan of China’s self-strengthening. Therefore, despite the opposing voices and rumors circulated in society, the project must be resolutely carried out to achieve its effects. Although Governor Zuo Zongtang will be deployed as the Governor-General of

Gansu Province in a few days, the establishment and operation of the navy yard and the naval college must follow the details of his proposal. Regarding the expenditure on developing shipbuilding industry and establishing the naval college, a total number of 70,000 taels shall be allocated to the College every month. If the actual spending exceeds the budget of 70,000 taels, Ying Gui, the Governor-General of Fujian and Zhejiang Province, shall be responsible for allocating the fund of 50,000 taels every month from customs duties of Fujian port in time.”

(Emperor Tongzhi: ‘An imperial edict on Zuo Zongtang’s proposal of establishing Chinese Navy Yard and Fujian Naval College’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, p. 289.)

(‘此次創立船政，實為自強之計，若為浮言搖惑，則事何由成？自當堅定辦理，方能有效；左宗棠雖赴甘省，而船局乃系該督創立，一切仍當預聞；所有前項不敷銀七萬兩，即於續撥閩海關每月五萬兩內支用，著英桂如數籌撥，毋許遲誤。’)

The imperial edict revealed absolute determination of the Qing government to develop modern shipbuilding industry in China. In reality, fund-raising was always a thorny problem since the expenditure always exceeded the budget in managing the dockyard and the naval college. Having been convinced of the urgency to establish a modern naval college and strengthen China’s coastal defense, Cixi agreed to allocate sufficient funds to support the College and other maritime affairs (Zuo Zongtang: ‘A memorial on supporting Fujian Naval College and Chinese Navy Yard’).

As mentioned in the imperial edict, during the preparation stage of the naval college, Zuo Zongtang was deployed as the Governor-general of Shaanxi and Gansu Province for putting

down Nian rebels in northwestern China. Shen Baozhen⁹⁶ (沈葆楨) was appointed to replace Zuo Zongtang and take charge of the dockyard and the college. Shen Baozhen took office in 1867 and officially established the naval college on January 6, 1867 in Fuzhou. Initially, the college was named “Truth-seeking Skills School” (‘求是堂藝局’) since any technology from the West was regarded as merely a skill in the 1860s of China. Shortly after its establishment, it was renamed as “Fujian Naval College” to reflect its nature and main educational objectives. In contrast with most scholar-officials in the Qing government, Shen Baozhen had a particular interest in western technology and was receptive to western ideas, which in some sense secured the smooth development of bilingual education at Fujian Naval College. He was clearly aware that the Chinese could not catch up with the West in a few years since western naval technology had developed over a century before China started to learn from the West (*Foochow Arsenal. Archives on China’s Coast Defense II*, p. 347 a-b). Thus, in his memorial on July 18, 1867, Shen Baozhen asserted that the main objectives of education at Fujian Naval College was not to build the same ships as the western countries, but to learn the basic principle of shipbuilding and navigation and achieve technological independence:

“It is not important to build ships as it is to learn [shipbuilding], ... but cautioned that learning the skills on the job, though important, was merely scratching the surface, whereas the principles behind the skills should be the central concern.”

(Pong, 1994, pp. 225-226)

⁹⁶ **Shen Baozhen** (1820-1879) was the former Prefect of Jiangxi Province. Because of his good reputation in the local community, he was appointed as the administrator of Fujian Navy College and Minister of Maritime in late imperial China in 1867.

5.3.2 The general division of Fujian Naval College

According to the content of curriculums, Fujian Naval College was divided into two sub-colleges: the French-medium College and the English-medium College. The French-medium College consisted of three departments: the Department of Shipbuilding, the Department of Design & Drawing and the Department of Apprentices. Courses in the French-medium College were primarily conducted by French teachers in French since France was a leading country in shipbuilding in the 19th century. Thus, some scholars also named the sub-college as the “French College” (Gao, 2007) or the “College of France” (Shen, 2007). The English-medium College consisted of the Department of Theoretical Navigation, the Department of Engineering and the Department of Practical Navigation. In fact, the Frenchman Prosper Marie Giquel, the headmaster of Fujian Naval College, had intended to repel British influence at the College and prioritize French culture and technological advances in the military field. However, he had to follow Zuo Zongtang’s plans for establishing an English-medium College since Britain had world-leading techniques of navigation and advanced naval education, and English was emerging as a lingua franca in China’s Imperial Maritime Customs Services and world navy officers (Leibo, 1985). Courses in the English-medium College were primarily conducted by British teachers in English. The general division of Fujian Naval College reflected the latest development of maritime industry in the 19th century, which specified and professionalized modern education in late imperial China.

5.3.3 The evolution of bilingual education at Fujian Naval College

5.3.3.1 The enrollment of students

From its inception in 1867 to being incorporated into Chinese Maritime Bureau in 1911, during the 45 years, 629 students graduated from Fujian Naval College (The Association of Annals Compilation of Fujian Navy College, 1996). Different from other government

schools like Peking Translation College, the source of students at Fujian Naval College was not limited to “Eight Banners” imperial members and their descendants, but expanded to the mass of society, including the people at the bottom strata of society.

In spite of the fact that the plan of educational modernization gained support from the emperor, some imperial and provincial governors, the initial development of Fujian Naval College was not without any obstacles. In reality, as detailed in Section 5.2, in the 1860s and 1870s there was still a tendency among the Chinese for pursuing their official positions and titles through the Imperial Examination that focused on Confucian knowledge, classics and ethics. Thus, it can be understood why few Chinese scholar-officials were interested in or paid enough attention to modern science and technology (Fan, 2009). Another enormous obstacle to the student enrollment of Fujian Naval College was the constant opposition from the conservative scholar-officials in the Qing government. They clung to the traditional view that modern science and technology like shipbuilding and navigation would provide no long-term benefits to China. Those conservative officials had no knowledge of the latest developments outside China and were not convinced of the superiority of western military technology. Instead, they firmly believed that Confucianism occupied an overarching position in the world knowledge system and the westerners should learn Chinese knowledge, not the other way around. Profoundly influenced by the conservative officials’ voices, and the ridiculous rumor that Fujian Naval College would compel your children to commit crimes, few students applied for places at the College in its initial years (Shen, 2007).

In order to spark people’s interest at Fujian Naval College, a variety of incentives were awarded to potential students. The College waived daily lodging and boarding charges of all students upon enrollment and gave each student 4 taels every month to take care of their family. The College also awarded the excellent graduates government posts, particularly for

those students who found it difficult to be selected to the government through the Imperial Examination (Zuo Zongtang: 'A memorial on establishing Chinese Navy Yard and Fujian Naval College').

Despite the difficulty in student enrollment, the admission requirements were not lax. In Shen's progress report on Fujian Naval College, he emphasized that "intelligence of students" and "students' Chinese proficiency" were two important entrance requirements (Shen Baozhen: 'A memorial on the progress report of shipbuilding and practical navigation at Fujian Naval College'). The entrance examination mainly tested students' Chinese proficiency as well as their understanding of Confucian ethics like reverence for the superior and piety for parents. Although Fujian Naval College focused on western knowledge, students were still required to reach the threshold level of Chinese proficiency and had a knowledge of requisite Confucian knowledge. The administrators of Fujian Naval College believed that high Chinese proficiency would help students lay a solid foundation for bilingual education in the future ('Reports on the Teaching of Fujian Naval College', 1870; Central Institute of Modern History, 1957).

After rigid entrance examinations, children aged between 15 and 18 with intelligent minds and the requisite level of Chinese language and Confucian knowledge were admitted to Fujian Naval College in 1867. However, due to the weak foundation in foreign languages, the students from mainland China found it difficult to adapt to the French-medium or English-medium courses, which led to the fact that few Chinese students were able to acquire knowledge and techniques of shipbuilding and navigation within 5 to 7 years. In contrast, the students, who were selected from the Central School in Hong Kong and had a solid foundation in English, were accustomed to the English-medium courses and graduated in 1874 with distinction. Thus, in order to enroll more students with high foreign language

proficiency, the administrators of Fujian Naval College decided to go to the Central School in Hong Kong for student enrollment. In a memorial dated March 5, 1876, Ding Richang (丁日昌), one of the administrators of Fujian Naval College, decided to send Tang Tingshu (唐廷樞) and Huang Daquan (黃達權) as examiners to the Central School in 1876 to select another 40 students. The Hong Kong students were primarily admitted to the English-medium College at Fujian Naval College for taking western content subjects such as Astronomy and Mathematics (Ding Richang: ‘A memorial on recruiting students in Hong Kong’).

The process of student enrollment at Fujian Naval College reflected the difficulties in changing people’s attitudes towards foreign languages and western knowledge in the initial period of the Self-Strengthening Movement. The multiple sources of students also indicated that foreign language education began to spread from the privileged class to the mass, including children from the poor family in late imperial China. Different from the traditional way of students’ selection (which depended on students’ family background or social status), the means of selection at Fujian Naval College hinged on students’ intelligence and Chinese proficiency. Admittedly, most admitted students might not have aspirations of modernizing China but were attracted by the incentives like free food. Nevertheless, breakthroughs in the manner of student enrollment signified a gradual transformation in the educational access during the Self-Strengthening Movement, namely that modern education gradually spread from the privileged ruling class to the grassroots.

5.3.3.2 Teacher recruitment and management

Since the objectives of Fujian Naval College were to equip promising Chinese children with expertise in shipbuilding and navigation, it was necessary to hire British and French teachers to teach western subjects. In the memorial on establishing the College, Zuo

Zongtang (左宗棠) stressed the need for employing British and French teachers who were familiar with shipbuilding and navigation. The teachers of western content subjects should have rich teaching experience and participate in related shipbuilding and navigation practices.

The integrated teacher team

Following Zuo Zongtang's suggestions for teacher employment, a staff team of Fujian Naval College comprised: 1) British and French teachers; 2) overseas Chinese teachers who spoke Chinese Mandarin, English, the local Fujian dialects and Cantonese⁹⁷; and 3) local teachers who spoke Chinese, English and the local dialects.

The western teachers were primarily responsible for western content subjects like Mechanics and Geometry. In order to employ qualified teachers from Britain and France, before Zuo Zongtang was deployed to the northwest of China, he planned to employ Prosper Marie Giquel as the headmaster of the College⁹⁸ and Paul Alexandre D'Aiguebelle as the deputy headmaster of the College. Zuo allowed the two headmasters to employ other western teachers and take charge of all the educational activities related to western knowledge at the College. In his memorial on December 11, 1866, Zuo explained why Prosper Marie Giquel was chosen as the headmaster of Fujian Naval College. Prosper Marie Giquel was a former French navy officer who was experienced at shipbuilding and navigation techniques. More importantly, he was also familiar with Chinese culture since he came to China as a French navy officer in 1857 and took position as the Inspector of Customs in Ningbo Port in September 1861. Paul Alexandre D'Aiguebelle was also a former French navy officer who organized an armed troop called "Victory Army" and

⁹⁷ Most of students in Fujian Navy College came from Fujian and Canton.

⁹⁸ The headmaster of Fujian Navy College was equal to the head of western teachers in power.

participated in the suppression against the Taiping rebellions in Ningbo. The impressive performance of D'Aiguebelle in the Anti-Taiping Rebellion Movement helped him to gain recognition from the Qing government, which made him become the Deputy Headmaster of Fujian Naval College.

Another reason for choosing two French rather than British as headmasters of the College was Zuo Zongtang's personal aversion to British interference in China's modernization (Central Institute of Modern History, 1957). Before the establishment of Fujian Naval College, Robert Hart hoped the plan of developing shipbuilding industry in imperial China would be under the administration of the British-headed China's Imperial Maritime Customs Services and recommended that China should purchase British ships instead of building its own. However, due to Zuo's bitter hatred towards the British resulting from the Opium Wars, he was determined not to allow British to occupy the important positions of Fujian Naval College, thus eliminating British control in China's coastal defense and modernization projects (Leibo, 1985).

With the help of Prosper Marie Giquel and Paul Alexandre D'Aiguebelle, almost 50 western teachers, technicians and navy officers were employed as teachers of western content subjects at Fujian Naval College in the first eight years⁹⁹. Most of the western teachers had rich teaching experience in the French Naval Academy and the Greenwich Royal Naval College. The details of the main western teachers employed at Fujian Naval College are presented in Table 4 on Page 272.

⁹⁹ The picture of the western teachers employed in Fujian Navy College from 1867 to 1875 is presented in Appendix B.

A noteworthy fact was that during the process of teacher recruitment, the French government initially disagreed to the plan for fear that sending teachers to China would strengthen the power of Chinese Imperial Navy and possibly undermine the French interests in China. However, after the lobbying of Prosper Marie Giquel, particularly after his meeting with Napoleon III, the scheme of sending French teachers and exporting requisite facilities including machinery, engine, head breadth chute and iron to China was approved by the French government (Leibo, 1985). When Prosper Marie Giquel and Paul Alexandre D'Aiguebelle left Fujian Naval College in the 1870s due to illness, the successors still followed the tradition of employing western teachers. If they could not employ sufficient teachers, the task of teacher recruitment would be left to the Chinese ambassadors to Britain and France. Alternatively, the Qing government also delivered a note to the British Admiralty and the French government to help them recruit teachers for Fujian Naval College (Leibo, 1985).

Table 4: The main western teachers employed at Fujian Naval College

Name	Nationality	Subject/Position	The year being employed
Prosper M. Giquel	French	The headmaster	1866
D'Aiguebelle	French	The deputy headmaster	1866
M. A. Borel	French	Shipbuilding Theory	1866
M. L. Rousset	French	Physics, Chemistry	1868
L.Medard	French	Mathematics	1868
舒斐¹⁰⁰	French	Steam Engine Building	1868
E. Jouvét	French	Steam Engine Building	1868
F. Marzin	French	Shipbuilding Practice	1868
M.Robin	French	Shipbuilding Practice	1868
A. Louis	French	Ship Design and Drawing	1868
M.Gueyin	French	French, Mathematics and Drawing	1868
A. T. Piry	French	French, Mathematics and Drawing	1868
A. Latouche	French	French, Mathematics and Drawing	1868
Rivassau	French	French, Mathematics and Drawing	1868
Cabouret	French	French, Mathematics and Drawing	1868
Roberdeau	French	French, Mathematics and Drawing	1868
C.Serreau	French	French, Mathematics and Drawing	1868
J. Carroll	British	Navigation Theory	1867
Swaison	British	Navigation Practice	1871
Harwood	British	Navigation Practice, Gunnery	1872

¹⁰⁰ Due to the limited availability of archives, I did not find the original English or French names of the teachers. Thus, only the Chinese version of names were provided.

R. E. Tracey	British	Navigation Practice	1872
Luxmore	British	Sailors' Techniques	1872
L.D.de Sengonzal	British	Navigation Practice	1875
穆勒格	British	Tube Wheel	1878
Deschamps	French	Shipbuilding Theory	1878
H. B. Taylor	British	Navigation Theory	1880
師丟瓦	British	Tube Wheel	1883
L.Orge	British	Tube Wheel	1885

(Source: **Prosper Giquel**. (1874). *The Foochow Arsenal and Its Results*; Shen Yan. (2012). *Fuzhou Naval College*; 'Expected visit of a Chinese War Vessel', *The Maitland Mercury and Hunter River General Adviser*, June 15, 1876)

While western teachers were responsible for teaching western content subjects, overseas Chinese teachers were employed to teach English or French language subjects at the intermediary level, and played the role of teaching assistants in the content subjects. Most overseas Chinese teachers employed at the College were originally Chinese migrants to Southeast Asia who helped to bridge the communicative gaps between western teachers and Chinese students in classrooms (Shen, 2007). Zeng Hengzhong (曾恒忠) and Zeng Jinwen (曾錦文), for example, were two Singaporean Chinese who were employed to facilitate teacher-student interaction in classrooms (Ying Gui: 'A letter to Zongli Yamen to address the criticisms of Baron de Meritens of Foochow Customs on the shipbuilding industry in China'). After the first eight-year studying period, the number of western and overseas Chinese teachers gradually decreased because many excellent graduates of Fujian Naval College became teachers at the college. The role of those teaching assistants was described in Dunn's report in *North-China Herald* on April 21, 1870:

“Language was a barrier at first, but Carroll, **aided by his English-speaking Chinese assistant (probably Zeng Hengzhong)**, was able to carry on. By early 1870, if not before, the students had become proficient enough for instructional purposes, though some of them still did not speak the language as fluently as Carroll wished.”

(‘The Foochow Arsenal’, *North-China Herald*, April 21, 1870, p. 278)

Some local teachers were employed to teach Chinese-related subjects including Chinese, Confucian classics, Chinese history as well as the English or French language subjects at the beginner’s level. In the early years of Fujian Naval College, most local students found it difficult to adapt to foreign language learning. Thus, the local teachers (such as Huang Bingcheng 黄炳承), most of whom graduated from local mission schools and were able to speak foreign languages, Mandarin and local dialects, were employed to help pupils overcome the language barrier and prepare for the upcoming western content subjects (‘Reports on the teaching of Fujian Naval College’, 1870; Liu & Shi, 2003).

Noteworthy was also the fact that western teachers, overseas Chinese teachers and local teachers held frequent close communication with each other. Every semester, a few unscheduled teacher meetings were held for all the teachers to discuss teaching content, curriculum design and teaching methods. Though each teacher aimed to accomplish his own teaching objectives, he was also required to share the teaching progress and reflections with teachers of other subjects (Prosper Giquel, 1874). For example, in order to alleviate the linguistic burdens on Chinese students, local teachers frequently consulted the western teachers to explain a terminology of navigation in English before they explained the terminology in their mother tongue to the students (Prosper Giquel, 1874). Through frequent teacher sharing sessions, teachers of Fujian Naval College were aware of the

importance of finding corresponding Chinese terminologies to the French and British technical terms in helping students understand abstract theories of shipbuilding and navigation ('Reports on the teaching of Fujian Naval College', 1870). In contrast with the availability of some English-Chinese reference books provided by British Protestant missionaries, there were almost no French-Chinese books or dictionaries since French Catholic missionaries who arrived in China during the Opium Wars taught Latin rather than French. The shortage of French-Chinese textbooks and other teaching aids was viewed as the source of pedagogical problems in the French-medium College (Leibo, 1985). After the joint efforts of both French and Chinese teachers, the first French-Chinese dictionary *Terminologies at Fujian Naval College* was published in Fuzhou in 1868. This dictionary and the *Mini French-Chinese Dictionary* published by Presbyterian Church Press in the United States became important reference books for Chinese students at Fujian Naval College.

The teacher management regulations

In order to enhance the efficiency and effectiveness of bilingual education at Fujian Naval College, all the staff including the headmaster, the deputy headmaster and teachers were required to abide by teacher management regulations. Upon employment, all western teachers signed "The employment agreement for western teachers" and "Rules & Regulations on Western Teachers' Behaviors at Fujian Naval College" with the Ministry of Maritime in late Imperial China. It can be seen from the contract that the western teachers' award and punishment scheme was closely tied to students' performance in examinations:

"Since the establishment of Fujian Naval College, within five years under the guidance of western teachers and technicians, the Chinese students must be proficient in English or French, have a good knowledge of mathematics, shipbuilding and navigation skills, and be capable of building and navigating ships independently. If

the western teachers, technicians and students cannot achieve the objectives, they will not be rewarded.”

(‘The employment agreement for the western teachers’, in Zuo Zongtang’s memorial ‘On establishing Chinese Navy Yard and Fujian Naval College’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, p. 314)

(‘自鐵廠開廠之日起，五年限滿，如能照所具保約教導中國員匠於造船法度一切精熟，均各自能製造，並能自造傢夥，並學堂中教習英法兩國語言文字，造船演算法及一切船主之學均各精熟，如五年限滿教導不精，卑鎮等及各員匠概不敢仰邀加獎。’)

The contracts with all western teachers were renewed every five years. Those teachers who completed the final task of enabling Chinese pupils to build modern ships and steer the ships overseas were likely to receive higher salaries and obtain contract renewal. In order to arouse the western teachers’ enthusiasm for teaching, administrators of Fujian Naval College decided to give extra monetary rewards (60,000 taels) to those teachers who fulfilled their responsibilities and achieved better educational results (Zhang Mengyuan: ‘A memorial on increasing the salary of competent western teachers at Fujian Naval College’).

Concerning the penalties on teachers’ behaviors, although western teachers took charge of almost all the teaching activities, the Board of Management¹⁰¹ at Fujian Naval College had been supervising the western teachers’ behaviors. If a teacher was found to “be lazy at work or go against discipline rules”, “convert Chinese students to Christianity”, “interfere in ‘beyond classroom affairs’” and “shouting at or insulting Chinese students”, he would be

¹⁰¹ The Board of Management in Fujian Navy College was made up of Chinese imperial and provincial governors. They were the de facto administrators of the College and supervised the western teachers’ behaviors in and out of class.

fired immediately ('Rules & Regulations on the Western Teachers' Behaviors at Fujian Naval College', 1866). The rigid regulations on the western teachers' "in and beyond classroom" behaviors suggested that the leadership at Fujian Naval College was still in the hands of Chinese officials. The award scheme as well as strict penalties on teachers' behaviors spurred western teachers to concentrate on teaching and enhance their teaching efficiency and effectiveness in order to earn higher salaries and the respect of Chinese administrators (Shen, 2007).

5.3.3.3 The curriculum design of Fujian Naval College

According to *Statutes of Fujian Naval College*, students were required to spend at least eight years at the College, with five years' theoretical courses and three years' internship in shipbuilding factories or aboard. Only those students who passed the written and oral examinations of language subjects, western content subjects, Chinese-related subjects as well as the practical examinations were eligible to graduate.

The status and role of the English or French language in the curriculum

Despite the slight changes in subjects during the years of development, English and French were always the core subjects at Fujian Naval College. In Ying Gui's¹⁰² report on the preparation of school establishment on February 19, 1867, he underlined the importance of English and French language learning and confirmed their status as core subjects of the whole curriculum. As shown in the curriculum arrangement at the College (For details, see Table 5 on Page 278), except for the School of Practical Navigation, all the other academic departments placed foreign language subjects in the first place, which indicated the pivotal role of foreign languages in acquiring western technical knowledge.

¹⁰² **Ying Gui** (1821-1879) was the Governor-General of Fujian and Zhejiang Province from 1863 to 1873. He was one of the important administrators and patrons in Fujian Navy College.

Table 5: The Main Curriculum of Fujian Naval College

	Sub-division of College	Courses
French-medium College	College of Shipbuilding	French, Mathematics, Algebra, Perspective Drawing Design, Physics, Trigonometry, Analytic Geometry, Calculus, Statics, Mechanics, Factory Internship, Chinese, Confucian Classics, History
	College of Design & Drawing	French, Mathematics, Plane Geometry, Descriptive Geometry, Drawing, Engine Design, Factory Internship, Chinese, Confucian Classics, History
	College of Apprentice	French, Mathematics, Plane Geometry, Descriptive Geometry, Algebra, Drawing, Mechanics Drawing, Chinese, Confucian Classics, History
English-medium College	College of Theoretical Navigation	English, Mathematics, Analytic Geometry, Algebra, Plane Trigonometry, Ball Trigonometry, Calculus, Nautical Astronomy, Geometry, Statics, Sea Gravity, Electromagnetism, Optics, Acoustics, Thermodynamics, Chemistry, Geology, Astronomy, Chinese, Confucian Classics, History
	College of Engineering	English, Mathematics, Analytic Geometry, Mechanic Drawing, Operating regulations on ship, Directions for using indicators, steam power, water speed meter, Engine Installation, Maintenance of steam power, Chinese, Confucian Classics, History
	College of Practical Navigation	Nautics, Navigation, Artillery, Art of Conductor

(Source: ‘The Curriculum Schedule at Fujian Naval College’, 1867; *The Foochow Arsenal and Its Results*, 1874; *New statutes and decrees of the Qing dynasty in the Guangxu period* (1875-1908); H. N. Shore, 1881)

The medium of instruction at Fujian Naval College

In Zuo Zongtang's memorials on the curriculum design at Fujian Naval College, he did not directly state the choice of MOI for western content subjects. However, it can be inferred from the school reports on curriculums¹⁰³, teaching activities, teaching materials and examination papers that most of the western content subjects were conducted in English or French. The choice of English-medium or French-medium instruction for western content subjects resulted from the western teachers' limited Chinese proficiency and the shortage of Chinese technical terms for military technology in the 19th century. As most British or French teachers could not speak Chinese, they could only communicate with Chinese students in English. In the initial years of development at Fujian Naval College when no English-Chinese or French-Chinese technical dictionaries had been published, there were no corresponding Chinese terms to describe the abstract French or English terminologies (Leibo, 1985). English or French was thus the only possible choice of the MOI for western content subjects of Fujian Naval College. The use of western languages as the MOI can be confirmed by the English writing of students' notebooks at the College, which is presented in Appendix C.

In spite of the fact that Zuo Zongtang's memorial on establishing Fujian Naval College gave no special mention to the MOI for western content subjects, he expressed his views that the real essence of western languages can only be captured and represented in their own languages (Zuo Zongtang's memorial on December 11, 1866). Another piece of compelling evidence for English-medium or French-medium instruction was the examination papers every semester at Fujian Naval College (e.g. 'Reports on Chinese

¹⁰³ *Reports on the Teaching of Fujian Navy College* in 1870 was an example.

Students' Performance in Theoretical and Practical Courses (1867-1873)', 1874). In the examinations of western content subjects, all the questions were presented in French or English and the students were required to answer the questions in French or English. Even in the School of Practical Navigation, all the commands and instructions made by British teachers including Lieutenant Swaison, Captain R. E. Tracey and Captain Luxmore, of the Royal Navy, were also in English. Only those students who reached a high linguistic and cognitive threshold level were able to understand western officers' commands (Prosper Giquel, 1874).

The Chinese-related subjects at Fujian Naval College

The primary educational objective at Fujian Naval College was to transfer advanced western knowledge on modern science and military technology to students. However, Shen Baozhen (沈葆楨), the administrator of Fujian Naval College, feared that students would be assimilated to western culture as they took western subjects. He maintained, "It is permissible for a Chinese mind to master the skills of foreigners, but it is not permissible for the bad habits of the foreign countries to contaminate the Chinese mind" (Pong, 1994, p. 230). In order not to lose their national identity, students at Fujian Naval College were also required to take a few Chinese-related subjects such as the Chinese language, history, ethics and Confucian classics.

In comparison with students in traditional Confucian academies who were engrossed in reading Confucian classics and writing useless "Eight-legged Essays", students at Fujian Naval College were asked to discuss practical affairs in their extra-curricular activities (Shen Baozhen's memorial on September 5, 1867). The co-existence of western subjects and Chinese-related subjects in the curriculum indicated that the model of bilingual education at Fujian Naval College was similar to the "Additive Model" of bilingual

education (Baker, 1996). It was not intended for assimilating students to western culture, values and religion, but differentiating the purposes and values of learning western languages and Chinese. The former provided students with an access to modern science and military technology while the latter helped to maintain Chinese identity against the diffusion of western ideologies in the age of colonialism.

5.3.3.4 The choice of textbooks and teaching materials

Appropriate textbooks and teaching materials for western content subjects are essential to the development of bilingual education practices. Since China was far behind western powers in shipbuilding and navigation, most textbooks at Fujian Naval College were the original ones used in the comparable western naval colleges¹⁰⁴ (The Association of Annals Compilation of Fujian Navy College, 1996).

There were five main sources of textbooks used at Fujian Naval College. The first was those western teachers at the College, who purchased textbooks from their mother country. Many textbooks were the teaching materials used by students in the world-renowned naval colleges like Greenwich Royal Naval College in Britain and Cherbourg Shipbuilding & Engineering College in France. As reported in *North China Herald* on July 14, 1871, James Carroll¹⁰⁵ gave a detailed description of the textbooks used at Fujian Naval College: “for mathematics subject, we use *Mathematics* by Bernard Smith; for algebra, we use *Elementary Algebra* by Todd Hunt” (pp.519-520).

The second source of textbooks was the Chinese ambassadors to Britain and France, who sent original western textbooks to China. According to Shen’s study (2007) on textbooks at

¹⁰⁴ Some textbooks used in Fujian Navy College are presented in Appendix D.

¹⁰⁵ **James Carroll** was a teacher in the English-medium division of Fujian Navy College.

Fujian Naval College, in 1869 five physics textbooks were purchased by Chinese ambassadors and sent from Britain and Europe to Fujian Naval College, which alleviated the shortage of textbooks on physics in late imperial China.

The third source of textbooks was the overseas students in Europe. In Shen Baozhen's memorial dated December 7, 1873, he elucidated the importance of sending excellent graduates of Fujian Naval College to study abroad:

“Top students in the French-medium College should be sent to France to learn shipbuilding theories and skills while top students in the English-medium College should be sent to Britain to further their study in navigation and naval training. It will take at least three years but not more than five years for those students to return to China and make contributions to the advancement of the shipbuilding industry and the development of modern navy in China.”

(Shen Baozhen: ‘A memorial on sending some excellent graduates of Fujian Naval College to study abroad’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, pp. 298-299.)

(‘前學堂習法國語言、文字者，也當選其學生之天資穎異、學有根柢者，仍赴法國深究其造船之方及其推陳出新之理；後學堂習英國語言、文字者，也當選其學生之天資穎異、學有根柢者，仍赴英國深究其駛船之方及其練兵制勝之理；速則三年，遲則五年，必事半而功倍。’)

The plan of sending students to study in Europe was approved by Empress Dowager Cixi in 1874, and the “Study Abroad” Project was operated in 1877 after three years’ preparation. From 1877 to 1905, 111 students were selected to study in British or French technical

colleges or shipyards such as the Royal Naval College¹⁰⁶, Toulon Naval Shipyard and National Institute of Mining of Paris (Leibo, 1985). During their overseas study in Europe, they were requested to send the textbooks that they used or found to be valuable to Fujian Naval College.

The fourth source of textbooks was teachers at Fujian Naval College, who wrote and compiled the textbooks or teaching materials. In order to facilitate students' understanding of foreign languages and before taking western content subjects, most of the textbooks and teaching materials for language education were Chinese-translated textbooks. For instance, Prosper Marie Giquel, together with the new French consular officer Gabriel Lemaire and Chinese language teachers, wrote the French-Chinese dictionaries — *Dictionnaire de Poche Francais-Chinois, Suivi d'un Dictionnaire Technique des Mots Usites a l'Arsenal de Fou-tcheou* for students' language learning at Fujian Naval College.

The fifth source of textbooks was the existent foreign language textbooks that were compiled by graduates of Peking Translation College and western missionaries in late imperial China. For example, *A Common-School Grammar of English Language* (<英文舉隅>) translated by Wang Fengzao (汪鳳藻), a graduate from Peking Translation College, was the most authoritative English language textbook for students at Fujian Naval College. Some western missionaries who arrived in Fuzhou after the Opium Wars had published a few Chinese-English dictionaries to convert Chinese children. The missionaries Robert Samuel Maclay and Caleb Cook Baldwin, for instance, wrote two English-Fuzhou dialect dictionaries including *The Alphabetic Dictionary in the Foochow Dialect*, and *Manual of the Foochow Dialect*. The two dictionaries listed the Chinese-English common phrases and

¹⁰⁶ The pictures of students' overseas study in the Royal Naval College are presented in Appendix E.

used Roman phonetic alphabets to spell the Fuzhou local dialect. Since more than 85 % of the students at Fujian Naval College came from Fuzhou and could not speak fluent Mandarin, the two dictionaries, linking English words and phrases with the local dialect, were important reference books for students at the College (Prosper Giquel, 1874).

5.3.3.5 The integration of practice into theory in the bilingual curriculum

Since the primary educational objective was to cultivate elites with remarkable shipbuilding and navigation skills, students' practical abilities became a focal aspect of bilingual education at the College. The idea to integrate practice with theory at the College can be represented in the curriculum design. As shown in *Statutes of Fujian Naval College*, before graduation all the students were required to spend at least three years' internship in ship dockyards or the ship aboard, attending either Factory Practical Course (‘廠課’) or Ship Practical Course aboard (‘艦課’) (The Curriculum Schedule at Fujian Naval College, 1867; Prosper Giquel, 1874). Specifically, in the internship course, students in the French-medium College were required to build ships under the guidance of French teachers and technicians within the last fourteenth months before graduation. All students in the English-medium College were required to study in the School of Practical Navigation and steer ships to the ocean (Wen Yu: ‘A memorial on boarding ‘Jianwei’ Ship for practical navigation’; Zuo Zongtang: ‘A memorial on purchasing or building more ships for practical navigation (with attachment)’). During the internship, British officers aboard gave all instructions and commands in English, and students kept a log of their voyage in English. According to Shen Baozhen's memorial dated September 15, 1873¹⁰⁷, during an internship program in 1871, 18 students of Fujian Naval College steered the “Jianwei” Ship to north via Zhejiang, Shanghai, Yantai, Tianjin and Niuzhuang Port, and went south to Amoy, Hong Kong,

¹⁰⁷ Shen Baozhen: A memorial on the progress report of shipbuilding and practical navigation in Fujian Navy College.

Singapore and Penang Island. Although it was only an internship, the 75-day voyage was viewed as the first oceangoing voyage of the “modern navy” in China (Pei Yinsen: ‘A memorial on purchasing and repairing modern ships for practical navigation’).

Apart from the three-year internship program, in daily theoretical courses students were not simply seated in classrooms for attending lectures. Since the college was located in the Chinese Navy Dockyard, it was convenient for students to visit the dockyard and the students had many hands-on experiences for shipbuilding and navigation. In the daily curriculum schedule of the French-medium College, students attended lectures on shipbuilding theories in the morning, and went to the factories for observing how different components of ships were made and became familiar with the process of building ships in the afternoon. The practical courses included “Steam Engine Building” taught by E. Jouvét, “Shipbuilding” taught by M. Robin and F. Marzin, and “Ship Design and Drawing” taught by A. Louis and M. Gueyin (Prosper Giquel, 1874). The integration of theory and practice at Fujian Naval College helped students internalize abstract terminologies or theories in lectures, and provided teachers with direct reflections to examine the teaching quality in theoretical courses. The practical courses also offered an invaluable platform for student-student and student-teacher interaction in French or English.

5.3.3.6 Rigorous assessment methods

The comprehensive assessment system was another characteristic of bilingual education at Fujian Naval College. The multiple rigid assessment methods would help to enhance the effectiveness of bilingual education at the College. According to *Statutes of Fujian Naval College* (1867), students had to pass the following three types of examinations before graduation:

(1) The probationary examination for newly admitted students

Two months after being admitted to Fujian Naval College, the students were required to sit for the probationary examination and only successful students could further their study at the College. The system of academic probation was similar to today's "probationary period" for PhD candidates in western-style universities. According to the educational reports of Fujian Naval College (e.g. 'Reports on Chinese students' performance in theoretical and practical courses (1867-1873)'), the probationary examination consisted of language proficiency examinations and mathematics examination since the students spent their first two months on basic core subjects of foreign languages and mathematics. The probationary examination exerted a considerable impact on the students at Fujian Naval College. As commented by Yu Lu (裕祿), one of the administrators of Fujian Naval College: "During the probationary period, students were under enormous pressure of being ejected if they were mentally lazy at coursework or performed poorly in probationary examinations" (Shen, 2007, p. 90).

(2) Monthly, term and graduation examinations

After passing the probationary examination, the students were required to take monthly examinations every three months, final examinations at the end of each term and the graduation examination. Except for examinations in the Chinese language, Confucian ethics, Confucian classics and Chinese history, other examinations were conducted in English or French, and students were required to answer the questions in English or French. Pictures of students' monthly examinations at Fujian Naval College are presented in Appendix F.

The foreign teachers of western content subjects needed to review and grade all the papers before the administrators ranked students according to their scores in examinations. The

first-grade students were awarded 10 taels; the second-grade students were not awarded or punished while the third-grade students were recorded a demerit. If a student got third grades for two consecutive times, he would be criticized. If he received third grades for three consecutive times, he would be expelled from the College. By contrast, a student who obtained the top grade for three consecutive times was awarded 30 taels, and clothes for encouragement. It was a normal practice of awarding students in modern schools in late imperial China, but it was rare to eliminate students based on their academic records. According to the statistics in Shen's historical study (2007) on Fujian Naval College, among the first group of 105 students, only 39 students remained after 8 years' learning. Thus, the rigorous curriculum assessment forced the students to concentrate on their study and enhanced the educational quality of Fujian Naval College.

(3) Examinations on students' practical abilities

Apart from the written examinations including probationary examinations, monthly, term and graduation examinations, different sub-colleges at Fujian Naval College held practical examinations to test students' practical abilities. For instance, students at the College of Engineering went aboard to serve as real engineers of modern ships and to perform the task of equipment installation in the ship's cabin, hold and compartment. When the students were engaged in the task, western teachers observed their performance and raised questions in English when they saw fit. When a few western teachers finished the contract and went back to Europe in the 1880s¹⁰⁸, many graduates returned to Fujian Naval College to become teachers. Although Chinese teachers held practical examinations, students were still required to answer questions in English (Li Zhaotang: 'A memorial on employing western

¹⁰⁸ The reason why western teachers terminated the contract in Fujian Navy College was that the College could not afford the high expenses of employing western teachers as China suffered from financial recession and the Sino-western relationship grew worse since the 1880s.

teachers to Central Navy Yard College’). The main objective of practical assessment was not to test students’ theoretical knowledge, but to provide a description of students’ practical abilities of shipbuilding and navigation.

5.3.3.7 Evaluation of the bilingual education practices at Fujian Naval College

It was difficult to make direct comparisons between results of bilingual education at Fujian Naval College and those of bilingual education in today’s secondary schools and universities in China because teaching scenarios changed dramatically over the century. Most of the previous studies have presented contemporary scholars’ comments on the results of bilingual education at Fujian Naval College, but overlooked the comments of historical participants or witnesses in late imperial China.

Several news reports in late imperial China reflected outsiders’ (not the ones involved in the educational activities) voices on the results of the bilingual education at Fujian Naval College. According to historical records, many visitors gave positive evaluations of the education practices of Fujian Naval College. Claude Thibaudier, the assistant engineer of French Navy and one of the earliest visitors to Fujian Naval College, commented in June 1868:

“If despite these serious difficulties they have arrived rather rapidly at the present results, it is necessary to attribute this not only to the intelligent energy of the professors but to the extreme application of the students — some of whom are no more than children — who undertake their studies with the acute perseverance and desire to accomplish their goals which characterize the Chinese. All work with great energy, most beyond the hours required by the school.”

(Thibaudier, 1868, p. 43)

As the premier government school on military technology, the education practices of Fujian Naval College captured increasing attention from western politicians, technicians and diplomats since the 1870s. After visiting the College in 1870, Pierre Veron, the Captain of French Navy, mentioned that “According to what I saw I don’t doubt, when the five years of the contract will have passed, the young men will have fulfilled the conditions of the program” (Veron, 1870, p. 13). In the same year, Alexis, the Grand Duke of Russia, visited Fujian Naval College and raised some theoretical questions on shipbuilding to the students at present. After hearing satisfactory answers from the students, the Duke praised the students and teachers’ hard work and thought of Fujian Naval College as the hope and turning point of modernization in China (Leibo, 1985).

The Newspaper *North China Herald* on April 21, 1870 presented a report of a visitor’s evaluation of the students’ foreign language proficiency: “the young men spoke correct and good English, and the jargon of Pidgin English was not heard” (p. 279). It can be seen from the above evaluation of the educational results that bilingual education at the College gained widespread recognition from the outsiders including some experts from the western powers.

Apart from the outsiders’ evaluations, the insiders of Fujian Naval College such as Shen Baozhen and Prosper Giquel also spoke highly of the educational achievements of Fujian Naval College. In July 1873 when the first group of students were about to graduate from the college, the Ministry of Maritime in late imperial China carried out a formal and comprehensive assessment of the whole college. The result was satisfactory as Shen Baozhen wrote in a memorial:

“In June, Prosper Marie Giquel assessed students’ capabilities in each division of Fujian Naval College and selected some students with great shipbuilding skills to work in the dockyard. The best students were appointed as leading shipbuilders and

led other students to build ships according to the sketch drawn by western teachers. In the last few months, without the guidance of western teachers and technicians, the Chinese students were capable of building or steering modern ships entirely on their own, which fulfilled the educational objectives of the College.”

(Shen Baozhen: ‘A memorial on sending some excellent graduates of Fujian Naval College to study abroad’, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, p. 298)

(‘是年六月起，該監督日意格逐廠考校，挑出中國工匠藝徒之精熟技藝、通曉者為正匠頭，次者為副匠頭，洋師付與全圖，即不復入廠，一任中國匠頭督率中國匠徒放手自造，並令前學堂之學生、繪事院之畫童分廠監之。數月以來，驗其工程，均能一一吻合’)

In a news report in *Shen Pao* on December 18, 1875, Prosper Giquel highlighted the success of Fujian Naval College. He maintained that because of the carefully-designed curriculum, the rigorous examination system and beneficial practical education, students at Fujian Naval College were much better than those who trained in Jiangnan Arsenal and even more intelligent than students in European naval colleges (‘Chinese Arsenal’, *Shen Pao*, December 18, 1875; Wright, 1962, p. 213).

In contrast with the different comments on Peking Translation College, both outsiders and insiders spoke highly of the bilingual education practices of Fujian Naval College. It achieved the fundamental objectives that Zuo Zongtang and Shen Baozhen had established at the inception of the college — to improve students’ foreign language proficiency and transfer advanced shipbuilding and navigation skills from the West to China. The successful education practices of Fujian Naval College not only brought

some short-term benefits such as building a few modern warships, but also provided long-term benefits to late imperial China, which is detailed in the following section.

5.3.4. The impact of bilingual education at Fujian Naval College on late imperial China

The Manchu Empire was overthrown in the Revolution of 1911 and the Republic of China was founded in 1912. Fujian Naval College, as one of the largest modernization projects in the Qing government, was divided into three schools in the Republic of China. The former French-medium College was renamed as Fuzhou Naval Shipbuilding School. The former English-medium College was renamed as Fuzhou Naval School while the Department of Apprentice within the former French-medium College was renamed as Fuzhou Naval Technical School. Subsequently, the three schools were amalgamated in Fuzhou Naval School, which was under the administration of the Maritime Bureau of the Republic of China. The 45-year development (1866-1911) witnessed how Fujian Naval College was established and developed in late imperial China, and how the new model of bilingual education evolved in the modern history of China.

As the premier government school in late imperial China, Fujian Naval College was one of the earliest government schools to integrate foreign languages with western content subjects and was regarded as “the best and most influential college” in late imperial China (Gao, 2007, p. 9). It was also the main breeding ground of China’s technological talents, who played important roles in China’s modernization, and exerted a considerable impact on the development of modern education and foreign language policy in late imperial China.

The education practices of Fujian Naval College promoted the rapid development of China’s modern technical education. The model of bilingual education at Fujian Naval

College was widely borrowed by other modern military and technical colleges in late imperial China such as Tianjin Naval College, Whampoa Naval College and Jiangnan Naval College since many excellent graduates of Fujian Naval College became the headmasters and teachers in other modern naval colleges. For example, Yan Fu, a well-known graduate from Fujian Naval College in 1874, was appointed as the headmaster of Tianjin Naval College in 1880. Yan Fu copied the bilingual education model of Fujian Naval College and applied it to the education practices of Tianjin Naval College. In particular, he insisted on EMI for the subject of navigation¹⁰⁹ and the organization of an international faculty team at the College. Similarly, as stipulated in *Statutes of Guangdong College of Western Knowledge* (1880), the College drew much insight from Fujian Naval College in drafting its regulations on student admission, division of academic disciplines, assessment, awards and penalty. Those naval colleges cultivated a large number of navy leaders, officers, shipbuilding experts, technicians and artisans in late imperial China. Through their efforts, China built the best shipbuilding factory in the Far East and its own modern fleet — Imperial Peiyang Fleet¹¹⁰. China's Imperial Peiyang Fleet became the largest fleet in Asia and the eighth largest fleet in the world during the late 1880s, only next to the western powers such as Britain, France and the United States (Li, 1979).

The bilingual education practices of Fujian Naval College and other similar technical colleges in late imperial China also facilitated the spread of modern education in China from the elite class to the mass of society. Immersed in long-standing Sino-centric culture, the Chinese had inherent resistance to western knowledge, and even considered western technological innovation as inferior techniques. Under such unfavorable socio-political

¹⁰⁹ Tianjin Navy College only had the Department of Navigation.

¹¹⁰ In Imperial Peiyang University, half of the navy generals and officers graduated from Fujian Navy College (Lin, 1986).

contexts beyond bilingual education, despite harsh challenges from the conservative scholar-officials in the imperial and provincial government, the success of modern military education at Fujian Naval College enriched the Chinese worldview, advanced their understanding of modern education and opened a door of modern civilization in late imperial China. The gradual acceptance of western languages and technical education in China during the Self-Strengthening Movement had also an impact on Confucian education and the Imperial Examination. In 1888, the Qing government accepted the proposal of Zongli Yamen to include western education in the Imperial Examination. The examinees who intended to be awarded the academic titles in modern mathematics were asked to take examinations in mathematics and Confucian knowledge (Tian, 2009).

Not limited to the sphere of modern education, the bilingual education practices of Fujian Naval College also exerted considerable effects on the development of language policy in late imperial China. The earliest attempt of combining language with content knowledge at the College found a new path to the development of bilingual education in late imperial China. Different from the early foreign language education practices in modern language schools like Peking Translation College, the education practices at Fujian Naval College identified the direct link between foreign language teaching and modern science education, and prioritized the importance of foreign languages in transferring western technology and modernizing the country. A foreign language was not merely a communication tool for treaty negotiations with the western powers, but a fundamental means of accessing modern science and military technology. Corresponding to the objectives of learning from the advanced western countries to strengthen China, the goals of foreign language education should be more specified to satisfy diverse needs in various academic disciplines of modern knowledge in late imperial China. Thus, the successful education practices of Fujian Naval College taught the policymakers in the following historical period that foreign language

education in China should be more content-based and integrated with expertise in different fields.

The success of bilingual education at Fujian Naval College also provided the language policymakers with profound insights into seeking a balance between teaching foreign languages for technological reasons and teaching Chinese for maintaining national identity. Though western expertise in shipbuilding and navigation was the priority in the education practices of Fujian Naval College, the Chinese language as well as traditional Confucian knowledge still enjoyed an important status in daily curriculums. Students were required to take subjects of Chinese, Confucian Classics and Chinese History, and to devote their leisure time to memorizing Confucian literary classics. The importance of Chinese was also reflected in the admission policy at Fujian Naval College. All the students had to reach a certain threshold level of Chinese proficiency in entrance examinations before they commenced their study at the College. Thus, attaching importance to students' Chinese proficiency at Fujian Naval College provided an invaluable example to other modern government schools, and responded to conservative officials' criticisms about the low status of Confucian knowledge in the curriculum of China's modern schools.

5.4 Chapter summary

This chapter presents a detailed account of bilingual education in late imperial China during the Self-Strengthening Movement. In contrast with the period of Opium Wars when only mission schools provided foreign language education, the period of Self-Strengthening Movement witnessed the earliest attempt of the Qing government to develop foreign language education in mainland China.

The Qing government's attitudes towards foreign languages and western knowledge gradually altered in this historical period. In the post-Opium Wars period, developing foreign language education was initially an important solution for the Qing government to overcome the disadvantage in diplomatic talks and treaty negotiations. Since the Chinese scholar-officials did not understand foreign languages, they found it difficult to communicate with western envoys and to assert their rights in diplomatic negotiations. Thus, the urgency of overcoming communicative barriers initiated the development of foreign language education in government schools to train translators and diplomats in China. Later, a group of progressive scholar-officials in the imperial and provincial government realized that those diplomats and translators only acted as "intermediaries" in the Sino-western communication. They were unable to save China from colonization and what China urgently needed was to catch up with the western powers in military technology. Having convinced Empress Dowager Cixi of the importance of western knowledge to safeguard her feudalistic control, the progressive officials started to launch a modernization movement to develop military technology in late imperial China. Western technical education thus became a core component of the modernization movement.

In spite of the fact that there were no explicit policies on modern education in this historical period, the education practices in the premier government schools were emblematic of the government attitudes towards foreign languages, modern science and technology. It can be seen from the relevant memorials and imperial edicts that Empress Dowager Cixi, who had the highest power in late imperial China, showed her strong determination to develop modern education in government schools. The supportive attitude of Empress Dowager Cixi towards western education were not only reflected in her final decision on the inclusion of western content subjects in the curriculum of Peking Translation College, but also her consent for allocating government funds to support Fujian Naval College. Thus, despite her

“feudalistic” or “monarchy” intention of consolidating the regime through modern education, Cixi’s supportive attitude ensured the development of foreign language education and western technical education in late imperial China.

Another noteworthy issue in this chapter was the emergence of bilingual education in the government schools. Because of the limited availability of Chinese teachers who understood western knowledge and the shortage of corresponding Chinese technical terminologies in the Self-Strengthening Movement, foreign languages were chosen as the MOI for western content subjects in the premier government schools. Although western education was the focus of education practices in modern schools, the premier government schools also offered Chinese-related subjects and viewed them as an important part of the whole curriculum. The integration of western subjects and Chinese-related subjects thus constituted the bilingual curriculum. It responded to the harsh criticisms of conservative scholar-officials about excessive westernization in government schools, and also achieved the dual purposes — pursuing western knowledge for practical purposes and maintaining national identity in the Self-Strengthening Movement. The education practices of the two premier government schools reflect that practitioners adopted a variety of means to enhance the effectiveness of bilingual education in the aspects of curriculum design, faculty team organization, textbook choices and assessment. The practices of bilingual education in the premier government schools provided instructive models for other foreign language schools and technical schools in the Self-Strengthening Movement, and afforded significant insights to policymakers and practitioners of bilingual education in the period that followed.

Chapter Six

The Bilingual Education Policies and Practices after the Sino-Japanese Naval War (1895-1911)

6.1 Chapter introduction

After the humiliating failure of the Boxer War¹¹¹, China was forced to sign the unequal treaty “The Boxer Protocol of 1901 ” with the Eight-Nation Alliance¹¹² and Belgium, Spain and the Netherlands, which made China fall further into the “semi-colonial” trap. In order to stabilize its regime against internal rebellions and external threats, after six years’ reflection and preparation, the Qing government started to implement a series of political, economic, military, cultural and educational reforms since 1901. The reform was called “New Policies” Reform, also known as the “Late Qing Reform”. During the “New Policies” Reform, bilingual education was the main form of modern education and a primary approach to absorbing the essence of western knowledge in China.

Different from the Self-Strengthening Movement, in the post-1895 period, the spectrum of bilingual education expanded from western military technology to western politics and law. Thus, the period witnessed the emergence of a few comprehensive modern schools and universities, in which western politics and law were integral components of the curriculum. Another notable change in this period was the gradual expansion and systematization of bilingual education all over the imperial China. During the “Self-Strengthening Movement”,

¹¹¹ **The Boxer War** was the war between China and the foreign countries resulting from an anti-imperialist uprising of the Militia United in Righteousness (Yihetuan, 義和團) that took place in China from 1899 to 1901, or called “Boxer Rebellion”義和團運動.

¹¹² **The Eight-nation Alliance** was an allied army including the troops from Austria-Hungary, France, Germany, Italy, Japan, Russia, the United Kingdom and the United States.

foreign language schools and military technical colleges were established only in coastal places or treaty ports. It suggested that bilingual education did not acquire an equal status as traditional Confucian education in China, particularly in large hinterland areas into which foreign languages, modern science and technology did not penetrate (Sang, 2007). Even in the coastal places where modern schools were established, due to the absence of central planning of modern education during the Self-Strengthening Movement, the educational standards and levels were diverse. By contrast, during the “New Policies” Reform, the establishment of the first national bilingual education (modern education) system facilitated the systematization and popularization of bilingual education in China. It also reflected the positive attitudes and active participation of the Qing government in promoting bilingual education at the turn of the 20th century.

The main proposals and policies of bilingual education during the “New Policies” Reform also had a considerable impact on social change, leading to the dissemination of modernization ideas in the Confucian society. Thus, a detailed investigation of the “New Policies” Reform will help us to examine the inherent link between the development of bilingual education and social change in late imperial China, and to identify the dynamic role and status of foreign languages in China’s educational modernization.

This chapter presents a detailed historical account of the bilingual education policies and practices after the Sino-Japanese Naval War (in 1895), particularly in the “New Policies” Reform. The following section (Section 6.2) outlines the background to the development of bilingual education in the “New Policies” Reform including the failed “Hundred Days’ Reform”, the influential proposals for educational reforms and the outbreak of the Boxer War as a direct catalyst for the “New Policies” Reform. Section 6.3 details the establishment of the first national bilingual education system in China — the “Guimao Education

System” (‘癸卯學制’) as the main government policy of bilingual education in this period. Section 6.4 presents an account of the bilingual education practices in three premier universities established after the Sino-Japanese War to examine the congruence between education policies and practices, and the impact of education practices on the revision and rectification of bilingual education policies in the last few years of Qing Dynasty.

6.2 The background of the “New Policies” Reform

6.2.1 The Hundred Days’ Reform in 1898

In order to examine and interpret the bilingual education policies and practices during the “New Policies” Reform, we should sketch the socio-political background before the Reform. The Hundred Days’ Reform in 1898, albeit failed and short-lived, generated many educational proposals that were later referenced in the “New Policies” Reform and lent enormous impetus to revolutionary forces in the final years of Qing Dynasty.

6.2.1.1 Reflections on the failure of the Self-Strengthening Movement

On April 17, 1895, due to the fiasco in the Sino-Japanese Naval War, the Qing government was forced to sign *Treaty of Shimonoseki* with the Empire of Japan. As stipulated in the treaty, the Qing government had to pay a sum of 200 million taels as a war indemnity to Japan and cede Formosa (Taiwan) to Japan. The fiasco shocked the Chinese scholar-gentries as Japan had been for long viewed as a small and inferior neighbor to China. In the Sino-Japanese Naval War, the Japanese Navy surprisingly destroyed the Chinese Northern Fleet, a fleet that had been viewed as an unbeatable fleet in late imperial China. Worse than expected, the defeat resulted in the scramble for “territories” by foreign powers. China would have probably been a total colony of western powers in the near future if no fundamental changes had taken place (Li, 2015).

The defeat of the Sino-Japanese Naval War awakened the scholar-officials of the Qing government to realize its considerable gap from the foreign powers on all fronts. They started to reflect on the failure of the naval War and mull over why previous modern education and modernization projects in the Self-Strengthening Movement had not produced satisfactory results. There were two different views on modern education in the Self-Strengthening Movement among the Chinese scholar-officials in the post-1895 period. Some conservative officials in the Qing government who had originally opposed to modernization argued that the Self-Strengthening Movement led to the fiasco of the Sino-Japanese Naval War. The modernization projects including shipbuilding, wiring construction and arms production were all superficiality of western knowledge and their massive expenditure placed a heavy financial burden on the country (Tan Sitong: ‘A letter to my teacher Ouyang Banjiang’).

Some progressive scholar-officials argued that the Self-Strengthening Movement should not be blamed for China’s defeat in the Sino-Japanese Naval War since China’s situation might have been worse without military modernization. The problem was that China’s modernization scheme in the Self-Strengthening Movement was limited to military technology and lacked radical institutional reforms. The Self-Strengthening Movement in China took place almost in the same period as the Meiji Restoration in Japan. By comparing the two imperial reforms in China and Japan, we find that during the Meiji Restoration, Japan adopted the model of western government and set up a parliament. In contrast, China declined to reform the autocratic government system, but was only preoccupied with transferring western military techniques that could not fundamentally alter China’s endangered situation and achieve the goal of modernization (Yang, 2011). As detailed in the memorial of Li Duanfen (李端棻), the Vice Minister of Justice,

“The modern schools established in the Self-Strengthening Movement only focused on teaching foreign languages. However, the root cause of western strengthening, namely the way to govern a country and enrich people, are not included in the curriculum of those schools.”

(Li Duanfen: ‘A memorial on the establishment of modern schools in China’, *The Imperial Records in the Governorship of Emperor Guangxu*, 4, p. 3791)

(‘諸館皆徒習西語西文，而於治國之道，富強之原，一切要書，多未肄及，其未盡一也。’)

The progressive officials’ viewpoints on the limitation of modern education in China received increasing support from the social elites and scholar-officials in the government, which laid the social basis for the institutional reform.

6.2.1.2 The yearning for institutional reform in late imperial China

Having recognized the limitations of the Self-Strengthening Movement, a number of governors and social elites called for a political and institutional reform in China. On May 2, 1898, thousands of patriotic imperial examination candidates signed a ten-thousand-word petition to the Emperor, calling for the abrogation of *Treaty of Shimonoseki* and the implementation of institutional reforms in China. It initiated the Gongche Shangshu Movement (公車上書). Although the petition was dismissed, greatly influenced by the Gongche Shangshu Movement, the reformist ideas were gradually accepted by many senior officials in the Qing government and Emperor Guangxu (光緒皇帝)¹¹³, which created a favorable context for an institutional reform in late imperial China (Zhang, 2014).

¹¹³ **Emperor Guangxu** (1871-1908) was the ninth emperor in Qing Dynasty. He was the nephew of Empress Dowager Cixi and was under great influence of Cixi. Thus, although he was the de jure ruler over China from 1875 to 1908, he did not take over the highest power as Cixi did.

On June 11, 1898, with the help of progressive senior scholar-officials in the Qing government, Kang Youwei (康有為)¹¹⁴ was allowed to come into the imperial court and made his constructive suggestions for radical institutional reforms to Emperor Guangxu. Kang Youwei's petition signaled the beginning of the Hundred Days' Reform in late imperial China. Among the long list of Kang Youwei's suggestions, two were concerned with educational reforms: (1) abolishing the Imperial Examination, and (2) establishing a modern education system and a modern university in mainland China. The two suggestions addressed the growing criticism from those social elites and progressive scholar-officials about the Imperial Examination. The thousand-year-old Imperial Examination was criticized for its outdated content as it ignored technical expertise but only focused on the knowledge of classics and the empty literary exercises of "Eight-legged Essay" (Ayers, 1971). Some radical reformists also criticized that China lacked a long-term planning of a centralized education system including detailed requirements for curriculum designs, syllabus and teaching materials (Tan Jixun: 'A memorial on the confusion state of modern schools'). Those modern schools in the Self-Strengthening Movement were even criticized to be, by level of education, equal to primary and secondary schools in western countries (Chen Qizhang: 'A memorial on making changes to the curriculum of Peking Translation College'). In spite of the fact that those criticisms may display the personal bias of the scholar-officials as they felt ashamed about China's defeat in the naval war, they explained the importance of formulating a long-term plan of modern education and establishing a comprehensive education system in China. The modern education in late imperial China should not be limited to establishing a few language schools or technical schools, but should develop systematically based on a comprehensive and effective education system (Sun

¹¹⁴ **Kang Youwei** (1858-1927) was an influential scholar, social elite and political reformist in late imperial China.

Jia'nai: 'A memorial on reconsidering and preparing to establish schools that comply with the imperial edict').

6.2.1.3 The failure of the Hundred Days' Reform

The ideas for the institutional reform in China during the Hundred Days' Reform met harsh opposition and criticisms from the conservative reformists who condemned the reform as too radical and impractical. Conversely, the conservative reformists proposed a relatively mild, moderate and gradual course of reform (Karl & Zarrow, 2002). With the backing of conservative officials in the Qing government, Empress Dowager Cixi engineered a coup d'état, secluded the young emperor Guangxu in Yingtai (瀛臺), a house of the Imperial Palace, and executed six reformists¹¹⁵, which put an end to the Hundred Days' Reform (Black, 2013). Fortunately, with the help of British and Japanese ambassadors to Beijing, the two principal leaders of the Hundred Days' Reform — Kang Youwei and Liang Qichao (梁啟超), fled to Japan and narrowly escaped the capture. They founded the Baohuang Society (保皇會) to disseminate ideas of political reforms and constitutional monarchy among the Chinese students and residents in Japan (Zarrow, 2005).

The short-lived Hundred Days' Reform demonstrated the strong determination of radical reformists in "trying to help the reeling dynasty cope with the challenges of modernity" (Tang & Elman, 1987, p. 206). The failure of the Hundred Days' Reform was a natural result since it abandoned gradualism in reforms and threatened the Qing regime. However, the radical reformists' proposals concerning the education reform inspired many imperial

¹¹⁵ The six reformists were Tan Sitong (譚嗣同), Kang Guangren (康廣仁), Lin Xu (林旭), Yang Shenxiu (楊深秀), Yang Rui (楊銳) and Liu Guangdi (劉光第). They were also called the "Six Gentlemen (戊戌六君子)".

governors to reconsider the problems of education in China. The educational reformists in the following “New Policies” period also gained illuminating insight from the proposals from radical reformists in the Hundred Days’ Reform.

6.2.2 Zhang Zhidong’s proposal for the educational reform

Apart from the radical reformists’ ideas on educational reform, the educational proposal of Zhang Zhidong (張之洞), one of the most influential scholar-officials in late imperial China, was also a cornerstone of the educational reform during the “New Policies” period (Li, 2013).

Zhang Zhidong was originally a member in the “Conservative Camp” headed by Empress Dowager Cixi, who had opposed any radical reforms and only cared about safeguarding her feudalistic control over China. However, Zhang Zhidong’s idea for combining traditional Confucian education and modern western knowledge, which was mooted and expounded in his representative essay “Quanxue Pian” (An Exhortation to Learning <勸學篇>), separated himself from the “Conservative Camp” and had a far-reaching impact on China’s educational reforms in the “New Policies” Reform.

Different from many scholar-officials in the “Conservative Camp”, Zhang Zhidong was a progressive scholar-official who advocated comprehensive educational reform in China based on the “critical re-examination of its institutions and substantial borrowings from the West” (Karl & Zarrow, 2002, p.79). In the post-1895 China, there were two radically different views on education. The radical reformists argued for substantially borrowing western knowledge and denying traditional Confucian knowledge, while the conservative scholar-officials adhered to the traditional Confucianism. Drawing insights from the

proposals of some scholar-officials and social elites such as Li Duanfen (李端棻), Chen Baozhen (陳寶箴) and He Qi (何啟), Zhang Zhidong attempted to reconcile the two extreme views and seek a balance between western knowledge and Confucian knowledge. In the essay “Quanxue Pian”, he proposed, we should “take Confucianism as the fundamental principles (Ti) and acquire western knowledge for practical use (Yong)”¹¹⁶.

The “Ti-Yong formula” reflected Zhang Zhidong’s educational ideas on the relationship between Confucian knowledge and western knowledge. He asserted that all the Chinese students should study both traditional Confucian knowledge and modern knowledge. The former included Confucian classics, Confucian ethics, Chinese history, political treaties, Chinese traditional mathematics and geographical studies while the latter included western languages, western science, technology and western social sciences. With respect to the sequence of learning, Zhang emphasized that students should have a solid foundation in Chinese before acquiring western knowledge. Only those students who had a solid foundation in Chinese language and Confucian knowledge could be “eligible” for learning western languages and receiving western education:

“Nowadays if we want to strengthen China and preserve Chinese [knowledge], we must study Western [knowledge]. Yet, if someone studies Western [knowledge] without first firmly being rooted in Chinese [knowledge] to cultivate its character, he may become a rebel leader if he has a strong body and a slave if he is weak. He will cause more harm to society than a person who knows nothing about Western [knowledge].”

(‘Following the ‘Sequence’ chapter’, *The Complete works of Zhang Zhidong*, p. 27. It was translated by Tze-ki Hon, printed in Karl & Zarrow’s *Rethinking the*

¹¹⁶ The original text is “中學為體，西學為用”.

1898 Reform Period: Political and Cultural Change in Late Qing China, 2002,
p. 89)

Zhang Zhidong's plan for educational reform not only balanced the intense debate between the reformists' calling for western education and the conservative officials' adherence to Chinese education, but also paved the way for educational transformation in the "New Policies" Reform. It exerted considerable effects on the establishment of modern education system in late imperial China, and had particular significance in maintaining Chinese cultural identity and historical continuity against the trend of total westernization and colonization in the early 20th century. His proposal inspired the Chinese to curb the increasing sense of cultural inferiority among them in the post-1895 period, particularly in some coastal places where the Chinese youngsters had a propensity for breaking the Chinese traditions, living a westernized life and even desiring to acquire foreign citizenship (Hon, 2002). Zhang Zhidong's middle, mild and balanced road to educational reforms in post-1895 China, which separated him from the radical reformists' way of overthrowing the Confucian sociopolitical order and formed a new camp of "moderate reformists", created a social milieu in which Confucian knowledge and western knowledge could be seen as a whole rather than being mutually exclusive. It was his relatively moderate reforming ideas that gained the support from Empress Dowager Cixi and he was thus appointed the chief educational policymaker during the "New Policies" period (Zhu, 2012).

6.2.3 The direct catalyst for the "New Policies" Reform — the Boxer War

Against the backdrop of severe disruptions caused by the encroachment of foreign powers, the Militia United in Righteousness (known as the 'Boxers') was established in 1899 to expel or exterminate foreigners in China (David, 2012). Having heard that western countries would colonize China through armed invasion, Empress Dowager Cixi, who was

originally hesitant about the militia rebellion, supported the Boxers and determined to expel all the foreigners living in China. As stated in an imperial decree on June 21, 1900, China declared war with the foreign powers and dispatched troops to siege foreigners and Chinese Christians in the Legation Quarter (Huang, 2006). The imperial China's proactive step in the war gave the Eight-Nation Alliance an opportunity to bring 20,000 troops armed with modern military weapons to China. They defeated the Imperial Army and captured the capital Beijing on August 14, 1901. Less than a month later, the Qing government was forced to sign the *Boxer Protocol of 1901*. As stipulated in the *Protocol*, foreign troops were allowed to be stationed in Beijing to protect their citizens in China and the Qing government had to pay war indemnity as much as 450 million taels of silver over 39 years (Huang, 2006). During the war, Empress Dowager Cixi fled to Xi'an in order not to be captured by the allied foreign troop. Confronted with the foreign threats and the possible fate of total colonization, Cixi decided to launch a series of political, fiscal, military and educational reforms to save the country from colonization and maintain her control over China.

On January 29, 1901, although the Boxer War did not end, Empress Dowager Cixi issued an edict on institutional reforms in the name of Emperor Guangxu¹¹⁷, which initiated the "New Policies" reform. In the edict, Cixi pointed out the urgency of implementing institutional reform in late imperial China:

"The institutional reform is not a novelty in China's history but a custom for dynasties. Despite the differences in the content of institutional reforms in different historical periods, every regime has the tradition of implementing institutional reforms."

¹¹⁷ The edict was in the name of Emperor Guangxu because Empress Dowager Cixi intended to deceive the public that Emperor Guangxu was still the controller in China and concealed the fact that Emperor Guangxu was secluded in the Imperial Palace.

(Zhu Shoupeng: *The Imperial Edicts during the Emperor Guangxu Governorship*, 1894, pp. 8-10).

(‘伊古以來，代有興革。當我朝列祖列宗，因時立制，屢有異同。’)

The edict showed determined resolution from the highest policymaker during the “New Policies” Reform in learning from the West and implementing the educational reform. However, in the same edict Empress Dowager Cixi also asserted that the institutional reform should be based on traditional Confucian principles and ethics. She added that the Hundred Days’ Reform was not a reform but an act of disrupting the imperial China (Huang, 2006). This balanced view represented in the edict dovetailed Zhang Zhidong’s “Ti-Yong” formula and separated Cixi’s “reform” from the radical reformists’ Hundred Days’ Reform (Li, 1999), which also set the tone for the “New Policies” reform.

In the following section (Section 6.3), I will introduce two major education policies established in the “New Policies” Reform (namely the ‘Renyin Education System’ in 1902 and the ‘Guimao Education System’ in 1904) and concentrate on the part of bilingual education in these two education systems.

6.3 The establishment of the first bilingual education system in late imperial China

6.3.1 Imitate the education model of Japan

After the military defeat in the Sino-Japanese Naval War, China took the war enemy Japan as the role model of reconstruction and modernization. Since Japan became a militarily and economically power through modern education during the Meiji Restoration, China attempted to imitate Japan’s education model to modernize the whole country (Reynolds, 1993; Wu 1902). In comparison with the western countries, Japan was a better model for

China's modernization. Japan and China were geographically and culturally close to each other, which made it convenient for China to import Japan's textbooks on modern knowledge, recruit Japanese teachers to China's modern schools and send students to Japan for overseas study (Miu, 1903; Yao, 1898).

In order to imitate Japan's model of modern education, the Qing government sent an educational mission to inspect the modern education system and modern schools in Japan. China's very first educational mission to Japan could be traced to January, 1898, when the mission headed by Yao Xiguang (姚錫光)¹¹⁸ was sent out by Zhang Zhidong (張之洞), the then Governor-general of Liang Jiang (兩江總督). The educational mission was dispatched to have a two-month inspection to more than 60 Japanese schools, with a particular focus on the education practices of the academic disciplines related to western politics and technology such as politics, law, military education, navigation, agriculture, engineering, forestry, medicine, mining, electronics, railway construction, chemistry and commercial science (Zhang, 1963).

Having returned to China, Yao Xiguang published a book called *Dongying Xuexiao Jugai* (*An Introduction to the Modern Schools in Japan*, <東瀛學校舉概>), in which he gave a detailed account of Japan's modern education system including state-funded primary schools, secondary schools, universities, military schools, industrial schools and private schools. Although the book had a huge impact on the Chinese educational reformists' minds (Keishū, 1970; Tian & Huo, 1988), it did not devote a special section to the bilingual education practices in Japan, probably because the focus of the educational mission was not on bilingual education. Nonetheless, in the memorial "On the inspection of Japan's modern

¹¹⁸ Yao Xiguang (1857-1921) was a well-known military strategist and politician in late imperial China.

schools” (<查看日本學校大概情形折>), Yao prioritized the importance of foreign language learning in students’ academic study and professional development:

“Japan’s modern schools draw reference to schools in western countries. ... Upon entering secondary schools, students study western languages to read western books, acquire western knowledge and study abroad in the future. Also, all the excellent graduates from Japan’s modern universities are sent to further their education in western countries by government funding.”

(Yao Xiguang: ‘A memorial on the inspection of Japan’s modern schools’, *The Historical Records of China’s Understanding to the Foreign Powers*, 2, p. 34)

(‘日本各學校大率取法泰西。。。至學生入中學校以後，必授以西文西語，固以備異日觀覽西書，研究西學，亦以為其學成出洋之藉。是以日本凡學業大成以後，無不資遣出洋’)

Apart from foreign language education, Yao also found that Japan attached great importance to native language education in modern schools:

“In Japan’s modern schools, though all the students learn western languages, they are required to focus on learning the native language. ... The knowledgeable people should be the ones who have a solid basis of their native language, absorb the essence of western knowledge but are not assimilated into western culture. They are entirely different from some students (in British colonies) who gain western expertise but deny all knowledge from their mother country.”

(Yao Xiguang: *An Introduction to Japanese Schools*, 1898, pp.17-21).

(‘日本學校，雖皆習西文，而實以其本國文為重。。。必學有根底之人，故能化裁西學而不為西學所化，視棄本國學術而從事西學者，亦實大相徑庭’)

In Yao's report above, he identified different roles of foreign language education and native language education in Japan's modern education system and drew a definite distinction between colonial language education in British colonies and modern education in independent countries. The report had a significant impact on the establishment of China's first bilingual education system, particularly in handling the relationship between Chinese language education and foreign language education.

Despite the fact that the Hundred Days' Reform was blocked on June 21, 1898, China's exploration for educational reforms never stopped. Since 1901, a growing number of educational missions had been dispatched to Japan (Li, 1902). At the end of 1901, a special mission consisting of Luo Zhenyu (羅振玉) and six other educators made a two-month visit to Japan with the primary purpose of collecting textbooks on modern education from Japan's schools (Zhang, 1901). The trip was viewed as one of the most comprehensive educational visits in late imperial China (Reynolds, 1993). During the visit, the Chinese representatives had frequent communication with major Japanese educators and government officials, and attended lectures delivered by Kanō Jigorō, the Director of Primary Education for the Ministry of Education in Japan. They also assembled a wide array of policies, law, regulations for different levels of Japan's educational institutions and sent many textbooks or teaching materials back to the modern schools in China (Hiroshi, 1990; Luo, 1902; Su, 1976).

After the mission had returned to China, Luo Zhenyu gave a detailed account of Japan's modern education system in the 19 articles published in *Jiaoyu Shijie* (*Education World*), the first modern journal of education in China. With a focus on the education laws and regulations at various levels and types of schools in Japan, Luo Zhenyu reported his findings from the general education system to curriculum designs of schools in Japan. In terms of

bilingual education, Luo Zhenyu aired his particular views on the starting age of learning foreign languages and the appropriate MOI at different levels of institutions:

“In primary schools, teachers should teach subjects in students’ native language. It is not until secondary schools that students start to learn foreign languages to prepare for specialized study in the future. (When students go to university), they take western content subjects with foreign languages as the MOI.”

(Luo Zhenyu: ‘On the education system’, *Education World*, 1902, p.1)

(‘小學教育全用本國文字語言；至中學校始授外國語，為受專門學科之預備；專門教育然後以外國文字語言教授。’)

Wu Rulun (吳汝綸), a famous educationalist in late imperial China and one of the members in the education mission in May 1902, lent his support to Luo Zhenyu’s view that native language education should not be removed from a modern education system. He also proposed a precondition of bilingual education in China — standardization of the Chinese language. On October 12, 1902, in his private correspondence with Zhang Baixi (張百熙), Minister of Education in late imperial China from 1901 to 1907, Wu Rulun pointed out the necessity of standardizing Chinese before popularizing modern knowledge and foreign languages in China:

“In Japan, a standardized national language helps people, no matter whether he is a cart driver or a maid servant in a hotel, to pronounce Japanese characters, and thus people can read Japanese books and newspapers. In contrast, the written form of Chinese is so abstruse that children find it difficult to understand. It is thus important to take the Mandarin (Beijing dialect) as the standard form of Chinese. A standardized language, as famous educationalists in China have maintained, is a key to forging the national identity in China.”

(Wu Rulun: 'A letter to Zhang Baixi', *Wu Rulun's Correspondences*, 4, pp. 14-16)

(‘日本之假名字，婦孺學之，兼旬即能自拼字畫，彼此通書；今日本車馬夫役、旅舍傭婢，人人能讀書閱報，是其證也，中國書文淵懿，幼童不能通曉，此音盡是京城聲口，尤可使天下語音一律，今教育名家率謂一國之民，不可使語言參差不通，此為國民團體最要之義’)

Apart from highlighting the importance of standardizing Chinese, Wu Rulun also suggested establishing a three-tier national education system to popularize and systematize modern education including bilingual education in China:

“If we intend to cultivate Chinese talents that can compete with foreigners, we should ensure that modern education in China advances step by step, namely proceeds in an orderly way from primary education to secondary education and then to tertiary education without any haste. (With respect to the objectives of modern education at different levels), primary education not only lays a foundation for secondary and tertiary education, but also imparts and popularizes requisite knowledge to Chinese students. Parents who do not send their children to primary schools should be penalized. ... Secondary education is an important transition period from which students acquire general knowledge on modern science. The main objective of tertiary education, which is different from popularizing knowledge in (primary education), is to teach students Chinese and European languages and cultivate talents for our country.”

(Wu Rulun: 'A letter to Zhang Baixi', *Wu Rulun's Correspondences*, 4, pp. 14-16)

(‘欲令後起之士與外國人才競美，則必由中小學校循序而進，乃無欲速不達之患；而小學校不惟養成大中學基本，乃是普國人而盡教之，不入學者罰。。。’)

至於將求成學，則必讀華歐文字，此是造就成材，與普教全國人民當分為二事，而中學校普通科學為之階梯’)

The choice of textbooks is another primary concern for the Chinese educationalists. In the journal *Education World*, Luo Zhenyu pointed out that the choice of textbooks should depend on the subjects:

“Modern schools in China should import Japanese textbooks, translate the textbooks and revise them if necessary. For subjects such as mathematics, physics, chemistry gymnastics and painting, original Japanese textbooks can be used without any revisions. For the subjects of China’s history and geography, Japanese textbooks are translated and then the translated books should be revised according to the style of Japanese textbooks. For the subjects of natural sciences, zoology, botany and mining as examples, the Japanese books must be revised to match China’s contexts and students’ prior knowledge. We should be neither careless nor too cautious to import and revise the textbooks from Japan.”

(Luo Zhenyu: ‘A diary of the two-month trip in Japan’, *Education World*, p. 23).

(‘今中國編定教科書，宜先譯日本書為藍本而後改修之，如算學、理化、體操、圖畫等可直用東書；若本國之歷史、地理，亦必先譯東書，師其體例而後自編輯之；至博物等科亦必修改，譬如動、植、礦三者，必就本國所產及兒童所習見者教授之，故不能全用他國成書也，又中國今日編教科書，不可草率，亦不可太矜慎’)

Inspired by Luo Zhenyu’s views of textbook choices, Zhang Zhidong suggested that China should establish a government agency affiliated to the Ministry of Education to examine and authorize the textbooks and then send the books to the various modern schools in China (Zhang, 1902). Luo Zhenyu and Zhang Zhidong’s viewpoint on the choice of textbooks

corresponded to the great mass fervor for learning from Japan in the post-1895 China. In fact, the educational reform in post-1895 China heavily modeled on Japan's modern education. Japan's education regulations such as the *1890 Elementary School Order* (Shogakko rei) laid a basis for the establishment of the first modern education system in China in the "New Policies" Reform (Reynolds, 1993). Nevertheless, despite the overwhelming influence of Japan's modern education on China, the educationalists in late imperial China did not copy Japan's model wholesale. The content of Japanese textbooks, for instance, would be subject to revision according to China's needs and the practical context.

6.3.2 The promulgation of the Renyin Education System in 1902

Having examined the reports of education missions on Japan's modern education, Zhang Baixi (張百熙), who was appointed as Minister of Education in 1901, drafted regulations on modern schools and submitted the memorial on establishing a modern education system in China to the throne. Approved by Empress Dowager Cixi, the "Authorized School Regulations", which was also called the "Renyin Education System" (壬寅學制), were promulgated on August 15, 1902, and viewed as the first modern education system in China. Specifically, the "Authorized School Regulations" (<欽定學堂章程>) consisted of "Regulations on Kindergartens" (<欽定蒙學堂章程>), "Regulations on Primary Schools" (<欽定小學堂章程>), "Regulations on Secondary Schools" (<欽定中學堂章程>), "Regulations on Pre-university Schools" (<欽定高等學堂章程>), "Regulations on Universities" (<欽定大學堂章程>) and "Regulations on Student Enrollment and Entrance Examinations" (<欽定考選入學章程>).

As a comprehensive modern education system, the "Renyin Education System" also imposed regulations on the bilingual education practices in different types of schools. It

was thus viewed as the first modern bilingual education policy in late imperial China. Specifically, the Renyin Education System consisted of three important parts related to bilingual education: (1) the relationship between western education (including foreign language education) and Chinese education (including Chinese language education); (2) the requirements for foreign language education at different levels of schools; and (3) the teacher employment for bilingual education.

6.3.2.1 The relationship between western knowledge and Confucian knowledge

At the very beginning of Zhang Baixi's memorial "On the promulgation of modern school regulations" (<進呈學堂章程折>), it pointed out both the limitation of previous traditional education in China and the potential advantages for acquiring western knowledge:

"Since the Chinese Imperial Examination System was entrenched in Sui Dynasty, Chinese scholars have been preoccupied with writing abstract poems and essays. Traditional Confucian academies, the nominal institutes for knowledge, become the places in which students practise their skills in passing the Examination. Though China has different religious, political beliefs and social customs from the West, it is important for Chinese to capture the essence of western knowledge to serve the country."

(Zhang Baixi: 'A memorial on the promulgation of modern school regulations', *The Imperial Records during the Emperor Guangxu Governorship*, pp. 4902-4903).

(‘隋設進士科以來，士皆殫精神於詩賦策論，所謂學校者，名存而已，雖中外政教風氣原本不同，亦不能不取其長，以期變通而盡利’)

Zhang Baixi's memorial indicated that the promulgation of the Renyin Education System was in essence similar to Zhang Zhidong's "Ti-Yong" formula in the educational reform. It

stressed the inclusion of western knowledge in the bilingual curriculum, and the modification of content in the Imperial Examination. Although the memorial did not dwell on the details of curricular design, desired students' foreign language proficiency at various levels of education and teacher employment in modern schools, the suggestions made in the memorial were later accepted in drafting the Renyin Education System.

The integration of western knowledge and Chinese knowledge could be reflected in specific regulations on curriculum designs in modern schools. As stipulated in the Renyin Education System, as Confucian knowledge was the basis of education in late imperial China, education in kindergartens and primary schools should center on Confucian knowledge, the Chinese language, calligraphy, China's history and traditional Chinese mathematics. The main educational objective of secondary schools, universities and specialized colleges was to impart modern western knowledge in various academic disciplines to students. The Renyin Education System also indicated the close link between foreign languages and western content subjects. Since foreign languages were essential tools to access western knowledge, translate foreign textbooks, study abroad and understand the lectures delivered by western teachers, the western content subjects at different levels and in different types of schools imposed different requirements on students' foreign language proficiency. Thus, the bilingual education policy was in some way an integral part of the Renyin Education System, which transcended general foreign language education, and linked language education with the absorption of western knowledge in schools. The parts of bilingual education in the Renyin Education System will be detailed in the following sections.

6.3.2.2 Foreign language education at different levels of schools

In contrast with previous modern schools that had no fixed regulations on levels of education and length of education, the Renyin Education System stipulated that modern

education should consist of six stages — Pre-school Education (4 years), Primary Education (6 years, 3 years for junior level and 3 years for senior level), Secondary Education (4 years), Pre-university Education (大學堂預科) (3 years), University Education (3 years) and Postgraduate Education (no fixed length). In addition to comprehensive schools at different levels, the Renyin Education System also imposed regulations on the length of education in specialized schools such as industrial schools, normal schools and officialdom schools. The details concerning length of education at different levels are shown in Table 6.

Table 6: The academic year and length of education at different levels of schools prescribed in the Renyin Education System

The Academic Year	Levels of Schools		
Not fixed	Postgraduate Schools		
18-20	Universities (divided into seven disciplines)		
15-17	Normal Schools Schools for Scholar-officials	Pre-university Schools	Senior Industrial Schools
11-14	Secondary Schools		Secondary Industrial Schools
8-10	Senior Primary Schools		Junior Industrial Schools
5-7	Junior Primary Schools		
1-4	Kindergartens		

(Source: Tao Xingzhi. (1922). *New Education*, 4(2), p.248)

Regarding foreign language education at different levels of schools, the Renyin Education System specified that students in kindergartens and primary schools, except for those in senior primary schools in treaty ports, should not learn foreign languages. Instead, in order to build a solid foundation in Chinese and Confucian knowledge, they were required to take the Chinese-related subjects such as “Chinese Ethics and Self-cultivation” (倫理修身), “Confucian Classics” (讀經), “Chinese writing” (作文), “Calligraphy” (習字) and “Chinese History” (史學). Nevertheless, the Renyin Education System stipulated that foreign language subjects in primary schools should be taught by Chinese teachers who were able to communicate with students in Chinese (Authorized School Regulations — Primary Schools).

As stipulated in the Renyin Education System, students should start to learn a foreign language when they entered secondary school. High foreign language proficiency helped students to access western knowledge and adapted themselves to the specialized study in universities or senior specialized schools in which most western content subjects were conducted in foreign languages. With respect to the weekly hours of foreign language education in secondary schools, the Renyin Education System stipulated that students should spend 9 hours on foreign languages every week, which occupied almost one fourth of the total coursework time in secondary education. An exception was made for junior normal schools, the Renyin Education System cut down 3 hours for foreign languages and added 3 hours for pedagogy and educational theory (‘Authorized School Regulations — Secondary Schools’, 1902).

According to the Renyin Education System, tertiary education consisted of pre-university education (3-year preparatory courses to universities) and university education. At pre-

university schools, no matter whether students studied in the Faculty of Politics¹¹⁹ or the Faculty of Science & Technology¹²⁰, they were required to take foreign languages as a compulsory subject. The hours of foreign language subjects occupied more than 60 % of the total coursework time every week at pre-university schools ('Authorized School Regulations — Pre-university Schools', 1902), which indicated the high status of foreign languages subjects at pre-university schools. Students are even encouraged to learn two foreign languages at pre-university schools. Apart from English as a core subject, students could also choose a foreign language subject from German, French, Russian and Japanese as an elective subject. The Renyin Education System also listed foreign languages as core subjects for university students. For students in universities, be it liberal arts students or science students, the hours of foreign language courses occupied almost one third of their weekly curriculum schedule. Specifically, for liberal arts students, every week they should spend 12 hours out of 36 hours studying foreign languages (5 hours for English and 7 hours for the second foreign language). Science students should spend 13 hours out of 36 hours studying foreign languages every week (6 hours for English and 7 hours for the second foreign language). ('Curricula & Subjects' in 'Authorized School Regulations — Universities', 1902).

6.3.2.3 The employment of foreign teachers and Chinese teaching assistants

As stipulated in the Renyin Education System, foreign languages subjects in secondary schools must be taught by foreign teachers as few Chinese understood foreign languages in the early 20th century. In light of the high expenditure on employing foreign teachers and the bleak financial situation of most modern schools in China after the Sino-Japanese Naval

¹¹⁹ **The Faculty of Politics** included the Department of Politics, the Department of literature and the Department of Business in universities.

¹²⁰ **The Faculty of Science & Technology** included the Department of Agriculture, the Department of Science, the Department of Design and the Department of Medicine.

War, secondary schools were allowed to stop employing foreign teachers if they found suitable Chinese teachers to replace foreign teachers in the future. Since late imperial China lacked sufficient Chinese teachers to impart western political and technical expertise to students, as stipulated in the Renyin Education System, foreign teachers should also be employed to teach western content subjects such as physics, logic, law, finance, chemistry, botanic and mining in universities. Most of foreign teachers were unable to speak and understand Chinese, so foreign languages were the MOI for western content subjects.

As stipulated in the Renyin Education System, modern universities, pre-university schools and secondary schools should employ a few Chinese as teaching assistants of foreign teachers to facilitate communication between foreign teachers and Chinese students. The proposed number of foreign teachers and teaching assistants hinged on the actual education practices and practical needs of different universities and secondary schools. In order to ensure the quality of bilingual education in China's modern schools, the Renyin Education System imposed strict regulations on hiring and supervising foreign teachers. For instance, as stipulated in Section "Teacher Employment" of the Renyin Education System, upon employment all the foreign teachers shall be subject to rigorous examinations by the Ministry of Education in late imperial China. If the foreign teachers were found to violate regulations of teachers' behaviors in and beyond class, they shall be fired immediately.

6.3.3 The promulgation of the Guimao Education System in 1904

The Renyin Education System was the first modern education system in the history of China (Mi & Li, 2014), but it was abolished in 1903 for various reasons. In the memorial dated January 13, 1904, Zhang Baixi listed three reasons for revising the Renyin Education System:

“Firstly, since modern education is at the embryonic stage of development in late imperial China, the courses should be slightly simpler and gradually expanded according to actual practices. Secondly, the administrators of modern schools in the provinces are mostly inexperienced in handling education affairs. Thirdly, all the students had been pursuing Confucian education for the Imperial Examination and did not receive the systematic modern education in primary and secondary schools. Thus, it is difficult for them to understand western expertise without a rudimentary knowledge and requisite foreign language proficiency.”

(Zhang Baixi: ‘A memorial on revisions to the Renyin Education System’, *The Imperial Edicts during the Emperor Guangxu Governorship*, 5, pp. 5125-5127)

(‘惟草創之際，規程課目，不得不稍從簡略，以徐待考求增補。至各省初辦學堂，管理學務者，既難得深通教育理法之人，而學生率皆取諸原業科舉之士，未嘗經小學堂陶熔而來’)

In light of the problems in the Renyin Education System, the memorial stated that it was not a realistic idea to transfer courses directly from other countries, but the policymakers should make adjustment depending on China’s contexts:

“If some courses cannot fit in China’s contexts, it is necessary to remove them from the course list. Similarly, we should change the name of courses when they are too difficult to understand. It is also required for us to reduce the number of courses if we find the courses increase students’ workload.”

(Zhang Baixi: ‘A memorial on revisions to the Renyin Education System’, *The Imperial Edicts during the Emperor Guangxu Governorship*, 5, pp. 5125-5127)

(‘擇其宜者用之，其於中國不相宜者缺之，科目、名稱之不可解者改之，其有過涉繁重者減之’)

Another bona fide reason for revising the Renyin Education System was that the newly promulgated system encountered fierce opposition from the Manchu conservative officials in the Qing government. The Manchu scholar-officials complained that Zhang Baixi, the only drawer of the Renyin Education System, was a scholar-official of Han ethnicity and thus he was inclined to draft education policies that displayed partiality for Han people. In order to achieve an equal status between the Manchu ethnicity and Han ethnicity, Rong Qing (榮慶), who belonged to the Manchu-dominated group of Plain Yellow Banner¹²¹, was appointed as another policymaker to draw the Guimao Education System. A special mention should be given to the relationship between Manchu and Han policymakers. Although Rong Qing had different opinions from Zhang Baixi in modern education, Zhang Baixi, who had higher prestige in the Qing government, played a dominating role in drawing the Guimao Education System (Ji & Chen, 2007).

The new regulations on modern schools, which was called “Presented School Regulations” (<奏定學堂章程>) or the “Guimao Education System”, were enforced on January 13, 1904. Specifically, the Guimao Education System consisted of “Regulations on Primary Schools” (<奏定小學堂章程>), “Regulations on Secondary Schools” (<奏定中學堂章程>), “Regulations on Pre-university Schools” (<奏定高等學堂章程>), “Regulations on Universities (including Postgraduate Schools)” (<奏定大學堂章程 附通儒院章程>), “Regulations on Normal Schools” (<奏定師範學堂章程>), “Regulations on Agricultural Schools, Industrial Schools and Commerce Schools” (<奏定農工商實業學堂章程>), “Regulations on Translation Colleges” (<奏定譯學館章程>), “Regulations on Officialdom Colleges” (<奏定進士館章程>) and “Principles of Education” (<奏定學務綱要>). The

¹²¹ **The Plain Yellow Banner** (正黃旗) was one of the the three “upper” banner armies. It was directly controlled by the emperor himself.

length of education at different levels of schools stipulated in the Guimao Education System is detailed in Table 7 on Page 324.

Compared to the Renyin Education System, the Guimao Education System was more detailed in setting forth the objectives of education at schools, drafting more explicit, specific and appropriate regulations on pedagogical issues in modern schools.

Table 7: The academic year and length of education at different levels of schools prescribed in the Guimao Education System

The Academic Year	Levels of Education		
22-25	Postgraduate Schools		
18-21	Senior Normal Colleges	Universities	Senior Industrial Schools
15-17	Translation Colleges	Pre-university Schools	Preparatory Programs attached to Senior Industrial Schools
10-14	Junior Normal Colleges	Secondary Schools	Secondary Industrial Schools
6-9	Senior Primary Schools		Junior Industrial Schools
1-5	Junior Primary Schools		
	Kindergartens		

(Source: Tao Xingzhi. (1922). *New Education*, 4(2), p. 249)

6.3.3.1 The objectives of education at different levels of schools

The Guimao Education System specified the objectives of education at different levels and in different types of schools:

“Senior primary schools and secondary schools are established to impart requisite knowledge to students. Pre-university schools and universities aim to impart specialized knowledge to students and cultivate talents for the country. In postgraduate schools, students continue their research in one specialized field and make their contributions to China’s innovations and advances in modern science and technology. In terms of specialized colleges, industrial schools aim to cultivate talents with professional skills, which is viewed as an important step to enrich the people and strengthen the country. Translation schools intend to train students to be proficient in foreign languages and be capable of reading foreign books. Graduates from translation schools will become interpreters or diplomats to negotiate with foreigners, or they will serve as language teachers in modern schools in the future. The School for Presented Scholars aims to equip scholar-officials with practical skills to handle the current national crisis and normal colleges are established to cultivate potential teachers in modern primary and secondary schools.”

(‘Presented School Regulations — Principles of Education’, 1904, pp. 1- 4)

(‘高等小學堂、普通中學堂，意在使入此學者通曉四民皆應必知之要端；高等學堂、大學堂，意在講求國政民事各種專門之學，為國家儲養任用之人材；通儒院，意在講究專門精深之義蘊，俾能自悟新理，自創新法，為全國學業力求進步之方；實業學堂，意在使全國人民具有各種謀生之才智技藝，以為富民富國之本；譯學館，意在通曉各國語文，俾能自讀外國之書，一以儲交涉之才，一以備各學校教習各國語文之選；進士館，意在使已經得第入官者，通知各種實學大要，以應濟時急需；師範學堂，意在使全國中小學堂各有師資’)

Having elucidated the educational objectives in different types of schools, the designers of the Guimao Education System focused on the curriculum design of modern schools. Since the present study focuses on the bilingual education policy, in the following sections I will focus on the parts of bilingual education in the Guimao Education System. The sections can be summarized by the following five topics: (1) the status of western knowledge vis-à-vis Confucian knowledge in the bilingual curriculum; (2) the status and role of foreign languages in the bilingual curriculum; (3) the choice of foreign languages at different levels of schools; (4) the choice of MOI; and (5) the choice of textbooks.

6.3.3.2 The status of western knowledge vis-à-vis Confucian knowledge in the bilingual curriculum

Similar to the Renyin Education System, the Guimao Education System had Confucian knowledge as the basis of education in China and viewed western knowledge as the supplement to Confucian knowledge. However, compared to the Renyin Education System, the drawers of the Guimao Education System elucidated the relationship between Confucian knowledge and western knowledge in more specific terms, and pointed to the correct sequence of learning. At the very beginning of the memorial dated January 13, 1904, Zhang Baixi mentioned:

“Administrators and curriculum designers of all modern schools should take Confucian ethics such as loyalty and filial piety as the fundamental school spirit. They should also attach great importance to the teaching of Chinese and Confucian classics to foster patriotism among students. Having laid a firm foundation in Chinese and Confucian knowledge, students should be taught foreign languages, western knowledge and specialized skills to enrich their mind, develop professional skills and serve the country in the future.”

(Zhang Baixi: 'A memorial on revisions to the Renyin Education System', *The Imperial Edicts during the Emperor Guangxu Governorship*, 5, pp. 5125-5127).

(‘無論何等學堂，均以忠孝為本，以中國經史之學為基，俾學生心術壹歸於純正，而後以西學瀰其智識，練其藝能，務其他日成材’)

The Guimao Education System stipulated that students should start reading Confucian classics in primary schools since the classics, like western religions, were the epitome of Chinese national spirit and basis of the country. The policy of attaching importance to Confucian knowledge was not merely a continuation of traditional education in China, but also modeled on Japan and the West. In the memorial “On the establishment of pre-university schools and the entrance requirements for the Normal School attached to Imperial Peking University”, Zhang Baixi maintained, “Administrators of modern schools in western countries were clear that their education was not to train all the students with extraordinary skills but to educate them to be loyal to their motherland.”¹²²

Although Confucian education enjoyed a high status in the Guimao Education System, the Guimao Education System also stipulated that courses on Confucian classics should be simple enough to help students understand the gist of the classics, not in conflict with western subjects. The policy of simplifying courses on Confucian education was conducive to striking a balance between Chinese knowledge and western knowledge in the bilingual curriculum. It also helped to enhance the effectiveness of Confucian education that had been harshly criticized to be too complicated and abstruse for students. The decision on simplifying Confucian education was also attributed to the fundamental idea of shortening

¹²² The original text is ‘歐美諸國知其然也，故其學校宗旨非欲人人為鴻博之才，乃欲人人為忠孝之士。’ It was translated from Zhang Baixi’s memorial “On the establishment of pre-university schools and the entrance requirements for the Normal School attached to Imperial Peking University”, printed in *Oriental Journal*, 1905, 4, pp. 67-69.

the length of education in China's modern education. As detailed in the correspondence with Zhang Baixi concerning the establishment of the national modern education system in late imperial China, Wu Rulun (吳汝綸) aired his views on the length of education and the simplification of Chinese education:

“It takes 15 or 16 years for students to acquire western knowledge and the same length goes to Chinese education. The combined length of education for both western knowledge and Confucian knowledge will be 30 years. ... Thus, it is essential to simplify our courses if we intend to enhance the effectiveness of modern education. ... The practice of simplifying Chinese-related courses should follow an order of priority (from the most important course to the least important course): China's history, the ancient literature, Confucian classics (*Confucian Analects*, *Mencius* and *Zuo Zhuan*), and other classics.”

(Wu Rulun: 'A letter to Zhang Baixi', in *Wu Rulun's Correspondences*, 4, pp. 15-16)

(‘今約計西學程度非十五六年不能卒業，吾國文學又非十五年不能卒業，合此二學，需用卅餘年之日力。。。然則欲教育之得實效，非大減功課不可。減課之法，於中學等則國朝史為要，古文次之，經又次之，經先〈論語〉，次〈孟子〉，次〈左傳〉，他經從緩。’)

The Guimao Education System also introduced regulations on the scope of western content subjects. As stipulated in the Guimao Education System, the western content subjects should include western law and politics because they are the essence of western knowledge. The expansion in education content prescribed in the Guimao Education System was similar to the proposals of those radical reformists in Hundred Days' Reform and Japan's modern education system. It thus suggested that the promulgation of the Guimao Education System

in late imperial China gained much insight from Hundred Days' Reform and the educational reform in Meiji Japan.

It can be concluded that the drawers of the Guimao Education System intended to achieve a balanced bilingual curriculum. The bilingual curriculum absorbed the essence of both Chinese knowledge and western knowledge instead of imposing heavier workload on students' shoulders.

6.3.3.3 The status and role of foreign languages in the Guimao Education System

The Guimao Education System accentuated the importance of foreign languages in the bilingual curriculum to access western knowledge. All secondary, pre-university schools and universities must teach students at least one foreign language. Even for those students majoring in Chinese-related disciplines in universities, foreign languages were still the core subjects because foreign language education provided students with a linguistic tool to bring together Chinese and western knowledge and compare similarities and differences in two different types of knowledge ('Presented School Regulations — Universities', 1904; 'Presented School Regulations — Pre-university Schools', 1904).

The high status of foreign languages was also reflected in the hours of foreign language education in modern schools prescribed in the Guimao Education System. For example, students in secondary schools should spend 8 hours (out of 36 hours) every week from Year 1 to Year 3 and 6 hours (out of 36 hours) every week in Year 4 and 5 on foreign language courses ('Presented School Regulations — Secondary Schools', 1904). The weekly hours of courses on different academic disciplines in secondary schools are detailed in Table 8 on Page 330.

The Guimao Education System also specified the content of foreign language education in secondary schools: “At first, teachers teach students pronunciation and spelling of words. Then they teach students how to read simple essays, do translation and improve their handwriting. Later, they teach students grammatical rules, writing and communication skills”¹²³ (‘Presented School Regulations — Secondary Schools’, 1904, p. 8).

Table 8: The weekly hours of subjects in secondary schools

<div>Academic Year</div> <div>Subject</div>	1	2	3	4	5
Confucian Ethics	1	1	1	1	1
Confucian Classics	9	9	9	9	9
Chinese Literature	4	4	5	3	3
Foreign Languages	8	8	8	6	6
History	3	3	2	2	2
Geography	2	2	2	2	2
Mathematics	4	4	4	4	4
Natural Sciences	2	2	2	2	-
Painting	1	1	1	1	-
Gymnastics	2	2	2	2	2
Physics & Chemistry	-	-	-	4	4

¹²³ The original text is “當先審發音、習綴字，再進則習簡易文章之讀法、譯解、書法，再進則講普通之文章及文法之大要，兼使會話、習字、作文”.

Finance & Law					3
Total	36	36	36	36	36

(Source: ‘Presented School Regulations— Secondary Schools’, 1904, pp. 1-20, the Bureau of Hubei Provincial Education)

Similar to secondary school students, students at pre-university schools should spend almost half of their weekly lecture time on foreign language courses since the fundamental objective of pre-university education was to help students lay a solid foundation in foreign languages and prepare for taking western content subjects in modern universities or senior specialized colleges (‘Presented School Regulations —Pre-university Schools’. 1904). The weekly hours of courses on three different types of academic disciplines at pre-university schools are shown in Table 9 on Page 332.

Table 9: The weekly hours of subjects at pre-university schools

The First Type of Academic Disciplines

(Classical Learning, Politics & Law, Literature, Commerce)

<div> <div>Academic Year</div> <div>Subject</div> </div>	1	2	3
Confucian Ethics	1	1	1
Confucian Classics	2	2	2
Chinese Literature	5	4	4
Military Science	1	1	3
Gymnastics	3	3	3
English	9	9	8
German/French ¹²⁴	9	9	8
History	3	3	3
Geography	3	2	-
Psychology & Logic	-	2	-
Law & Finance ¹²⁵	-	-	4

¹²⁴ Students who would major in German law, French law, German literature and French literature in universities took 4-hour English language course per week from Year 1 to Year 3, and 14-hour German or French language course per week in Year 1 and Year 2 and 12-hour German or French language course per week in Year 3.

¹²⁵ The students majoring in politics and law took the 2-hour “Latin” language course as elective courses every week in Year 3.

Total	36	36	36
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The Second Type of Academic Disciplines

(Natural Sciences, Industry, Agriculture)

<div>Academic Year</div> <div>Subject</div>	1	2	3
Confucian Ethics	1	1	1
Confucian Classics	2	2	2
Chinese Literature	3	2	3
Military Science	2	1	2
Gymnastics	3	3	2
English ¹²⁶	8	7	4
German/French	8	7	4
Mathematics	5	4	6
Painting	4	3	3
Physics	-	3	3
Chemistry	-	3	5

¹²⁶ Students who intended to major in forestry in universities did not take English courses.

Geology & Mining	-	-	2
Total	36	36	36 ¹²⁷

The Third Type of Disciplines (Medicine)

Academic Year Subject	1	2	3
Confucian Ethics	1	1	1
Confucian Classics	2	2	2
Chinese Literature	4	2	2
Military Science	2	1	2
Gymnastics	3	3	3
German ¹²⁸	13	13	9
English/French	3	3	3
Latin	-	-	2
Mathematics	4	2	-
Zoology & Botany	4	3	-
Physics	-	3	6

¹²⁷ Students who intended to major in zoology, botany, geology and veterinary medicine in universities were required to take a 2-hour course on Latin every week in Year 3.

¹²⁸ If students had a foundation in German, they were required to spend 9 hours every week in Year 1 and 2, 7 hours in Year 3 in German. They were also required to take a 7-hour English (or French) language course every week in Year 1 and 2 and a 5-hour English (or French) language course in Year 3.

Chemistry	-	3	6
Total	36	36	36

(Source: ‘Presented School Regulations — Pre-university Schools’, 1904, pp. 1-19, Bureau of Hubei Provincial Education)

In contrast with the high status of foreign language education in secondary schools, pre-university schools and universities, the Guimao Education System set rigid restrictions on foreign language education in primary schools so as to help students concentrate on learning Chinese and to avoid interference by foreign languages. In accordance with the Section of “Principles of Education” of the Guimao Education System,

“Primary schools educate students to show loyalty to the country and respect to Confucianism. All the subjects in primary schools should be conducted in Chinese. Students from Grade 1 to Grade 3 in primary schools are not allowed to learn foreign languages; otherwise, foreign language education will interfere with their native language education. Only the students of senior primary schools in treaty ports are allowed to learn foreign languages as extracurricular subjects if necessary.”

(‘Presented School Regulations — Principles of Education’, 1904, pp. 2-3)

(‘初等、高等小學堂，以養成國民忠國家、尊聖教之心為主；各科學均以漢文講授，一概毋庸另習洋文，以免拋荒中學根柢，惟高等小學堂，如設在通商口岸附近之處，自可於學堂課程時刻之外兼教洋文。’)

In summary, as stipulated in the Guimao Education System, foreign languages were compulsory courses for students at the secondary and tertiary level. A good command of foreign languages, as designers of the Guimao Education System thought, would facilitate

students' understanding of western knowledge and helped them acquire professional skills. While for students in primary schools, they were required to focus on learning Chinese and reading Confucian classics instead of being immersed in the English environment like the indigenous children living in British colonies.

6.3.3.4 The choice of foreign languages for bilingual education

As specified in the Guimao Education System, “the choice of foreign languages at pre-university schools depends on the language requirements of different academic disciplines in which they major in universities or specialized colleges”¹²⁹ (‘Presented School Regulations — Pre-university Schools’, 1904, p.16). Before students were admitted to universities, they had taken subjects at pre-university schools and chosen one academic discipline that they intended to study in universities from the following three categories: (1) Chinese Classical Learning, Politics and Law, Literature and Commerce; (2) Natural Sciences, Engineering and Agriculture; and (3) Medicine.

According to the Guimao Education System, students who chose the first type of academic disciplines were required to study English as the first foreign language, German or French as the second foreign language. Students who desired to study law were also required to learn Latin since it was a legal lingua franca in western countries in the 19th and early 20th century and an important language to gain expertise in western law (Ristikivi, 2005).

Students who chose the second type of academic disciplines, apart from English as their first foreign language, were required to choose German or French as the second foreign

¹²⁹ The original text is “各類學科之外國語，備將來進習專門學科之用”.

language. Students who desired to major in Chemistry, Electronic Engineering, Mining, Metallurgy and Agriculture, in particular, were required to choose German as the core subject. Students who chose the third type of academic disciplines were required to study German as their first foreign language, and English (or French) as the second foreign language.

It can be also seen from the Guimao Education System that the choice of foreign languages hinged on the language of countries with world-leading knowledge and skills in one specialized field. For example, Germany was a leading country in medical research in the 20th century (Kim, 2014), so the students majoring in medicine were required to choose German as the first foreign language to read German textbooks on modern medicine and grasp medical skills from Germany.

6.3.3.5 The choice of MOI for western content subjects

The choice of MOI for western content subjects was a highly debatable issue in the “New Policies” Education Reform. Some conservative scholar-officials who rejected the absorption of western knowledge argued that the use of foreign languages as the MOI was a sign of cultural inferiority and downgrading the status of Chinese language (Ji & Chen, 2007). They also argued that the use of foreign languages as the MOI would create barriers to students’ understanding and teacher-student interaction in class, particularly for those students with a flimsy foundation in foreign languages. Thus, the schools would achieve better educational results if they employed some Chinese teachers and chose Chinese as the MOI for western content subjects (Yuan Shuxun: ‘A memorial on the establishment of Guangdong University’).

In contrast with the views of conservative officials, some progressive scholar-officials and social elites argued for the use of foreign languages as the MOI for western content subjects. As a prestigious educationalist in late imperial China, Yan Fu maintained that foreign languages should be used as the MOI for western content subjects as it would “keep the accuracy of western knowledge”¹³⁰. Yan Fu also refuted the conservative scholar-officials’ argument that the use of foreign languages as the MOI would downgrade the status of Chinese:

“Patriotism is an emotion deeply rooted at the bottom of our heart. The languages we speak will not change the degree of our patriotic passion. The reason why the western powers used their native languages as the MOI for content subjects is that they have researched on modern knowledge for a long time and have yielded many academic results in their languages. ... In contrast, the worrying issue of China’s education is not the decline of the Chinese language in status but a void of modern knowledge in the education system. If our people do not acquire western knowledge, they will become ignorant, stupid and powerless. Even if they take the native language as worship, they are no more than arrogant people with no practical knowledge and skills. What benefits will they bring to the country?”

(Yan Fu: ‘A discussion on education with the editor of *Diplomacy News*’, in *The Collected Works of Yan Fu*, 4, pp. 10-14)

(‘愛國之情根於種性，其淺深別有所系，言語文字非其因也。且列邦為學，必用國語，亦近世既文明而富於學術乃如是耳。。。然則觀此可悟國之所患，在於無學，而不患國語之不尊。使其無學而愚，因愚而得貧弱，雖甚尊其國語，直虛喬耳，又何補乎？’)

¹³⁰ It was translated from Yan Fu’s essay ‘A discussion on education with the editor of *Diplomacy News*’, in *The Collected Works of Yan Fu*, 4, pp. 10-14. The original text is “必用西文西語而後得其真”.

However, Yan Fu objected to employing foreign teachers to teach all the students. Instead, he suggested that it should be better to choose appropriate teachers and the MOI according to the level of education:

“In secondary schools, it is proper to employ Chinese teachers (as most foreigners do not understand how to teach Chinese students foreign languages at the beginner’s level). In universities or specialized colleges, it is suggested that foreign teachers should be employed to impart specialized knowledge to students. For the class with a large size, it is better to employ Chinese as teaching assistants.”

(Yan Fu: ‘A discussion on education with the editor of *Diplomacy News*’, in *The Collected Works of Yan Fu*, 4, pp. 10-14)

(‘中學堂課西文西學宜用中國人（洋人課初學西文多不得法）。高等專門諸學，宜用洋教習，若人眾班大，則用華人為助教。’)

Greatly influenced by Yan Fu and other educationalists’ points of view, the drawers of the Guimao Education System imposed different regulations on the choice of MOI for students with different foreign language proficiency. The university students, who had a solid foundation in foreign languages after receiving at least eight years of foreign language education, were required to do western content courses delivered in foreign languages. In contrast, for students who were in officialdom colleges, normal colleges and secondary schools, since they did not reach the threshold level of foreign language proficiency, the courses should be conducted in Chinese (‘Presented School Regulations — Universities (including the Postgraduate Schools)’, ‘Presented School Regulations — Principles of Education’, 1904).

However, the Guimao Education System had a gray area in regulating the MOI at pre-university schools, which did not give a definite regulation on the choice of MOI at pre-university schools. Without an explicit regulation on the choice of MOI at pre-university schools in late imperial China, the Guimao Education System granted more autonomy for individual schools to choose the desired MOI according to their contexts, which resulted in the confusion and inconsistency of education practices in those pre-university schools. The confusion about the choice of MOI at pre-university schools will be detailed in Section 6.4.

Another noteworthy issue related to the MOI was how to assist students who found it difficult to understand western content courses conducted in foreign languages. Different from the Renyin Education System, the Guimao Education System did not explicitly mention the position of “teaching assistants”. However, as stipulated in the Section of “Faculty & Supervisors” of the Guimao Education System, chief teachers and co-teachers were included in the faculty team (‘Presented School Regulations — Universities (including Postgraduate Schools’, 1904; ‘Presented School Regulations — Pre-university Schools’, 1904). The chief teachers were mostly foreign teachers while the co-teachers were graduates who came from foreign universities and had a good command of foreign languages. The Guimao Education System also specified the responsibilities of chief teachers and co-teachers:

“Chief teachers at pre-university schools and universities are responsible for imparting expertise in different academic disciplines to students and providing guidance to students’ research in postgraduate schools. Co-teachers are responsible for assisting the chief teachers and providing guidance to students’ experiments.”

(‘Presented School Regulations — Pre-university Schools’, 1904, p. 87)

(‘正教員分主各分科大學所設之專門講席，教授學藝，指導研究，副教員助正教員教授學生，並指導實驗’)

The regulation that the “co-teachers are responsible for assisting the chief teachers” might include offering language help to students in class and offering language remedial courses out of class. Thus, the actual MOI might be “mixed-mode” instruction for western content subjects. Foreign teachers delivered lectures in foreign languages while co-teachers explained the theory in Chinese if necessary. The percentage of foreign language use and Chinese language use in class depended on students’ foreign language proficiency and their understanding of the lecture.

6.3.3.6 The choice of textbooks in western content subjects

In accordance with Article 33 of the Section of “Principles of Education”, since China had no self-compiled textbooks on western knowledge, western textbooks should be purchased for direct use. The regulation on the choice of textbooks addressed the long-term criticisms on insufficient original textbooks on western knowledge in modern schools (Zhang, 1902), and it suggested the use of foreign languages as the main MOI for most western content subjects. The choice of textbooks also depended on the level of education. According to the Guimao Education System, original western textbooks were mainly used in universities, senior specialized colleges while translated textbooks or teaching materials were used in primary schools, secondary schools, and junior specialized colleges because students had not reached the linguistic threshold to read western books.

As stipulated in Article 31 of the Section of “Principles of Education”, all the teaching materials should be firstly examined and authorized by the Ministry of Education in late imperial China and then be sent back to the schools for use. Since it took some time for the

Ministry of Education to examine the quality of textbooks, Article 32 complemented that foreign teachers were allowed to use their own teaching handouts and materials temporarily before the Ministry of Education authorized the textbooks. At the end of each semester, those self-compiled teaching materials should be bound and delivered to the Ministry of Education for examination. The two articles (Article 31 and Article 32) indicated the trend of textbook authorization in modern schools in late imperial China. It addressed the shortage of teaching materials in provincial schools and facilitated the central management on the bilingual education practices in different modern schools during the “New Policies” Reform.

6.4 The implementation of bilingual education policies in the “New Policies” Reform

The Guimao Education System was the main government policy on regulating the bilingual education practices during the “New Policies” Reform, which provided basic guidelines for different types of modern schools. However, it is necessary to examine whether the Guimao Education System was fully translated into practice and investigate the congruence between the policies and the actual practices of bilingual education in the premier government schools in order to reveal a full picture of bilingual education during the “New Policies” Reform. A detailed investigation of the bilingual education practices in premier government schools would also help us to identify the void of the Guimao Education System and explaining the reason why the Ministry of Education in late imperial China promulgated three complementary policies on bilingual education in the last three years of Qing Dynasty. In the following part, I will give a detailed account of bilingual education practices in the three premier government universities (or colleges): Peiyang University (Section 6.4.1), Imperial Peking University (Section 6.4.2) and Nanyang College (Section 6.4.3), and I will also provide a summary of the bilingual education practices in the pre-university schools

and specialized colleges in China (Section 6.4.4). In fact, all the three premier universities were established before the promulgation of the Guimao Education System. Thus, it also provides us with a new perspective to examine the possible effects of bilingual education practices in the premier government universities on the promulgation of the Guimao Education System and the changes in education practices upon the establishment of the system.

6.4.1 The bilingual education practices at Peiyang University

The first modern university in China, in a strict sense, should be Peiyang University established in 1895 (Zong & Zhang, 2005). The administrators of Peiyang University learned lessons from previous modern schools in the Self-Strengthening Movement, included expertise in western law and politics in the curriculum, and employed various methods to improve the effectiveness of bilingual education at the university. In this section, the education practices of Peiyang University will be summarized in the following nine aspects:

- (1) university establishment;
- (2) division of academic disciplines;
- (3) student enrollment;
- (4) design of a bilingual curriculum;
- (5) teacher employment;
- (6) choice of MOI for western content subjects;
- (7) assessment of bilingual education;
- (8) results of bilingual education;
- (9) effects of bilingual education practices.

6.4.1.1 The establishment of Peiyang University

The idea to establish Peiyang University was not a direct product of the “New Policies” Reform (1901-1911), but was mooted in the memorials of radical reformists in 1895. After China’s defeat in the Sino-Japanese Naval War, some radical reformists such as Chen Xiang (陳驤) recognized the importance of developing modern tertiary education to cultivate professionals in various fields and explore a path for China’s modernization. In his private correspondence with Shen Enjia (沈恩嘉), a high-ranking official in the Office of the Grand Council of State affiliated to the Qing government, Chen Xiang drew a blueprint of establishing a modern university in Tianjin, a major gathering place of radical reformists before the Hundred Days’ Reform. In the letter, he also expounded his ideas on the division of academic disciplines at the university:

“The university should establish six academic disciplines: (1) School of Politics; (2) School of Commerce; (3) School of Natural Sciences; (4) School of Manufacture; (5) School of Surveying and Mapping; and (6) School of Translation. Concerning the rationale of dividing the academic disciplines, School of Politics is founded because politics is the foundation of a country. School of Commerce is established because commerce is the cornerstone to national wealth. School of Natural Sciences is founded as advances in natural sciences are closely tied to national prosperity. School of Surveying & Mapping is established to equip students with requisite expertise in understanding western surveys, maps and instructions of operating machines. School of Translation is also needed as it helps to alleviate the shortage of translated books on western knowledge in China. The six academic disciplines above are established to take the essence of western knowledge and overcome the limitation of Confucian education.”

(Chen Xiang: ‘A private correspondence with Shen Enjia’, in X. J. Kong’s article ‘National crisis after the First Sino-Japanese War and the founding of Peiyang University’, pp. 176-185)

(‘敝稿計分六門，政治為立國之本，故以為首。商務為富民之本，民富斯國富，故次之。格致為致富強之實功，又次之。明格致而後能製造，故又次之。而政治、商務、格致、製造，有非圖不明者，故又次以測繪，以上各事皆取人之長，救吾之短。。。故譯書為要。’)

Chen Xiang’s embryonic idea on the division of academic disciplines in a modern university was similar to that of the modern universities of Japan. In reality, in order to become a militarily powerful country like Japan, China imitated Japan’s approach to tertiary education after the Sino-Japanese Naval War. As stated in Sheng Xuanhuai’s¹³¹ (盛宣懷) memorial “On establishing an Anglo-Chinese university in Tianjin”, the establishment of Peiyang University and the division of academic disciplines at the university gained considerable insights from Japan’s modern universities:

“During the Meiji Restoration, Japan imitated the way western countries developed modern education and established a large number of modern schools. Naval schools were founded to cultivate generals and soldiers for land forces and navy, modern universities and senior law colleges were established to cultivate potential envoys and diplomats. Within the modern universities, School of Mechanic Engineering and School of Chemistry were set up to nurture future miners, railway constructors, gun and cannon producers. Because of the completeness of modern education, it only took more than ten years for Japan to have a large talent pool.”

(Sheng Xuanhuai: ‘A memorial on establishing an Anglo-Chinese university in Tianjin’, *The Selections on the Records of History of Peiyang University and Tianjin University*, 1, p.17)

¹³¹ **Sheng Xuanhuai** (1844-1916) was a famous entrepreneur, politician and educationalist in late imperial China. He was the founder of the two premier universities in late imperial China — Peiyang University and Nanyang College.

（‘日本維新以來，援照西法，廣開學堂書院，不特陸軍海軍將弁皆取材於學堂；即今之外部出使諸員，亦皆取材於律例科矣，製造槍炮開礦造路諸工，亦皆取材於機器工程課科學化學科矣。僅十餘年，慘然大備。’）

The importance of establishing Peiyang University was accentuated in the article “The rise of intellectuals” (<人才蔚起>) in *Kuo Wen Pao* (<國聞報>)¹³² on January 9, 1898. The article quoted the highly positive comments on Peiyang University from Yan Fu (嚴複), who was one of the few scholars that had studied in Europe for a long time and had acquired both Confucian and western knowledge (*Kuo Wen Pao*, January 9, 1898, p.7). In 1898, Yan Fu was invited to be an external examiner of the graduation examination at Peiyang University. After the examination, Yan Fu gave a speech in the graduation ceremony. In the speech, he encouraged the graduates, academic and administrative staff to work hard for the rise of China. He asserted that “if all previous schools in China had been like Peiyang University, China would not have been despised by westerners”¹³³ (‘The rise of intellectuals’, *Kuo Wen Pao*, January 9, 1898, p. 10). Yan Fu’s comments indicated that the establishment of Peiyang University not only satisfied China’s urgent demand for intellectuals to enhance its national competitiveness in the international arena, but also provided a template for other universities in late imperial China.

Apart from the ambitious promotion by radical reformists in Tianjin, the successful establishment of Peiyang University was also attributed to the constructive and concrete suggestions of the entrepreneur Sheng Xuanhuai. From the Self-Strengthening Movement to the post-1895 period, when Sheng Xuanhuai was engaged in business affairs with foreigners, he recognized the importance of establishing a modern western-style university

¹³² **Kuo Wen Pao** was an influential news agency in late imperial China. It was set up in Tianjin in 1897.

¹³³ The original text is “我國之學堂，若皆如此，支那豈尚不至見鄙於白人乎?”.

to cultivate talents who understood western languages and acquired necessary expertise in modern science and technology (Wang, 2007). In 1892, Sheng Xuanhuai was appointed Mayor of Tianjin and the head of Tianjin Customs. Through close communication with Li Hongzhang¹³⁴ and Charles Daniel Tenney¹³⁵, Sheng Xuanhuai specified his ideas in the founding of a modern university and the division of academic disciplines at the university, and prepared his memorial to the throne.

On September 19, 1895, Sheng Xuanhuai submitted his memorial on the establishment of an Anglo-Chinese university in Tianjin to Wang Wenshao (王文韶), who replaced Li Hongzhang to be the Governor-general of Zhili in 1895. In the memorial, Sheng Xuanhuai proposed that a university and pre-university school should be established in Tianjin to cultivate talents in the field of modern science and technology. Eleven days later (On September 30, 1895), Wang Wenshao copied the content of Sheng Xuanhuai's original memorial with a minor modification on the title as "Sheng Xuanhuai's suggestions for establishing a western-style university" (<盛宣懷創辦西學學堂稟明立案由>), and then submitted the revised memorial to the emperor. In the memorial, Wang Wenshao changed the name of university to a "western-style university" instead of the original more conservative name "Anglo-Chinese University", which suggested the relatively favorable social milieu for western languages and knowledge in the post-1895 China. On October 2, 1895, Emperor Guangxu replied in an imperial edict, "His Majesty authorized the opening of a western-style university"¹³⁶ (Emperor Guangxu: 'An imperial edict on the establishment of a western-style university in Tianjin').

¹³⁴ **Li Hongzhang** was the Governor-general of Zhili (直隸總督) from 1883 to 1895. Tianjin belonged to the administrative region of Zhili in the late Qing period.

¹³⁵ **Charles Daniel Tenney** (1857-1930) was a famous American diplomat and educator in late imperial China. He was the founder of the first modern college in Tianjin — Tianjin Anglo-Chinese College.

¹³⁶ The original text is "創辦西學學堂，請飭立案，下所司知之". It was taken from *The Original Records of Emperor Guangxu*, p. 5.

The imperial edict showed the official sanction for the establishment of Peiyang University. There were no original records on the exact date of inauguration, but a news report titled “A visit to Tientsin University” in *Peking and Tientsin Times* on December 7, 1895 recorded that “it has been two weeks since the officially-sanctioned university was established” (p. 367). Thus, the date of university establishment could be someday between October 18, 1895 and November 16, 1895. Regarding the name of university, various primary sources of data including *Register of Peiyang University* (1897), students’ graduate certificate¹³⁷ and *Peking and Tientsin Times* on December 7, 1895 revealed that the university was named as “Peiyang University” (北洋大學堂) since its commencement in 1895.

6.4.1.2 The division of academic disciplines

Since the national regulations on education practices in universities had not yet been promulgated in 1895, the administrators of Peiyang University drew insights from modern universities in Japan and the West when they drafted the statutes. According to *Statutes of Peiyang University* in 1895, the university consisted of two sub-divisions, namely a university (or called an advanced or senior class ‘頭等學堂’) and a pre-university school (or called an elementary or junior class ‘二等學堂’). As stated in Sheng Xuanhui’s memorial and the university statutes in 1895, Peiyang University aimed to impart advanced expertise in modern science and technology to students while the affiliated pre-university school intended to help students lay a solid foundation in foreign languages and to prepare them for the specialized study at Peiyang University. With regard to the length of education, both Peiyang University and the affiliated pre-university school had a four-year curriculum

¹³⁷ A classic example is the graduate certificate of Wang Chonghui 王寵惠, one of the first graduates in Peiyang University in 1899.

and graduates at the pre-university school would be admitted to the university after they had passed the admission examination.

Having clarified the educational objectives of Peiyang University, the administrators focused on the division of academic disciplines. Peiyang University modeled on the renowned American universities such as Yale University and Harvard University probably because the United States was one of the leading countries in modern science and technology in the late 19th and early 20th century. In accordance with *Statutes of Peiyang University* in 1895, the university was originally divided into the following five academic disciplines: Engineering, Electronics, Mining Science, Mechanics and Law. The division of academic disciplines accorded with the nature of Peiyang University as a modern polytechnic university under the strong social ambiance of “saving China by developing the industry” (‘工業救國’) (Li, 2010). However, apart from the academic disciplines on modern science and technology, Peiyang University also founded the Department of Law to impart expertise in international law and diplomacy to students. The founding of the Department of Law also satisfied China’s pressing need for international negotiations in signing treaties and developing trade relations with other countries. As railway construction was the basis of developing mining and metallurgy industry in China, the Department of Railway was added at Peiyang University in 1897. Later, the Department of English, the Department of French and the Department of Russian were founded to train interpreters, translators and diplomats for the increasing diplomatic talks between China and foreign countries (Li, 1935). Thus, it can be seen that the division of academic disciplines at Peiyang University was closely tied to the social needs of late imperial China after the Sino-Japanese Naval War.

6.4.1.3 The enrollment of students

In the initial years of development, similar to other modern schools in late imperial China, Peiyang University could not admit sufficient students who had prerequisite knowledge of modern science and technology and were proficient in foreign languages. The administrators founded a pre-university school as a preparatory school to help students gain requisite western knowledge and enhance their foreign language proficiency for their future study at the university. Since it took at least four years to train students at the pre-university school to be qualified for tertiary education, the university also selected some Hong Kong students who had reached the requisite cognitive and linguistic threshold for tertiary education, which was similar to the education practices of Fujian Naval College in the 1870s. The actual situation of selecting students in Hong Kong was described in the memoir of Wang Chongyou (王寵佑):

“In 1895, the entrance examination of Peiyang University was administered in Tung Wah Hospital of Hong Kong. On site there were roughly 1,000 test-takers including my younger brother Wang Chonghui and me. After the examination, it was fortunate that I ranked first and my younger brother Chonghui second. Our excellent performance in the entrance examination won high praise from others.”

(Wang Chongyou: ‘My life on Peiyang University’, *Peiyang Weekly*, p. 65)

(‘1895 年，北洋大學招考學生於香港，試場設在東華醫院。應考者千餘人，寵佑偕弟寵惠與焉。寵佑謬以第一名獲取，而寵惠亦臚列第二。兄弟僥倖連榜，時人譽之。’)

Apart from Hong Kong, Peiyang University also placed the notice of student enrollment in the newspapers in Shanghai, Hankou and Canton. Despite the relatively low student enrollment, Peiyang University did not lower its entrance requirements and only one student in those places was finally admitted to the School of Law at the University (The

University History Archives of Tianjin University, 1985). In fact, in the early 20th century, only the top three students in outstanding secondary schools of all provinces in mainland China were allowed to apply for a place at Peiyang University and few of them were admitted (P. H. Zhang, 2006), which showed the demanding admission requirements of Peiyang University.

6.4.1.4 The design of a bilingual curriculum

The role of foreign language courses in the curriculum

Since foreign languages were important tools for acquiring western knowledge, the curriculum designers of Peiyang University attached considerable importance to foreign language education. As stipulated in *Statutes of Peiyang University* in 1895, foreign languages were core subjects in both Peiyang University and the affiliated Pre-university School.

English education was the core of the four-year bilingual curriculum at the Pre-university School. As shown in the Section of “Curriculum & Pedagogy” of *Statutes of Peiyang University* in 1895, the Pre-university School offered a great variety of English language courses such as Elementary English, English Spelling, English Reading, English Grammar, Intermediate English, Writing English Letters, English Translation, English Business Letters and Advanced English. The main courses of the pre-university school are detailed in Table 10 on Page 352.

Table 10: The main courses of the Pre-university School attached to Peiyang University

Year	Courses
1	Elementary English, English Spelling, Mathematics, Chinese, China's History
2	Intermediate English, English Grammar, English Spelling, Reading, Writing English Letters, English Translation, An Introduction to Mathematics, Chinese
3	Advanced English, English Grammar, World History, Geography, English Business Letters, English Translation, Algebra, Chinese, Political essays on current affairs of China (策論)
4	Advanced English, World History, Natural Sciences, English Letters, English Translation, Plane Survey, Political essays on current affairs of China (策論)

(‘Curriculum & Pedagogy’ of *Statutes of Peiyang University*, 1895)

All the students at Peiyang University were required to take English as the core subject in a four-year bilingual curriculum. As shown in Table 11 concerning the core courses of Peiyang University, the English language subject at Peiyang University included the courses on English writing and Translation.

Table 11: The core courses of Peiyang University

Year	Courses
1	Geometry, Triangle Pythagorean, Natural Sciences, Drawing, World History, English Writing, English Translation
2	Surveying and Mapping, Mechanics, Calculus, Natural Sciences, Chemistry, Mechanic Drawing, English Writing, English Translation
3	An Introduction to Astronomical Engineering, Chemistry, Botany, Mechanic Drawing, English Writing, English Translation
4	Epigraphy, Geography, Zoology, International Law, Finance, English Writing, English Translation

(‘Curriculum & Pedagogy’ of *Statutes of Peiyang University*, 1895)

Table 10 and Table 11 have revealed that English language courses occupied a large proportion in the curriculum of the Pre-university School and Peiyang University. The main difference in the English language courses between the Pre-university School and the University lies in the content and difficulty of courses. The Pre-university School focused on sharpening students’ English skills while the University stressed the use of English as the MOI for western content subjects such as natural sciences, geography and international

law. Another noteworthy issue is the choice of foreign languages in the curriculum. It is apparent from the curriculum lists that English, as the most influential foreign language in the field of modern science and technology, was chosen as the first foreign language at Peiyang University.

Apart from English, some students also needed to study the designated second foreign language at Peiyang University according to the language requirements of different academic disciplines. Students majoring in Civil Engineering, for example, were required to learn German as the second foreign language since their teaching materials on specialized subjects such as Hydro-engineering and Rail Engineering were written in German (*Statutes of Peiyang University*, 1895).

Normally, Peiyang University offered the second foreign language subject in the second academic year as one of the specialized subjects in different departments of Peiyang University. Students being admitted to Peiyang University were required to take all the core subjects in the first year. After the first year, the administrator and the head teacher tested the students' intelligence and their grasp of general knowledge on modern science and technology. Later, the students were allocated to different departments to specialize in one field based on their natural endowments, and learn the second foreign language according to the requirements of different academic disciplines (*Statutes of Peiyang University*, 1895).

The Chinese-related subjects in the bilingual curriculum

Although Peiyang University was by nature a western-style polytechnic university, it did not remove Chinese-related subjects from the curriculum or lower the requirements for students' Chinese proficiency. Instead, according to the memorial "Suggestions for making changes in the curriculum of Peiyang University" in January 1906 (<改良北洋大學堂事

宜稟並批>) , students' Chinese proficiency was one of the essential admission requirements for Peiyang University:

“There are two reasons why students' Chinese proficiency should be tested upon enrollment. Firstly, the academic standard of universities is much higher than that of secondary schools and primary schools. If students only understand western languages but are not proficient in Chinese, they cannot become qualified translators. Nor can they handle complicated political affairs. Secondly, all the foreign countries attach importance to native language education.”

(Charles D. Tenney: ‘Suggestions for making changes in the curriculum of Peiyang University’, *Journal of Zhili Education*, 4, pp. 1-5).

(‘學生國文宜請嚴加甄別也。大學階級較高於中小學堂數倍，今日之學生即皆異日服官臨民之人，若僅通西文不通國文，譯員尚不勝任，授之以政，其何能達？即東西洋各國教育亦未有不重本國文字者。’)

The importance of Chinese language education was also clarified in *Statutes of Peiyang University* in 1895:

“There is no need to offer Chinese language subjects for those students admitted from the Pre-university School since they have taken it as a core subject in the preparatory school and all of them have passed the test of Chinese language upon enrollment. However, for those students from Canton and Shanghai, since their Chinese proficiency has not been tested, they are required to take Chinese language subject, and teachers at Peiyang University should be strict with the students' Chinese language learning.”

(Sheng Xuanhuai: ‘A memorial on establishing Anglo-Chinese University in Tianjin’, *The Selections on the Records of History of Peiyang University and Tianjin University*, 1, p.3)

(‘學生將來由二等學堂挑來者，漢文自可講究。現由粵滬等處挑來者，恐漢文不能盡通；是以漢文教習必須認真防延，不得絲毫徇情。’)

It was actually not a new idea to include the subject of Chinese in the curriculum as most modern schools established in the Self-Strengthening Movement attached equal importance to Chinese language education and foreign language education. Nonetheless, the Chinese language subject at Peiyang University, in terms of content, differed from other schools in late imperial China. Students did not need to study “Eight-legged Essays”, but they learned to write political essays and discussed current affairs in class. Since most students had already learned Confucian classics in primary schools, they did not repeat learning the classics but studied the history of China (*Statutes of Peiyang University*, 1895).

The inclusion of theoretical and practical courses in the curriculum

Since the primary educational objective of Peiyang University was to impart expertise in modern science and technology to students, the university offered a wide range of theoretical courses. Apart from the core courses shown in Table 11 (on Page 353), the bilingual curriculum also included specialized theoretical courses for each academic department, which was similar to the courses in western polytechnic universities in the 19th century (Yan & Wang, 2015). Please see Table 12 on Page 357 for details of the main theoretical courses offered in the five academic departments.

Table 12: The main theoretical courses in the five academic departments of Peiyang University

Academic Department	Courses
Engineering	Engineering Machinery, Geo-science, Physics, Hydrotechnics, Material Science, Bridge and Roof Construction, Excavation Science
Electronics	Electrical Science, Electromechanics, Power Transmission, Power Generation House Operation, Telegram, Anemology
Mining Science	Chemistry, Mineral Resources Deposition, Mine Seedling Survey
Mechanics	Physics, Mechanics, Material Science, Blower Machinery, Mechanical Drawing, Machine Room Operation
Law	Laws and Regulations of Qing Dynasty, International Law, International Commercial Law

(‘Curriculum & Pedagogy’ of *Statutes of Peiyang University*, 1895)

In addition to the theoretical courses, Peiyang University also offered some experiment and practical courses to put what students had learned in theoretical courses into practice. Students in the School of Mining Science and Metallurgy, for example, were required to investigate in mining regions and explore hidden mineral resources in their summer holiday (*The History of Peiyang University — Tianjin University*, 1990). The arrangement of

practical curricula in the summer holiday can also be confirmed by the memoir of Wang Chongyou (王寵佑), a graduate from the School of Mining Science and Metallurgy:

“In every summer holiday, Professor N. F. Drake led us to the faraway mining regions to explore mining resources and conduct geological surveys. Although it was a long trip, it advanced our knowledge of mining and benefited our physical health.”

(Wang Chongyou: ‘My Life on Peiyang University’, *Peiyang Weekly*, p. 29)

(‘是以每於暑假期內，從外國教授 Drake 氏赴礦山看礦，研究地質，長途跋涉，固甚勞苦，此不僅於學業可以孟晉，而於身體亦收鍛煉之功。’)

Since most teachers at Peiyang University were foreigners who were unable to give lectures in Chinese, the MOI for the practical curriculums and internships was the foreign language. Thus, the practical courses were also an integral part of the bilingual curriculum of Peiyang University.

In summary, the bilingual curriculum at Peiyang University consisted of foreign language subjects, western content subjects, Chinese-related subjects (including Chinese language courses and courses on Confucian knowledge) and practical courses. The bilingual curriculum at Peiyang University had three main characteristics. To start with, the curriculum designers emphasized the importance of foreign languages to accessing specialized knowledge in various academic disciplines. Only the students who had passed two foreign language tests (one was the final year at the Pre-university School and the other was in the first academic year of Peiyang University) were allowed to continue their specialized study in the next three years at Peiyang University. Secondly, the Chinese language subject was not removed from the curriculum. Although Chinese was not on the list of core subjects in the curriculum of Peiyang University, it was a hurdle test for students’

admission to Peiyang University and an integral component in the curriculum of the Pre-university School. Thirdly, the university also offered some practical courses to help students accumulate practical experiences and more importantly, provided them with opportunities to negotiate with their teachers in foreign languages.

6.4.1.5 The teacher employment

According to *Statutes of Peiyang University* in 1895, the academic faculty at Peiyang University consisted of a head teacher, foreign teachers of western content subjects, Chinese teachers and teaching assistants.

The employment of the head teacher

As stated in Sheng Xuanhuai's memorial dated September 19, 1895, the head teacher at Peiyang University should be "a member of the staff who possesses an in-depth understanding of western knowledge and who can shoulder the heavy responsibilities for all the academic affairs at the university"¹³⁸. In the memorial, Sheng Xuanhuai also suggested that Charles Daniel Tenney be the first head teacher of Peiyang University. Charles Daniel Tenney, born in the United States in 1857, came to Northern China for preaching and served as a vice-consul in the United States Consulate in Tianjin in 1882. Because of his broad and in-depth knowledge of modern science and technology as well as his familiarity with Chinese culture, he was selected to be the head teacher of Peiyang University. He resigned from the post of head teacher in 1906 and became a supervisor for overseas students of Peiyang University (Y. G. Wang, 2003).

¹³⁸ The original text is "所有學堂事務，任大責重，必須遴選深通西學體用之員總理". It was taken from Sheng Xuanhuai's memorial "On establishing an Anglo-Chinese University in Tianjin", *The Selections on the Records of History of Peiyang University and Tianjin University*, 1, p. 17.

The employment of foreign teachers at Peiyang University

Due to the shortage of Chinese teachers who were able to teach western content subjects, the administrators of Peiyang University decided to employ a large number of foreign teachers. According to “The Name List of Foreign teachers (1895-1905)” and the statistics in Wang and Zhu’s study (2008), in the first decade of Peiyang University, two thirds of teachers at the university were foreigners. Specifically, the faculty included 15 foreign teachers of liberal arts subjects such as Foreign Languages, Law and History of Foreign Countries, and 13 foreign teachers of science subjects like Mining Science, Geology, Civil Engineering, Mechanic Engineering, Metallurgy, Chemistry and Railway Construction. The employment of foreign teachers was also mentioned by Wu Chonglan’s (吳崇蘭) memoir on the learning experience of his elder brother Wu Nanru (吳南如): “The three professors of International Law were all Americans, aged between 30 and 50. They taught courses on Contract Violation Law, International Public Law, International Private Law, Comparative Law, and Constitution of Different Countries.”¹³⁹ (Wu Chonglan: ‘The life of my second elder brother Wu Nanru’, in Zuo Si’s *A Reminiscence of Life at Peiyang University*, 1989, p. 17)

When Charles Daniel Tenney resigned from office in 1906, his successor Wang Shaolian (王劭廉) insisted on employing foreign teachers at Peiyang University. It complied with the Section of “Teacher Employment” of the Guimao Education System that required universities to hire foreigners as chief teachers of western content subjects. With the gradual expansion of curriculum at Peiyang University, the foreign teachers taught a wider range of

¹³⁹ The original text is “教授的年齡都不大，差不多都在三十與五十之間。二哥班上一共有三位美國教授，分授契約違法行為、國際公法、國際私法、比較法、各國憲法等課程。”

subjects. The details of the foreign teachers including their names, nationality and the subjects they taught at Peiyang University are presented in Table 13 on Page 361.

Table 13: The main foreign teachers employed at Peiyang University

Name	Nationality	Subject
C. D. Tenney	American	The head teacher from 1895 to 1905
L. C. Clitfardan	American	Chemistry
V. A. Renocg	American	Foreign history, Finance
W. H. Peels	American	Natural Sciences, Engineering
N. F. Drake	American	Mining, Geology
S. deGieler	French	French
S. Rozen	German	German
A. A. Saptew	Russian	Russian
T. Saito	Japanese	Japanese
C. H. Robertson	American	English
P. B. Tripp	American	English
D. Lattimore	American	English
W. Lyon	American	English
B. Lyon	American	English
E. R. Long	British	English
N. H. Pitman	American	English

O. C. Clifford	American	Physics
B. C. Eastham	American	Physics
T. Bodde	American	Physics
T. T. Read	American	Chemistry
W. J. Bateman	American	Chemistry
T. S. Woodward	American	Chemistry
H. V. Fuller	American	Chemistry
E. F. Gamnman	American	Law
E. P. Allan	American	Law
V. A. Renouf	American	Law
L. I. Sharfman	American	Law
R. T. Evans	American	Law
C. J. Fox	American	Law
Y. J. Thompson	American	Law
E. Kun	American	Law
M. H. Peck	American	Civil Engineering
F. W. Morrill	American	Civil Engineering
J. I. Dobbins	American	Civil Engineering
J. F. Ellis	American	Civil Engineering
N. D. Baker	American	Civil Engineering
F. Oatman	American	Civil Engineering
H. A. Petterson	American	Civil Engineering
J. W. Oakley	American	Civil Engineering
O. Rourke	American	Civil Engineering

J. F. Ball	American	Civil Engineering
H. Bouchard	American	Civil Engineering
W. H. Adams	American	Mining Engineering
R. V. A. Mills	American	Mining Engineering
F. L. Barker	American	Mining Engineering
A. C. Terrill	American	Mining Engineering
F. K. Morris	American	Mining Engineering
G. B. Barbour	American	Mining Engineering
D. D. Smythe	American	Mining Engineering

(Source: The Name List of Foreign teachers (1895-1905). *The Autograph Book of the 30th Anniversary of Peiyang University*. 1925; The Name List of Foreign teachers (1906-1911))

To attract foreigners to be chief teachers, Peiyang University decided to pay foreign teachers the salaries twice as much as the ones Chinese teachers earned. In accordance with *Statutes of Peiyang University* in 1895,

“Each of the foreign teachers is rewarded 200 taels of silver every month while each of the Chinese teachers who teach foreign languages is paid 100 taels of silver per month. The teachers of Chinese-related subjects are paid 40 taels of silver per month.”

(Sheng Xuanhuai: ‘A memorial on establishing an Anglo-Chinese University in Tianjin’, *The Selections on the Records of History of Peiyang University and Tianjin University*, 1, p. 11)

(‘洋人分門教習每人每月薪水銀二百兩；華人洋文教習每人每月薪水銀一百兩；華人漢文教習每月薪水銀四十兩。’)

The employment of Chinese teachers

Apart from foreign teachers, Peiyang University also recruited some Chinese to be teachers of Chinese-related subjects and to be teaching or teaching assistants of western subjects. Some influential Chinese scholars such as Wu Zhihui (吳稚暉), Luo Yinggong (羅癭公) and Zhuang Lingsun (莊淩孫) were employed as teachers of the Chinese language and Confucian classics (The Name List of Teachers at Peiyang University (1895-1905)).

Most of the Chinese teachers employed at Peiyang University were teaching or teaching assistants to foreign teachers of western content subjects to explain and translate some parts of lectures into Chinese when students could not understand the lectures delivered by foreign teachers (L. C. Zhang, 2006). It can be inferred from the position of “teaching assistants” that foreign languages might be the possible main MOI for western content subjects, which will be detailed in the following section.

6.4.1.6 The choice of MOI for western content subjects

The design of a bilingual curriculum, together with the organization of an international faculty team, indicated that there might be no single MOI policy at Peiyang University. After the promulgation of the Guimao Education System in 1904, Peiyang University complied with the national education system and the choice of MOI depended upon the content of subjects and the teachers in class.

Foreign languages were used as the MOI for western content subjects at Peiyang University. Although there were no direct records of actual education practices, the use of foreign languages as the MOI for western content subjects was mentioned in the memoirs of former students’ relatives or friends who were familiar with the students’ educational experiences

at Peiyang University. For instance, according to Wu Chonglan's (吳崇蘭) memoir on the learning experience of his second eldest brother Wu Nanru (吳南如),

“The textbooks on British law, American law and French law were all original western textbooks. The teachers taught the subjects of Civil Law, and Business Law (including law violation behaviors, contract law, litigious relations and business relations) with lawsuit cases in foreign languages.”

(Wu Chonglan: ‘The life of my second elder brother Wu Nanru’, in Zuo Si’s *A Reminiscence of Life at Peiyang University*, 1989, p. 35)

(‘英美法及案例全是洋文本，民法、商法（違法行為、契約關係、訴訟關係、商業關係）都用案例，上課全是外國教授，說洋文。’)

In fact, using foreign languages as MOI was a tradition left at Peiyang University. Although an increasing number of Chinese teachers were employed as chief teachers of western content subjects in the last few years of Qing Dynasty, foreign languages were still the MOI. It can also be confirmed by Wu Chonglan’s memoir of his second elder brother Wu Nanru:

“Using foreign languages as the MOI was a custom at Peiyang University. To facilitate students’ understanding of western knowledge and improve their foreign language proficiency, Peiyang University required that original textbooks should be used in western content subjects and professors should generally give the lecture in foreign languages. Teachers were even not allowed to provide Chinese explanations in class. Prof. Feng Xiyun, the teacher of International Law, analyzed American criminal cases in English. Though he was a bit weak in oral English, he spoke very slowly so that we could understand his meaning.”

(Wu Chonglan: ‘The life of my second elder brother Wu Nanru’, in Zuo Si’s *A Reminiscence of Life at Peiyang University*, 1989, p. 35)

(‘為了要直接研究外國學問，訓練學生的英文程度，凡是外國課程都採取外國大學課本，而且教授通堂要用英文講解，不得插一句中文解釋。馮（英美的馮熙運教授）講美國刑事案例也用英文，不過馮的英語表達能力稍差，但也說得很詳細、很慢，同學們都聽得懂。’)

The choice of MOI not only complied with the explicit requirement of the Guimao Education System, but also resulted from the needs of actual education practices such as convenience in delivery of lecture and review of examination papers at Peiyang University. Since all the textbooks, except for the teaching handouts of Chinese-related subjects, were original textbooks imported from foreign countries and the students were required to answer examination questions in foreign languages, it was more convenient to use foreign languages as the MOI for western content subjects (Jia, 2014).

Despite the all-English environment at Peiyang University, Chinese was still used as the MOI for the Chinese-related subjects. Those Chinese-related subjects included subjects of Confucian knowledge such as Confucian Ethics and Classics, and some content subjects such as “Mining in China” and “China’s Railway” (Charles Tenney: ‘Suggestions for making changes in the curriculum of Peiyang University’).

6.4.1.7 The assessment of bilingual education

In order to enhance the quality of bilingual education, Peiyang University undertook a systematic assessment of students’ foreign language proficiency and their grasp of western knowledge. Specifically, the examination scores for foreign languages occupied a large part in the overall assessment of a student. As mentioned in Shen Tong’s memorial “On inspecting and making changes on the education practices of Peiyang University” (<整頓學規大概情形稟並批>) dated November 29, 1904, if a student’s mark was below 50

(the passing grade) in the Chinese language examination, his score for foreign language could offset the score for the Chinese language. Thus, foreign languages were more important to the Chinese language at Peiyang University as its score could offset the score for Chinese language examination but not the other way around.

The importance of foreign languages in the assessment also lies in the fact that most of the examination papers at Peiyang University were written in foreign languages. According to the memoir of Wei Shoukun (魏壽昆), a former student at Peiyang University and one of the most famous experts in metallurgy, physical chemistry and modern education in late imperial China, all the admission examination papers were written in English except for examinations in Chinese-related subjects. Chinese teachers reviewed the Chinese examination papers while western teachers reviewed the examination papers of western content subjects (The University History Archives of Tianjin University, 1990).

Peiyang University also implemented a stringent elimination system based on students' examination scores. According to *New Amendments to Regulations of Peiyang University* (<天津大學堂新訂規則>) promulgated in 1904, the type of examinations consisted of monthly examinations, term examinations, semester examinations and graduation examinations. If a student failed in three consecutive monthly examinations, he would be expelled from the University. Similarly, if a student in an advanced (senior) class failed in term examinations, he would be downgraded to the elementary (junior) class, and if a student in the elementary (junior) class failed in examinations, he would become a detained student for a month and retake the examination. When he failed in the examination for a second time, he would be expelled from Peiyang University.

The fierce elimination system at Peiyang University was also mentioned in the memoir of former students such as Liu Derun (劉德潤). According to his memoir,

“There were altogether 45 newly admitted students in our department that year. However, only 31 students graduated, including 16 students majoring in Civil Engineering and 15 students majoring in Mining Science. Almost one-third of the students were expelled from Peiyang University because of either severe illness or failure in examinations.”

(The University History Archives of Tianjin University, 1990, p. 11)

(‘我們那一屆班次，原本有 45 名新生，到畢業時只剩下土木 16 人，礦冶 15 人，一共 31 人，中途不是因病輟學，就是成績不夠標準而退學，幾乎占了三分之一的人不終學。’)

The stringent assessment conformed to the fundamental principle of Peiyang University in its bilingual education practices — putting quality before quantity. Despite the small number of graduates, the quality of graduates was always the priority, which was conducive to the excellent results of bilingual education at Peiyang University.

6.4.1.8 The results of bilingual education at Peiyang University

Since there were no overall nationwide standardized tests in the 19th and early 20th century in China, it would be more reasonable to evaluate the educational results of Peiyang University from the comments of insiders and outsiders in that period.

The first external comment on the bilingual education practices of Peiyang University came from an anonymous news report “a visit to Tientsin University” on December 7, 1895 in *Peking and Tientsin Times*. The report gave a positive evaluation of the educational results of Peiyang University:

“The institution, established under official sanction, has now been opened about a fortnight. ... While the appointments are by no means as elegant and complete as characterize a [w]estern [u]niversity, they are everything that could be desired for utility, cleanliness and success, and it is most credible that so much has been accomplished at such short notice. Great praise is due to the Customs Taotai H. E. Sheng, to the Directors and to the President for the successful inauguration of what in Chinese language will be called the 北洋大學堂.”

(‘A visit to the Tientsin University’, *Peking and Tiensin Times*, December 7, 1895, p. 92)

Although the focus of the news report was not on the bilingual education practices but the overall quality of education at Peiyang University, it predicted a promising future for the University as its development was on the right track under the leadership of Sheng Xuanhuai, the main founder and de-facto administrator of Peiyang University.

Some foreign teachers in other universities and mission schools in late imperial China also made positive comments after they had examined the education practices at Peiyang University. For instance, John Calvin Ferguson, the Principal of Nanking University and later the head teacher of western subjects in Nanyang College, praised Peiyang University as the “most advanced western-style university in China” with the “most leading teaching methods” (‘The Government Schools in China’, *Education Quarterly*, 1909, 6, p. 43). Ferguson spoke highly of the high foreign language proficiency of graduates and the high social status of Peiyang University students in late imperial China, which suggested the successful practices of bilingual education at the university.

Another piece of evidence to show the positive evaluation of Peiyang University was the ranking and grading of Chinese universities by the Ministry of Education in the United States. As mentioned in the memoir of Liu Derun (劉德潤), a former student of Peiyang University and later a holder of PhD degree in Engineering at University of Iowa in the 1930s:

“At that time the United States classified Chinese universities into four grades (A, B, C, D) based on the educational quality. Peiyang University ranked first among those Grade A universities (only four Grade A Chinese universities in total), which indicated that the university was the best one in China.”

(J. Bian's: 'Tenney Charles Daniel: the first American head instructor at Peiyang University', *International Talent*, 2014, 4, pp. 57-59)

(‘當時美國把中國大學分為 A、B、C、D 四個等級，其中 A 級有四個，北洋大學是 A 級第一位。’)

Because of the worldwide reputation for high educational quality at Peiyang University, many universities in the United States and Europe even decided to admit top students of Peiyang University to their graduate schools without the need for them to take any entrance examinations (P. H. Zhang, 2006).

Apart from the outsiders' positive comments, some insiders such as principals, teachers and students also cast a positive light on the quality of bilingual education at Peiyang University. For example, having examined the education practices, Shen Tong (沈桐), the Principal of Peiyang University from 1904 to 1905, commented that, “It is a brilliant result that students

at Peiyang University acquired a wide range of western knowledge. If they keep working hard, they will become social elites in the country.”¹⁴⁰

The comments above showed that both insiders and outsiders highly commended the bilingual education practices of Peiyang University. The education practices improved students’ foreign language proficiency, advanced their understanding of western knowledge and thus laid a basis for their further overseas studies at well-known universities of Europe and the United States. The satisfactory educational quality at Peiyang University brought about significant effects on the society, which will be expounded upon in the following section.

6.4.1.9 The effects of bilingual education at Peiyang University

The development of bilingual education at Peiyang University exerted considerable effects on the advancement of China’s tertiary education, social change in China, and cultural and educational communication between China and the West.

The establishment of Peiyang University, particularly the idea to divide the university into two parts — university education and pre-university education, marked a significant breakthrough on the development of bilingual education in late imperial China. The bilingual education thus developed in a more systematic manner, which facilitated the promulgation of the Renyin Education System and the Guimao Education System. Students at the Pre-university School attached to Peiyang University spent three years learning foreign languages and basic western knowledge, which laid a solid foundation for their

¹⁴⁰ It was taken from Shen Tong’s memorial ‘On inspecting and making changes on the education practices of Peiyang University’, in Peiyang Official Newspaper, p. 483. The original text is “查堂中學生講求西學，程度甚高，斐然可觀，加以濯磨，可稱上選，特是培植人才”。

specialized study at a higher level in universities. Because of the satisfactory educational results, the model of bilingual education at Peiyang University was later borrowed by other modern universities or colleges as Nanyang College (established in 1897) and Imperial Peking University (established in 1898).

Peiyang University also cultivated a large number of prominent bilinguals who played an active role in China's modernization and social change. As Peiyang University was by nature a polytechnic university, most of its prominent graduates came from the fields of modern science and technology. The representative graduates included the founder of Traumatic Medicine in China — Liu Ruiheng (劉瑞恒), the famous metallurgists — Wen Zongyu (溫宗禹) and Cai Yuanze (蔡遠澤), and the head designer and constructor of Chengdu-Chongqing Railway — Liu Jingshan (劉景山) (Li, 1989).

As the nature of Peiyang University changed from a polytechnic university to a comprehensive university in the early 20th century, it also cultivated many prominent graduates in liberal arts. The representative graduates included the Vice Minister of Finance in the Republic of China — Qian Yongming (錢永銘), and the well-known educationalists — Luo Zhongchen (羅忠忱) and Li Jianxun (李建勳). Some graduates also became teachers in other universities and modern schools. For instance, Wang Chonghui (王寵惠), one of the first graduates from Peiyang University in 1899, served in Nanyang College as the chief teacher of English and Geography. Ma Yinchu (馬寅初), a graduate of Peiyang University in 1907, served as the Dean of Peking University in 1920 (Li, 1989).

Similar to the evaluations we made of the results of bilingual education in the premier modern schools such as Peking Translation College (as detailed in Section 5.2.8), we should not attribute all the graduates' achievements to the bilingual education at Peiyang University.

Nevertheless, in light of the fact that bilingual education was the main education model to gain advanced western knowledge in late imperial China and Peiyang University was the first modern polytechnic university in China, the impact of the bilingual education on students' development could not be underestimated. The achievements of graduates of Peiyang University demonstrated its high-quality bilingual education and accelerated the pace of modernization in late imperial China. As commented in the report of *Ta Kung Pao* "On Celebrating the 51st Anniversary of Peiyang University" (‘祝北洋大學五十一周年’) on October 2, 1946,

“Peiyang University played an important role in China’s modernization during the first half of the 20th century. Most of the academic leaders and middle-ranked cadres in the field of engineering were graduates of Peiyang University. Thus, the development of large-scale construction industry such as civil engineering, mining and metallurgy in China was inseparable from the contributions of Peiyang University.”

(‘On celebrating the 51st anniversary of Peiyang University’, *Ta Kung Pao*, October 2, 1946)

(‘北洋大學在半個世紀以來的中華建國的工作中，在近代中國走向現代征途中，有其輝煌的貢獻。尤以在工程界所有的領導人物及中級幹部人才，多半出身北洋，卓然能自樹立。在土木、採礦、冶金三部門中，任何較有規模的建設事業，更幾乎都與北洋大學有不可分的關係。’)

The bilingual education practices of Peiyang University also facilitated China’s international communication in the early 20th century. The well-designed bilingual curriculum helped students lay a solid foundation in foreign languages, which made it easier for students to study abroad. From the inception of Peiyang University in 1895 to 1911, 57 out of 357 graduates chose to further their education in a foreign university on a fund

granted by Peiyang University (Zhang & Jia, 2005). Different from the government-funded “study abroad” scheme during the Self-Strengthening Movement, the overseas students from Peiyang University had more explicit goals and stronger motivation for acquiring cutting-edge knowledge from well-known western universities and contributing to China’s modernization after they returned. The “study abroad” Project at Peiyang University facilitated China’s diplomatic communication when China was eager to get over the dilemma after the military defeats in the post-1895 period, and to pave the way for modernization by learning from foreign countries.

6.4.2 The bilingual education practices at Imperial Peking University

Imperial Peking University (京師大學堂) was one of the three premier universities established after the Sino-Japanese Naval War (*The Yearbook of China’s Education*, 1903). It provided an outstanding model for other modern universities in China to develop their bilingual education. In reality, the proposal of establishing a modern university in China was not a result of the education reforms implemented by moderate reformists during the “New Policies” period, but it was advocated by radical reformers during the Hundred Days’ Reform. As Weston (2002) commented, the idea to establish Imperial Peking University was mooted by radical reformers, promoted by moderate reformers and implemented by the conservative Empress Dowager Cixi in 1898. It thus became a common ground for different political groups to implement institutional reforms and showed great resolution of the Qing government to alter its education system and develop modern education in the post-1895 period. Since Imperial Peking University was the premier government university, it is necessary to investigate its bilingual education practices to examine the relationship between the policies and practices.

6.4.2.1 The establishment of Imperial Peking University and its initial development until 1901

The earliest idea of establishing a modern university in China was traced back to the 1880s when Zheng Guanying (鄭觀應)¹⁴¹ proposed to establish a modern university and include foreign language subjects and western content subjects in the curriculum:

“Peking Translation College only taught students foreign languages and imparted rudimentary knowledge of mathematics, astronomy and geography to students. By contrast, in other countries, at least one modern university was established in the capital to develop students’ professional skills.”

(Zheng Guanying: ‘On Examination’, *Words of Warning to a Prosperous Era*, 1884, pp. 38-42).

(‘查各國京師，俱有大學堂，各精一藝，各專一業者，非經我國同文館教習，只通算學、天文、地理、各國語言文字而已。’)

Zheng Guanying’s proposal did not gain enough attention from the Qing government because during the 1880s and 1890s, the Qing government was confronted with a series of wars such as the Sino-French Naval War and the Sino-Japanese Naval War. However, the idea to establish a modern university recurred in the post-1895 period when China started to reflect on the Sino-Japanese War and the limitations of previous modern education. On July 3, 1898, in the memorial “On the establishment of Imperial Peking University”, Sun Jia’nai¹⁴² (孫家鼐) asserted that modern universities differed from previous modern schools in that their curriculums not only included foreign language subjects but also western content subjects such as western law and politics. As shown in the memorial,

¹⁴¹ **Zheng Guanying** (1842-1921) was a well-known educationalist, industrialist and thinker in the late Qing period.

¹⁴² **Sun Jianai** (1827-1909) was a famous educationalist and was appointed the Grand Councilor of State in the Qing government in 1890.

“The educational objective of Imperial Peking University is to develop students’ skills in a specialized field, so the teaching methods are entirely different from those adopted in other schools (established in the Self-Strengthening Movement). Those people who are proficient in foreign languages are not necessarily the talents who understand western knowledge as western languages are radically different from western knowledge. ... Since educational results are closely linked to curriculum designs, two fundamental issues should be considered in the curriculum design of Imperial Peking University. Firstly, the university should offer subjects of both Confucian knowledge and western knowledge. Secondly, foreign language subjects should be an integral part but not the only subject of university curricula since a foreign language is only a linguistic access to western knowledge but not the totality of western knowledge.”

(Sun Jia’nai: ‘A memorial on the establishment of Imperial Peking University’, *The Imperial Records during the Emperor Guangxu Governorship*, 4, pp. 4155-4157)

(‘此次設立學堂之意，乃欲培植非常之才，以備他日特達之用，則其教法亦不同。夫僅通西國語言文字之人，亦不能謂為西學之人才明矣。西文與西學二者，判然不同。。。功課之完善與否，實學生成就所攸關，故定功課為學堂第一要著。今力矯流弊，標舉兩義：一曰‘中西並重’，觀其會通，無得偏廢；二曰‘以西文為學堂之一門’，不以西文為學堂之全體；以西文為西學發凡，不以西文為西學究竟。’)

Apart from specifying the educational objectives, in the memorial Sun Jia’nai also recommended to offer ten general knowledge subjects, five foreign language subjects and ten specialized knowledge subjects at Imperial Peking University. The general knowledge subjects included Confucian classics, neo-Confucianism, Literary Anecdotes (掌故), Zhuzi (諸子), mathematics at the intermediate level, natural sciences, politics, geography,

literature and gymnastics. The foreign language subjects included English, French, Russian, German and Japanese. The ten specialized knowledge subjects were mathematics at the advanced level, natural sciences (at the advanced level), western politics, western geography, mining, engineering, commerce, military tactics, hygiene and painting. Students were required to take all the ten general knowledge subjects, choose one foreign language subject and pick one or two specialized knowledge subjects.

In reality, the idea to offer foreign language subjects at Imperial Peking University was firstly mooted in Xiong Yiqi's¹⁴³ (熊亦奇) "Proposals for establishing Imperial Peking University":

"Acquiring western knowledge should start from learning foreign languages since one cannot read western books without a command of foreign languages. ... For the choice of foreign languages, one does not need to learn the ancient foreign languages like Greek and the Roman language, but they should learn important foreign languages like English, French, German and Russian. The intellectuals in western countries are proficient in many foreign languages. However, since students at Imperial Peking University just start to learn foreign languages and are unable to learn many languages, it would be more appropriate for them to focus on one foreign language."

(Xiong Yiqi: 'Proposals for establishing Imperial Peking University', in Zheng Zheng Duo's *Selected Essays in Late Imperial China*, 1987, pp. 567-568)

(‘西學須從語言文字入手，蓋不通文字語言，則無由讀西書。。。語言文字，雖不必遠尋希臘羅馬古文，而英、法、德、俄四國之文，不可不備。論西國通人，無不兼通數國。今學生問津伊始，難責以兼人之量，只可各占一科。’)

¹⁴³ **Xiong Yiqi** was a well-known literati and educationalist in late imperial China. He was also the Imperial Records Compiler in the Qing government.

Sun Jia'nai's memorial dated July 3, 1898 did not explicitly mention which language to be used as the MOI for western content subjects at Imperial Peking University. However, it stated that students who were proficient in foreign languages should read original western textbooks while students who did not acquire the foreign language proficiency should read translated books¹⁴⁴. (*Statutes of Imperial Peking University*, in the memorial 'On the establishment of Imperial Peking University'). It thus suggested that foreign languages could be chosen as the MOI for students who were proficient in foreign languages.

Another important issue of bilingual education at Imperial Peking University was the choice of foreign languages for students. In accordance with 'Rules and Regulations of Imperial Peking University' ('京師大學堂條規') published in *Chinese Globe Magazine* (<萬國公報>) in 1898, students chose any of the five foreign languages (English, French, German, Russian and Japanese) according to their major at Imperial Peking University. Specifically, as stipulated in the "Rules and Regulations of Imperial Peking University",

"If a student aspires to study military affairs or arms production, he should learn Russian and German. A student who majors in diplomacy and treaty negotiation should choose French as the target foreign language. If a student aspires to study agriculture, industry and commerce, he should learn English and Japanese."

('Rules and Regulations of Imperial Peking University'. *Chinese Globe Magazine*, 120, pp. 46-49.)

(‘如其人志在兵學或可習製造槍炮等事者，令習俄、德文；其性於條約為近者，令習法文；欲習農工商等務者，令習英文及日本文。’)

¹⁴⁴ The pictures of those translated textbooks used at Imperial Peking University are presented in Appendix G.

Apart from the five main foreign languages, *Statutes of Imperial Peking University* in 1898 also stipulated that foreign language education at the university should not be limited to one or two foreign languages but should include other foreign languages based on the requirements of academic disciplines.

In the beginning of *Statutes of Imperial Peking University* in 1898, Sun Jianai, who was appointed the administrator of Imperial Peking University, summarized the limitation of previous education practices in modern schools and insisted on employing Chinese as the head teacher:

“Most of the previous modern schools such as Peking Translation College and Peiyang University employ westerners as the head teacher. As we intend to develop a balanced bilingual curriculum, we should hire the head teacher who is familiar with both Confucian knowledge and western knowledge. Some Chinese scholars have acquired Confucian and western expertise while no westerners have a full understanding of Confucian knowledge. ... Thus, if we would like to follow the guiding principle of modern education (Zhang Zhidong’s ‘Ti-Yong Formula’) and promote the greater effectiveness of education, we should employ a Chinese scholar as the head teacher.”

(*Statutes of Imperial Peking University*, 1898, pp. 1-2)

(‘同文館及北洋學堂等，多以西人為總教習。然學堂功課，既中西並重，華人容由兼通西學者，西人必無兼通中學者。。。故必擇中國通人，學貫中西，能見其大者為總教習，然後可以崇體制而收實效。’)

To employ Chinese as the head teacher of Imperial Peking University indicated that after deep reflection upon the previous modern education, the Chinese scholar-officials realized

the necessity of assuming their control over westernized education in the modern schools and giving greater importance to Chinese-related subjects.

The Qing government accepted Sun Jia'nai's proposal and issued an imperial edict on July 14, 1898 to agree on the establishment of Imperial Peking University (Emperor Guangxu: 'An imperial edict on the establishment of Imperial Peking University'). Unfortunately, the education practices of Imperial Peking University were suspended in 1900 due to the Boxer Rebellion. However, the administrators and reformists insisted on establishing Imperial Peking University as the premier university in China. During the "New Policies" Reform, the proposal of re-establishing Imperial Peking University was a priority of government agenda.

6.4.2.2 The bilingual education practices at Imperial Peking University during the "New Policies" Period

The preparation stage after the Boxer War: 1902-1903

After the Boxer War, the Qing government decided to implement an institutional reform to strengthen its regime against foreign inroads. With a particular focus on educational modernization, Empress Dowager Cixi agreed on the proposal of the moderate reformers such as Zhang Zhidong, Zhang Baixi and Sun Jia'nai on reopening Imperial Peking University as the premier modern university in late imperial China.

In 1902, Imperial Peking University was reopened and divided into "Speed-up Educational School" (速成科) (which included the Department of Scholar-officials (仕學館) and the Department of Teacher Training (師範館)) and "Pre-university School" (預備科) (which included the Department of Politics and the Department of Technology). Since Imperial Peking University was reestablished a year before the promulgation of the Guimao

Education System, the education practices modeled on Japan's modern universities. For instance, the idea to establish the Department of Scholar-officials and the Department of Teacher Training came from Wu Rulun's inspection reports on Japan's modern education in 1902. In the report, Wu Rulun stressed the importance of overcoming the faculty shortage by establishing the Department of Teacher Training and highlighted the importance of imparting expertise in modern science and technology to scholar-officials (Wu, 1902). Due to the massive destruction of the Boxer War, Imperial Peking University had to spend a couple of years reorganizing the faculty and training the students to be prepared for educational activities at the university. One year later, the School for Presented Scholars¹⁴⁵, the Department of Translation and the Department of Medicine were established at the university.

Foreign languages were the core subjects of Imperial Peking University. Except for some scholar-officials who were too old to learn foreign languages, all the students at the Pre-university School, the Department of Translation and the Department of Medicine were required to take foreign language subjects. They were even not allowed to discontinue their foreign language learning upon enrollment without justifiable reasons (Dean's Office of Imperial Peking University: 'Notice prohibiting all students studying a foreign language from willfully discontinuing the subject'). The high status of foreign languages in the curriculum led to the employment of foreign teachers at Imperial Peking University. According to "The name list of teachers at Imperial Peking University" in 1903, except for the Principal (Zhang Baixi), teaching assistants and a few Chinese teachers of Chinese-related subjects, the other teachers at Imperial Peking University including language teachers and content subject teachers were all foreigners.

¹⁴⁵ **School of Presented Scholars** was also called Jinshi Guan 進士館 in Chinese. It was a school for successful candidates in the highest imperial examination.

After two years of preparation, Imperial Peking University was back on the track in 1904. In the following sections, six main aspects of the bilingual education practices at Imperial Peking University will be summarized including:

- (1) student admission to Imperial Peking University;
- (2) employment of foreign teachers;
- (3) the relationship between western education and Confucian education;
- (4) weekly hours of foreign language courses in timetables;
- (5) choice of foreign languages;
- (6) choice of MOI for western content subjects.

Student admission to Imperial Peking University

Compared to the admission requirement in *Statutes of Imperial Peking University* in 1898, the University had high requirements for students' Chinese and English proficiency during the "New Policies" Reform. For instance, in the university entrance examinations in 1908, all the candidates took a foreign language examination and a Chinese language examination. Those students who passed the language examinations would sit for examinations in Chinese history and geography (5 questions), western history and geography (5 questions), arithmetic (5 questions), algebra and planimetry (5 questions), physics and chemistry (5 questions). As the students generally had a limited understanding of western knowledge, those who did poorly in the examinations of western knowledge but demonstrated a high Chinese and foreign language proficiency were also admitted to Imperial Peking University (*Statutes of Imperial Peking University*, 1908). The importance of Chinese and foreign language proficiency in the university entrance examinations was clarified in the memoir of Yu Tongkui (俞同奎), a former student of Imperial Peking University: "The scores for

Confucian knowledge, Chinese and foreign languages accounted for a great weighting in the admission assessment”¹⁴⁶.

An increasing number of foreign teachers employed from 1904 to 1911

After the Guimao Education System had been promulgated in 1904, modern universities in China established a variety of academic disciplines and included western content subjects in the curriculum, which created burgeoning demands for foreign teachers. According to *The First Yearbook of China's Education* in 1933, 33 foreign teachers were employed as chief teachers, and 82 Chinese teachers were employed as co-teachers, teaching assistants or teaching assistants. The list of main foreign teachers at Imperial Peking University is presented in Table 14 on Page 384.

Some foreign teachers were employed at Imperial Peking University after the Qing government had requested the governments in other countries such as Britain, France and Japan to send teachers to China (Imperial Peking University: a report on March 31, 1903). Alternatively, some foreign teachers came from the recommendation of provincial governors or practitioners of other modern schools (Imperial Peking University: ‘The discussion of the Board of Directors on employing teachers at Imperial Peking University’).

¹⁴⁶ The original text is “招選學生，以國學和東西文有根底者為取錄標準”. It was translated from Yu Tongkui's memoir “The studying experiences at Imperial Peking University 46 years ago”, in *The Special Commemorative Edition of Peking University*, pp. 11-16

Table 14: The main foreign teachers employed at Imperial Peking University

Name	Subject
W. A. P. Martin	The head teacher of western subjects
J. Bailey	English
F. H. James	English
聶克遜 ¹⁴⁷	English
M. de Gieter	French
賈士藹	French
Herr V. Broen	German
B. Schmidt	Russian
S. Shintaro	Japanese
Nishigori	Japanese
R. Coltman, jr.	Medicine
H. Unokichi	Japanese Literature

¹⁴⁷ Due to the availability of primary sources of data, I only found the Chinese version of some foreign teachers' names at Imperial Peking University.

S. Kutoh	Zoology, Physiology
N. Kuji	Chemistry
太田達人	Physics, Mathematics

(Source: The First Historical Archives of China. ‘The Ministry of Education in Late Imperial China’, vol. 69; ‘Peking’, *North China Herald*, February 6, 1899, p. 211)

In the employment process, Imperial Peking University put quality of foreign teachers as the priority:

“The western teachers employed in previous modern schools were mainly western residents in China, foreign missionaries, or retired custom officers. Most of them were not professionals and unable to impart western knowledge to students. Western knowledge has developed rapidly in the last few years, and modern western schools have cultivated a large number of talents each year with cutting-edge western expertise. Thus, during the process of hiring foreign teachers at Imperial Peking University, it is crucial to screen teachers carefully. Only those who pass the examination of the Ministry of Education or universities in foreign countries are eligible for teaching at Imperial Peking University.”

(Zhang Baixi: ‘A memorial on preparing for the establishment of modern universities in China’, ‘Authorized School Regulations — Related Memorials’, p. 4820)

(‘中國學堂所請西人教習，向皆就近延其本居中國者，或為傳教來華之神甫，或為海關退出之廢員，在教者本非專門，而學者亦難資深造；且西國學問數年一變，則其人才亦月異而歲不同。將來延請教習專門，亦非彼國文部及高等學堂考問，不能分別優劣。’)

As stipulated in Section “Responsibilities of Chinese and Foreign Teachers” of *Statutes of Imperial Peking University* in 1904, some Chinese teaching assistants were employed to help students solve language-related problems and bridge the communicative gap between foreign teachers and Chinese students in western content subjects. Most of the teaching assistants employed were overseas students financed by the Ministry of Education in late imperial China or graduates from modern schools during the Self-Strengthening Movement. For instance, as mentioned in the memorial dated June 22, 1904, Bai Rui (柏銳), the current Principal of Rites (禮部主事) and one of the former government-financed overseas students to Britain, was hired as a teaching assistant at Imperial Peking University (Imperial Peking University: A memorial on transferring government-financed overseas students to be teaching assistants at Imperial Peking University).

The integration of western subjects and Chinese-related subjects in the bilingual curriculum

According to *Statutes of Imperial Peking University* in 1904, the university not only offered a few Chinese-related subjects, but also offered a variety of western content subjects such as western languages, politics, law, natural science, engineering, agriculture, medicine and commerce.

At Imperial Peking University, students majoring in a specialized field were required to take subjects of other academic disciplines. For example, as stipulated in the *Statutes of Imperial Peking University* in 1904, students majoring in Confucian Classics, Chinese Literature and History were required to take subjects of foreign languages, history of western science, western literature, and history of western countries with foreign languages as the MOI. The curriculum design indicated close integration between different subjects at Imperial Peking University, and reflected the importance of foreign languages for accessing

different fields of knowledge. Similarly, students majoring in British literature were required to take Chinese literature as a compulsory subject and Chinese history as an elective subject. It not only prevented the Chinese students majoring in British literature from discontinuing their native language learning, but also advanced their understanding of similarities and differences between Chinese literature and British literature and developed their critical thinking on the essence of British and Chinese literature ('Curricula & Subjects', *Statutes of Imperial Peking University*, 1904). The importance of Chinese was also reflected in the students' selection test of the "Study Abroad" scheme at Imperial Peking University (Feng & Niu, 2007). Students who desired to receive government funds to further their study in foreign universities after graduation needed to pass an examination in Chinese. They were also required to continue reading Confucian classics when they studied abroad so as not to lose their Chinese identity in the western culture (Minister of Education: 'A memorial on selecting students for overseas study').

Another piece of evidence to demonstrate close integration between different academic disciplines and subjects was the curriculum design in the Department of Translation attached to Imperial Peking University. Apart from learning foreign languages, students in the Department of Translation also took subjects of general knowledge and subjects of specialized knowledge. The subjects of general knowledge included Confucian Ethics, Chinese Literature, History, Geography, Mathematics, Natural Sciences, Physics, Chemistry, Painting and Gymnastics while the subjects of specialized knowledge included Cross-culture Communication, Finance and Education ('Curricula & Subjects', *Statutes of the Department of Translation attached to Imperial Peking University*, 1904). It can be seen from the curriculum that the Department of Translation imposed high requirements on students' comprehensive knowledge as the curriculum designers believed that an extensive knowledge of various academic disciplines would help to sharpen students' skills in

translation. The purpose was detailed in the report “On the establishment of the Department of Translation at Imperial Peking University”,

“As the Minister of Education expects, the Department of Translation at Imperial Peking University is founded not merely to train a few translators, but to cultivate potential translators who have extensive knowledge of different academic disciplines. Thus, students should not learn a foreign language for its own sake but for acquiring western knowledge, and in the meantime, they should be proficient in Chinese. ... The persons who only understand foreign languages but do not have a thorough understanding of modern science and technology cannot be called knowledgeable talents.”

(Imperial Peking University: ‘A report on establishing the Department of Translation at Imperial Peking University’, *Education Journal*, 1905, p. 42)

(‘而學務大臣所期望所責成，則不惟育譯才而在育學問完備之譯才，不惟習外國語言文字，而在習外國語言文字以求外國之學術，而保存靈粹舊墟於國文。 。 。 。 科學不備，雖通洋文無能為也。’)

As stipulated in the section of “Objectives of Education” in *Statutes of Imperial Peking University* in 1904, Chinese proficiency as well as knowledge of Confucian classics, China’s history and geography were important to translators and interpreters. The importance of Chinese-related subjects in the Department of Translation was also reflected in the hours of courses. Students were required to spend 4 hours (out of 36 hours) on each of the Chinese-related subjects including Chinese, Confucian ethics, Chinese literature every week from Year 1 to Year 5, and spend 4 hours on both China’s history and China’s

geography every week (out of 36 hours) in Year 1. ('Curricula & Subjects', *Statutes of the Department of Translation attached to Imperial Peking University*¹⁴⁸, 1904).

The long hours of foreign language courses

In accordance with the requirements of the Guimao Education System that prioritized foreign languages in modern schools, the administrators and curriculum designers of Imperial Peking University decided to allocate much time to courses on foreign languages. It is surprising that, according to *Statutes of Imperial Peking University* in 1904, foreign language education accounted for the longest hours in the weekly course schedules in the Department of Confucian Classics, the Department of Literature and the Department of Commerce. For instance, students majoring in the I Ching (the Book of Changes, 易經), China's Geography and China's History spent 6 hours (out of 24 hours) every week on foreign language courses. While for students in the Department of Politics and Law, the Department of Medicine, the Department of Natural Sciences, the Department of Agriculture and the Department of Engineering, the *Statutes* did not include "foreign language courses" in the regular curriculum list but only included it on the list of "Additional Courses" that were open to students who had difficulties in understanding lectures. Nevertheless, it does not suggest that foreign language education was not important to those students. Since foreign teachers delivered lectures in foreign languages, high foreign language proficiency would enhance their understanding of the lectures.

The wider choices of foreign languages

Normally, students would choose one foreign language from English, French, Russian, German and Japanese according to the requirement of their major. However, compared to

¹⁴⁸ See the Appendix H for the original *Statutes*.

previous modern schools, Imperial Peking University during the “New Policies” Reform provided wider choices of foreign languages to students. For instance, the students majoring in Chinese Literature chose Latin and Greek as the elective subjects in their final year as a command of Latin and Greek helped students to access classical western literary works and make comparisons between Confucian classics and western literature. Those students majoring in British Literature, except for English (9 out of 24 hours every week) and Latin (3 out of 24 hours every week) as the core subjects, also chose one or two other foreign languages from Greek, Italian, Dutch, French, German, Russian and Japanese as the elective subjects. The wider choice of foreign languages provided students with a linguistic tool to access modern knowledge in different countries and to expand their international outlook.

Different from the dominating status of English and French in the modern schools during the Self-Strengthening Movement, Imperial Peking University witnessed a rising status of Japanese language education in the curriculum. The growing importance of Japanese may be attributed to the fact that an increasing number of Japanese teachers were employed at Imperial Peking University since the end of the Sino-Japanese Naval War (‘The name list of teachers at Imperial Peking University’, 1903) and many Japanese textbooks were imported from Japanese universities. Thus, the Japanese language, which bears more similarities to Chinese in its lexis and orthography than western languages, acquired a high status at Imperial Peking University (Emperor Guangxu: ‘An imperial edict on requesting every province to elect and send students to the Office of Foreign Affairs for study in Japan’). For instance, in the Department of Politics and Law, and the Department of Agriculture, Japanese teachers taught courses on Politics, Political History, Finance, Statistics, Administrative Jurisprudence and Agricultural Economics in Japanese. Japanese thus became a compulsory foreign language for students in the two departments (‘Curricula & Subjects’, *Statutes of Imperial Peking University*, 1904).

As stipulated in the Guimao Education System, students at pre-university schools were also required to study a second foreign language. However, the administrators of Imperial Peking University found it difficult for some students to learn the second foreign language as most of them had no solid foundation in English, not to speak of the second foreign language. Having reviewed the report on students' difficulties in learning the second foreign language at Imperial Peking University, the Ministry of Education adopted a flexible policy that "the students are allowed to learn the second foreign language only if they have acquired a full mastery of the first foreign language, otherwise they should specialize in only one foreign language."¹⁴⁹ ('An official document on allowing the Pre-university Students to learn only one foreign language', *Official Document of the Ministry of Education*, April 5, 1907, p. 257).

Nevertheless, in order to encourage students to learn a second foreign language, the administrators of Imperial Peking University gave awards to those students who learned a second foreign language. The students' score for the first foreign language was calculated into their average score in each semester, and the score for the second foreign language would be recorded in the "Notes" section of students' transcripts. For those students who only learned one foreign language, their awards upon graduation would be lower compared to those who obtained the same grade but learned two foreign languages (The Ministry of Education: 'An official report on asking Imperial Peking University to submit students' curriculum lists and handouts at the Pre-university School and School of Teacher Training').

The choice of MOI for western content subjects

¹⁴⁹ The original text is "凡習英德法語文者，其或學力已深許其兼習，否則專使肄力本科".

Although few original archives have revealed the MOI for western content subjects, similar to Peiyang University, it can be inferred from the makeup of faculty team, the examination papers and the use of original foreign textbooks that a foreign language was probably the MOI for western content subjects.

As detailed at the beginning of Section 6.4.2.2, a large number of foreign teachers were employed to teach western content subjects at Imperial Peking University. In spite of the fact that some foreign teachers were former missionaries to China who had been living in China for several decades and were able to speak Chinese, they still found it difficult to deliver lectures in Chinese since few corresponding Chinese terms and expressions could be used to explain technical terminologies. Some Chinese teaching assistants were thus employed to help students overcome the language barrier between Chinese students and foreign teachers in class. The teaching assistants were also asked not to interfere in western content subjects but only to give students language assistance in remedial foreign language courses (*Statutes of Imperial Peking University*, 1904). For students at the Pre-university School, foreign teachers taught language courses without the presence of Chinese teachers, which imposed a high requirement on students' foreign language proficiency (*Statutes of Imperial Peking University*, 1908). Another piece of solid evidence to show the use of foreign languages as the MOI was the requirement for students' foreign language proficiency in the admission requirements. As stipulated in *Statutes of Imperial Peking University* (1904), "students who graduate from normal colleges cannot be admitted to the University as they have low foreign language proficiency and may have difficulties in understanding western content subjects"¹⁵⁰ (p. 2). Therefore, foreign languages could be the primary MOI for western content subjects at Imperial Peking University.

¹⁵⁰ It was translated from *Statutes of Imperial Peking University* (1904). The original text is "范畢業生外國文素無根底，恐將來入學以後，聽講既不能獲益，而學堂教授上尤多室礙".

The choice of foreign languages as the MOI also helped students prepare the all-English (or other foreign languages) examinations in western content subjects¹⁵¹. As stipulated in *Statutes of Imperial Peking University* in 1904, the foreign chief teachers reviewed all examination papers in their subjects. In order to facilitate the reviewing and marking process of foreign teachers, the examination papers of western content subjects were printed in foreign languages, which provided concrete evidence to the use of foreign languages as the MOI for content subjects.

The choice of foreign languages as the MOI was also tied to the choice of textbooks at Imperial Peking University. Complied with the requirements of the Guimao Education System, original textbooks of western countries were used at Imperial Peking University¹⁵². The Chinese diplomats and envoys in western countries were asked to send original textbooks to China to compensate the shortage of original textbooks in western content subjects at the University¹⁵³ (Emperor Guangxu: ‘An imperial edict on commissioning the Chinese diplomats and ministers in the United States and Japan to send original textbooks to Imperial Peking University’).

6.4.2.3 The effects of bilingual education at Imperial Peking University

In light of the fact that the development of bilingual education at Imperial Peking University only lasted for 7 years (1904-1911), it is unfair to compare the results of bilingual education at Imperial Peking University with those of modern universities in other countries. Nevertheless, as an early government university in China and a top priority in government

¹⁵¹ See Appendix I for the original Russian examination paper at Imperial Peking University.

¹⁵² Please see Appendix J for the list of the original textbooks that were imported from the United States at Imperial Peking University.

¹⁵³ Please see Appendix K for Emperor Guangxu’s imperial edict on telegraphing the Chinese ministers in foreign countries to send original textbooks to Imperial Peking University.

agenda in the “New Policies” Reform, the bilingual education practices at Imperial Peking University exerted considerable effects on the establishment, consolidation and implementation of the Guimao Education System in China. It also provided an instructive model of bilingual education to other modern universities or colleges in China, and it had a significant impact on the social acceptance of foreign languages and the introduction of western knowledge to the Confucian society. The main effects of bilingual education at Imperial Peking University will be summarized in the following paragraphs.

As mentioned at the beginning of Section 6.4.2, the development of bilingual education at Imperial Peking University can be divided into two chronological periods demarcated by the historically significant “New Policies” Reform in 1901. Since the establishment of the Guimao Education System was one of the most important resolutions in the “New Policies” Reform, the development of bilingual education at Imperial Peking University was closely tied to the establishment, consolidation and implementation of the Guimao Education System. Specifically, the idea to establish Imperial Peking University was conceived in the post-1895 period when China was eager to cultivate talents in various fields to catch up with the leading world powers. In Sun Jia’nai’s memorial “On the establishment of Imperial Peking University”, he made the suggestions for curriculum designs in modern universities. His suggestions not only laid a foundation for the curriculum development of Imperial Peking University, but, more importantly, yielded insights into Zhang Baixi and Zhang Zhidong’s drafted version of the national education system. When the Guimao Education System was promulgated in 1904, the practitioners at Imperial Peking University complied with the national regulations on universities. The alignment between the bilingual education practices at Imperial Peking University and the Guimao Education System facilitated the further consolidation and implementation of the newly promulgated national education system and the further standardization of tertiary education in China.

The bilingual education practices at Imperial Peking University also provided a concrete model for education practices in other modern universities and specialized colleges. The Guimao Education System aimed to combine Confucian knowledge and western knowledge in a balanced curriculum, but the abstract regulations of the Guimao Education System might not provide concrete guidelines to practitioners in the modern universities and specialized colleges. Thus, the curriculum list and the weekly hours of each subject in different departments of Imperial Peking University, which was clearly presented in the university statutes, provided a practical and instructive model to educational practitioners in other schools. The exemplary role of Imperial Peking University in guiding the bilingual education practices in China was even mentioned in the Guimao Education System, which explicitly stated that other modern universities and colleges should take “Imperial Peking University” for reference.

As the premier modern university in China, Imperial Peking University played an important part in changing people’s viewpoints on modern education in the early 20th century. The high status of foreign language subjects in the bilingual curriculum of Imperial Peking University accelerated the general acceptance of foreign languages in the society that had been immersed in the Confucian culture for over two thousand years and had developed obstinate resistance to foreign languages. In the same vein, offering a wide array of western content subjects also facilitated the rapid introduction of western knowledge to the mainstream society. When the Imperial Examination was abolished in 1905 and the traditional bureaucracy route terminated, the smooth development of bilingual education at Imperial Peking University altered a majority of Chinese’ mindsets for modern education, which made Imperial Peking University one of the most well-known universities in late imperial China (Xie & Zhang, 2017).

As shown in the source of students, Imperial Peking University enjoyed a wider popularity among the mainstream society than other modern schools (The number of students at Imperial Peking University (1902-1911)). The source of students at Imperial Peking University was not limited to the minority of social elites or students from a special geographical region, but extended to students all over China (Zhang, 2003). Another piece of convincing evidence on the popularity of Imperial Peking University was the amendment of graduates' award scheme. From 1898 to 1904, the University kept the tradition of previous modern schools to award graduates academic titles and government posts as incentives to attract students. However, in light of the fact that a growing number of students were admitted to Imperial Peking University, the University decided not to award graduates government posts (Chen Zengyou: 'A memorial on the amendment of the award scheme of Imperial Peking University'). The growing high social acceptance was not only attributed to the relatively wide range of academic disciplines at Imperial Peking University, but also to the continually financial support from the Qing government. Thus, it was natural that the bilingual education practices of Imperial Peking University, which reflected the supporting attitude of the Qing government towards foreign languages and western knowledge, had a positive impact on the introduction and penetration of foreign languages, western politics, law, modern science and technology into the mainstream society of China.

6.4.3 The bilingual education practices of Nanyang College

In contrast with Peiyang University and Imperial Peking University, the nature of another premier college in China — Nanyang College (the predecessor of Shanghai Jiaotong University) was more complex. Nanyang College originally intended to cultivate intellectuals in politics and law. However, due to various reasons such as the dramatic "Ink

Bottle” event¹⁵⁴ in 1902, Nanyang College shifted its educational focus to expertise on modern science and technology. Nanyang College was not, in a strict sense, a true university, but a complex of a primary school (外院), a secondary school (中院), a specialized college (上院), School of Teacher Training (師範院), School of Japanese (東文學堂) and School of Textbook Translation (譯書院). From 1905 onwards, Nanyang College was governed by the Ministry of Business, the Ministry of Post and Telecommunication, and the Ministry of Transport in succession. Therefore, the name of Nanyang College was later changed to “Shanghai Senior Industrial College attached to the Ministry of Business” in 1905 and “Shanghai Senior Industrial College attached to the Ministry of Post and Telecommunication” in 1907¹⁵⁵. Over the course of its development, in accordance with the Guimao Education System, bilingual education was always an important means of imparting expertise in western law, politics, science and technology in Nanyang College to students. In the following part, after a brief account of the establishment of Nanyang College (Section 6.4.3.1), the bilingual education practices in Nanyang College will be detailed in five aspects:

- (1) student enrollment and college entrance examination;
- (2) design of a bilingual curriculum;
- (3) teacher employment;
- (4) assessment of bilingual education;
- (5) results of bilingual education.

6.4.3.1 The establishment of Nanyang College

¹⁵⁴ “Ink bottle” event was a significant student campaign in China’s history. In 1902, a Chinese teacher Guo Zhenying in Nanyang College found a clean ink bottle in his desk. An empty ink bottle stood for no knowledge in Chinese culture. The school administrator decided to dismiss the students who played the joke, but it led to the strike protest from the other students.

¹⁵⁵ For convenience and brevity, the College will be called “Nanyang College” in the following part.

The founder of Nanyang College was also Sheng Xuanhuai (盛宣懷). As a chief assistant to Li Hongzhang, Sheng Xuanhuai acquired a high social status in China from the Self-Strengthening Movement to the post-1895 period. As we noted in Section 6.4.1.1, Sheng Xuanhuai was also one of the most prestigious Chinese entrepreneurs in late imperial China. By the end of the 19th century, he was the de-facto controller of the lifeline of China's economy, namely large-scale industries such as shipbuilding, telegraphing, railway, banking and textile. Because of Sheng Xuanhuai's leading role in China's modern industries and considerable contributions to China's modernization, he was appointed the Secretary of the Ministry of Commerce and the Minister of Post and Telecommunication in the Qing government in 1896, which demonstrated his high status in China's modern industry and the Qing government (Ou, 2012).

In 1896, Sheng Xuanhuai was appointed the head of China's Railway Corporation in Shanghai. Since Shanghai was an international trade port in the late 19th century, Sheng Xuanhuai chose it as the main site to develop modern industry. He set up the head office of China's Merchants Steamship Company, Bureau of China's Telegram and Huasheng Textile Company in Shanghai. When Sheng Xuanhuai was engaged in commercial dialogues with western businesspersons in Shanghai, he recognized the shortage of Chinese who understood western knowledge and the urgency of establishing a modern university in Shanghai as a brother school to Peiyang University (W.W. Zhang, 2012).

On March 21, 1896, Sheng Xuanhuai submitted his memorial "On the establishment of Nanyang College" (<請設學堂片>) to Liu Kunyi (劉坤一), the General-governor of Liangjiang (兩江總督)¹⁵⁶, to present his ideas of establishing a modern college in Shanghai.

¹⁵⁶ Shanghai was under the administration of the General-governor of Liang Jiang (Jiangnan and Jiangxi).

Sheng Xuanhuai's idea of establishing Nanyang College happened to be mooted in a favorable social milieu for modern education in the post-1895 China when the scholar-officials in the Qing government arrived at a consensus on developing tertiary education in China. Almost at the same time, the Qing government approved of Li Duanfen's (李端棻) memorial "On the establishment of modern schools in China" (<奏請推廣學校折>), and agreed to establish a modern university in both Beijing and Shanghai, facilitating the establishment of Nanyang College in Shanghai (Jing Yuanshan: 'A notice on handing the Jingzheng Academy to the public'). Five months later, in the memorial dated August 11, 1896, Sheng Xuanhuai reported the preparation progress of Nanyang College and submitted *Guidelines of Nanyang College* (<南洋公學綱領>) or called *Statutes of Nanyang College*. Specifically, the *Statutes* imposed detailed regulations on the naming of college, sources of funding, educational objectives, length of education, admission requirements, curriculum design, assessment methods, faculty team organization and management and educational facilities (Sheng Xuanhuai: 'A correspondence with Liu Kunyi'). Without any modifications, the General-governor Liu Kunyi submitted the memorial to the throne. On December 6, 1896, Emperor Guangxu (光緒皇帝) approved of the proposal of establishing Nanyang College in Shanghai and viewed the College as an "important site of cultivating intellectuals in China"¹⁵⁷.

When Sheng Xuanhuai prepared for establishing Nanyang College, he gained profound insights from Japan's modern education. He viewed a modern university as a comprehensive institute consisting of a primary school, a secondary school and a specialized college. Regarding the fundamental goals of education at different levels of schools, the primary school and secondary school attached to Nanyang College intended to

¹⁵⁷ The original text is "是國家陶冶人材之重地". It was translated from *The Imperial Edicts in the Governorship of Emperor Guangxu and Xuantong*, 22, p. 286.

prepare students for their specialized study while Nanyang College (at the tertiary education level) intended to develop students' skills in a specialized field. According to Sheng Xuanhuai's original idea, the focus of Nanyang College should be on spreading knowledge of western law, diplomacy and politics as he intended to differentiate the educational goal of Nanyang College from that of Peiyang University, a modern polytechnic university in the post-1895 China (Sheng Xuanhuai: 'The private correspondence with Zhang Zhidong').

Although the proposal of establishing Nanyang College was approved, Sheng Xuanhuai found it a thorny problem to find suitable Chinese teachers to impart expertise in western law and politics to students. Thus, he decided to establish a school of teacher training before the commencement of bilingual education in Nanyang College. After four months of preparation, the School of Teacher Training attached to Nanyang College was founded on April 8, 1897, which suggested the official establishment of Nanyang College¹⁵⁸.

6.4.3.2 The student enrollment and college entrance examination

Having identified the educational objectives of Nanyang College, Sheng Xuanhuai placed a notice in *Shen Pao*¹⁵⁹ to enroll students. The first student enrollment began on March 2, 1897 and ended on April 25, 1897, which admitted 30 students to School of Teacher Training. The admission requirements of Nanyang College were similar to those of Imperial Peking University. During its 14-year development (1897-1911), Nanyang College attached particular importance to students' Chinese proficiency and their knowledge of Confucian classics. As shown in the notice of student enrollment placed in *Shen Pao*, the applicants' examination score for Chinese and Confucian classics was considered as the first deciding

¹⁵⁸ Please see Sheng Xuanhuai's report on the establishment of Nanyang College on April 8, 1897 in Appendix L.

¹⁵⁹ The report on the student enrollment of Nanyang College in *Shen Pao* on March 2, 1897 is presented in Appendix M.

factor in students' admission to Nanyang College. The notice even explicitly stated, "Even those students who pass the examinations in western languages and western knowledge but fail in the examinations in Chinese and Chinese Confucian classics cannot be admitted."¹⁶⁰ ('The Notice of Student Enrollment', *Shen Pao*, March 2, 1897, p. 1). The particular focus on students' Chinese proficiency in entrance examinations can also be confirmed by the memoir of John Calvin Ferguson, the first head teacher of western subjects in Nanyang College:

"One of the admission requirements was students' Chinese proficiency and their capabilities of writing essays in Chinese and reading Confucian classics. Nanyang College only selected students who had passed the rigorous Chinese examination."

(C. Ferguson: 'The early history of Nanyang College', *The Selections on the Records of History of Jiaotong University*, 1, p. 32).

(「錄取條件之一是會寫本國語言、作文與閱讀。南洋公學只招收經過嚴格中文考試的學生。」)

As indicated in the college entrance examination, Chinese proficiency and Confucian knowledge were more important than students' western knowledge and foreign language proficiency. In Calvin Ferguson's memoir (1931), he explained that students' Chinese proficiency was important in the college entrance examination because "one of the long-term educational goals in Nanyang College was to teach students how to write down their thoughts in Chinese and thus modern science became an integral part of Chinese culture"¹⁶¹ (Ferguson, 1931, p. 10).

¹⁶⁰ The original text is "中學未成者雖同西學西文不錄".

¹⁶¹ The original version of texts is "能夠用規範的中國文學語言把他們的思想記錄下來，這樣現代科學就會成為中國文學生活的組成部分".

The practice of accentuating the importance of Chinese in the college entrance examination was also copied to the student enrollment in other affiliated schools of Nanyang College. As shown in the relevant original archives on student enrollment, whether it was in the entrance examination of the primary school, the secondary school, or departmental admission examinations such as the School of Practical Learning and the Department of Navigation, Chinese was always one of the most important components. The examinations in the Chinese language primarily included various sections of Chinese grammar, syntax and calligraphy (*Statutes of the Primary School attached to Nanyang College*, 1901). The examinations in Confucian knowledge normally comprised Confucian classics, Chinese philosophy, traditional literary essays, China's history, China's geography and essays on current affairs in China (He Sikun: 'A report on the establishment of the Secondary School attached to Nanyang College').

When the Guimao Education System was promulgated in 1904 and foreign language education gradually popularized in China in the early 20th century, the applicants' foreign language proficiency became an integral component in the entrance examination of Nanyang College¹⁶² ('The entrance requirements on the applicants for the Department of Navigation in Shanghai Industrial College'). In addition to foreign language examinations, the college entrance examination also tested students' prior knowledge of modern science and technology. As recorded in the memoir of Ling Hongxun (凌鴻勳), a former student majoring in Civil Engineering in 1911,

“In the college entrance examination, except for the subjects of Chinese, Confucian Ethics and French, the examinations in other subjects were all

¹⁶² An example of students' admission examination paper is presented in Appendix N.

presented in English, and the students were required to answer questions in English. The examination was so difficult that students felt very nervous. For example, one task in the test was to translate a Chinese account of steam locomotives invented by the British George Stephenson into English. Nowadays, students in secondary schools may hear about the story of steam locomotives, but seven decades ago, it was a strange story to students from Canton. ... Regarding mathematics and science, the teachers of our secondary schools taught these subjects in Chinese, but the entrance examinations were presented in English. We had a partial understanding of the questions, but we found it difficult to answer them in English.”

(Ling Hongxun: ‘My memory of Nanyang College’, *The Story of Jiaotong University*, p. 21)

(‘入學考試除國文、修身、法語外，各科以英文出題，用英文答題。考試的題目令人緊張，其中有一段中翻英，內容是對英國史蒂芬森氏發明鐵路機車的敘述。現在的中學生也許都聽過這段故事，但在七十多年前對廣州中學生則是聞所未聞。。。至於數學和理化，中學全是用中文教授，而出的題目卻全用英文。題目尚有點看得懂，但用英文寫答卷卻難了。’)

The rigid admission requirements for students’ foreign language proficiency resulted from the high status of foreign languages in the bilingual curriculum and the use of foreign languages as the MOI in the education practices of Nanyang College. As mentioned by Tang Wenzhi (唐文治), the Principal of Nanyang College in 1907,

“The students’ foreign language proficiency is important to their study in our college. Since our college focuses on expertise in modern industry and asks students to use English textbooks in class, students have to acquire a high foreign

language proficiency so that they can understand the lectures given by foreign teachers.”

(Tang Wenzhi: ‘On listing reasons for not closing the Primary School and Secondary School attached to Nanyang College’, *The Original Archives of Xi’an Jiaotong University*. Archives No.: 1803)

(‘外語水準對學生在校學習非常重要。由於本校注重實業，各科均用英文課本，須能直接聽洋教員講授。’)

Because of the difficult and stiff college entrance examination, few students in China could be successfully admitted to Nanyang College. Nevertheless, since its establishment, the College never waived its admission requirements, which took the quality of students as the first priority in the admission process. According to the statistics in Z. G. Wang’s historical study (2016), during the 14-year development (1897-1911), only 331 students were admitted to Nanyang College, namely 22 students each year.

Despite the demanding admission requirements, an increasing number of students applied for a place at the college, particularly in the early 20th century when a command of foreign languages and specialized knowledge became a cornerstone to the social mobility in China. According to John C. Ferguson’s memoir (1931), many applicants for Nanyang College had passed the Imperial Examination and acquired academic titles such as “Juren”, and “Xiucai”¹⁶³, which suggested an implicit change in Chinese people’s attitudes towards modern education in the post-1895 China. A growing number of students preferred to give up their traditional path to bureaucracy through the Imperial Examination and chose to study in modern universities or industrial colleges to acquire western knowledge.

¹⁶³ “Xiucai” (秀才) referred to successful candidates who passed the Imperial Examination at the county level.

6.4.3.3 The design of a bilingual curriculum

Although Nanyang College underwent dramatic changes in its governing bodies, educational focus, managerial and faculty teams, bilingual education was always the main education model of the college. It played an important role in consolidating students' foundation in Confucian knowledge and Chinese, and in the meantime imparted advanced expertise in western science, technology, law and politics to Chinese students. Five important aspects of bilingual education at the College will be summarized in the following sub-sections:

- (1) the high status of foreign language subjects;
- (2) the choice of foreign languages;
- (3) the integration of Chinese-related subjects and western subjects;
- (4) the choice of MOI;
- (5) the supplement of practical courses in the curriculum.

The high status of foreign language subjects in the bilingual curriculum

Similar to other modern schools in the late Qing period, foreign language subjects acquired high status in Nanyang College. According to John C. Ferguson's memoir (1931), English was always a core subject in the curriculum to develop students' skills in reading English textbooks, understanding lectures delivered by foreign teachers and writing experiment reports in English.

The high status of foreign language subjects was reflected in the curriculum design in Nanyang College. During the initial six years of development (1897-1903), since the Guimao Education System had not been promulgated, the administrators in Nanyang College made decisions on the curriculum design according to their own practices. Before

the establishment of Nanyang College, Sheng Xuanhuai (盛宣懷), the founder of Nanyang College, had originally intended to design a special three-year speed-up educational curriculum (‘達成館’) for the social elites and scholar-officials in the Qing government since it might take a decade to cultivate intellectuals through the normal bilingual curriculum. In his memorial “On the establishment of Nanyang College”, Sheng Xuanhuai stated that it was essential to develop a special speed-up educational curriculum in Nanyang College and select top students to study English, French, law, politics and commerce.

Although Sheng Xuanhuai’s idea of designing a special speed-up curriculum was rejected for various reasons, his suggestions for listing foreign languages on the core subjects were accepted by the practitioners¹⁶⁴ in Nanyang College. Even in the affiliated primary school, students started to learn foreign languages in the third year (*Statutes of Primary School attached to Nanyang College*, 1901). It can be seen from the educational practices that the affiliated primary school to Nanyang College did not comply with the requirements prescribed in the Guimao Education System. As stipulated in the Education System, primary school students were only allowed to learn foreign languages as the extracurricular subject. However, the practitioners insisted on offering English courses in the third and fourth academic year because they believed that the early introduction of English would lay a solid foundation in foreign languages for those students who desired to receive western education in specialized colleges. As stated in Article 7 of “Statutes of the Primary School attached to Shanghai Senior Industrial College¹⁶⁵” (<郵傳部上海高等實業學堂附屬小學堂章程>), students shall spend six hours per week (out of 36 hours) learning English in the third year and nine hours per week (out of 36 hours) in the fourth year. Offering English

¹⁶⁴ The practitioners included headmasters, curriculum designers and teachers concerned in Nanyang College.

¹⁶⁵ As previously mentioned, Nanyang College was renamed as “Shanghai Senior Industrial College” in 1905.

language courses in the primary schools as regular courses was not in complete conformity with the Guimao Education System, but it does not suggest the primary school paid scant attention to Chinese education. The details of Chinese education in the school are presented in the Section “The integration of Chinese-related subjects and western subjects in the bilingual curriculum”.

English was also a core subject in the curriculum list of the affiliated secondary school. As revealed in the four curriculum schedules of the secondary school in the year of 1898, 1899, 1903 and 1908, students were required to spend two or three hours on English language course every day. English was one of the three most important subjects for students in the secondary school, being equally important as Chinese and mathematics. The English language subject in the secondary school developed students’ basic English skills such as vocabulary, pronunciation, sentence structure analysis, English grammar, reading, simple writing and dialogues (‘The curriculum schedule of the Secondary School attached to Nanyang College’, 1898, 1899; Wang, 2016).

The bilingual curriculum in the tertiary-level education of Nanyang College concentrated on specialized western knowledge. Although foreign languages were not on the list of core subjects in Nanyang College, they were not removed from the curriculum system. For example, students from the Department of Navigation were required to spend three hours on foreign language courses every week (‘The report on inviting foreign ministers to examine the statutes of the Department of Navigation attached to Shanghai Senior Industrial College and the student name list’).

The choice of foreign languages in the curriculum

The foreign language subjects in Nanyang College were not restricted to English but also included subjects of other languages. For instance, students in School of Teacher Training took subjects of French and Japanese. According to the memoir of Yang Yaowen (楊耀文), a former student in Nanyang College,

“In the first few years after the establishment of Nanyang College, as students in School of Teacher Training were old and slow at learning foreign languages, they were allowed to choose only one foreign language as a compulsory subject from English, French and Japanese.”

(Yang Yaowen: ‘The important changes in Nanyang College in the last 40 years’, *The 40-year Anniversary Memorial Volume of Jiaotong University*, 1936, p. 319).
(‘本校初辦時，師範院生年齒較長，外國文雖設英、法、日三門，僅任選一門為必修課程’)

In the School of Practical Learning, all the students were required to learn Japanese. Cai Yuanpei (蔡元培), the director of the School of Practical Learning, maintained that a good command of Japanese would provide students with an important tool for accessing modern knowledge. As Japanese bore many similarities to Chinese, it is much easier for Chinese to acquire Japanese to read Japanese textbooks on western knowledge than to acquire western languages (Sheng Xuanhuai: ‘A memorial on establishing School of Japanese and enrolling students’). Because of its importance, Cai Yuanpei listed Japanese as a core subject in the School of Practical Learning. Latin was another core language for some students in Nanyang College. Ma Xiangbo (馬相伯), a famous educationalist and the founder of Fudan University in China, was employed to teach Latin because Latin was viewed as the origin of European languages and also an important linguistic tool for understanding culture in ancient Europe (Ma, 1935).

In agreement with the Guimao Education System, offering foreign language subjects in Nanyang College depended on the language requirements of different academic disciplines. For instance, since France had increasing commercial communication with China in the 1900s (Ge, 2015), French was a core subject in the Department of Commerce (*Statutes of Shanghai Industrial College*, 1908). Similarly, as France had world-leading techniques in railway construction and a large number of French experts were invited to assist Chinese technicians to design and construct railways in the early 20th century (Suo, 2012), French was also a core subject for students in the Department of Railway. In the first academic year, the students took a three-hour course on French vocabulary every week while in the second academic year, they took a two-hour course on French writing and one-hour course on writing business letters in French every week (The Curriculum Schedule of Students in the Department of Railway in Shanghai Senior Industrial College. 1908).

The integration of Chinese-related subjects and western subjects in the bilingual curriculum

It is unsurprising that over the 14-year development (1897-1911), Nanyang College offered many western subjects since the fundamental objective of establishing Nanyang College was to transfer western knowledge to China.

Demarcated by the significant “Ink Bottle” event in 1902, the content of western subjects in Nanyang College underwent dramatic changes (Cao, 2003). From 1897 to 1901, in compliance with the original educational objective of Nanyang College, the western content subjects centered on western law and politics. In the School of Japanese, for instance, apart from Japanese language courses, the students were also required to take courses on western law, diplomacy and commerce such as “A General Introduction to Law”, “Constitution”, “Criminal Law”, “International Law”, “Private International Law”, “Administrative Law”,

“Commercial Law” and “Civil Law” (*Statutes of School of Japanese in Nanyang College*, 1901). However, after the “Ink Bottle” event, given that the subjects of western politics and law instilled western democratic ideas into students’ mind and might lead to students campaigns such as the “Ink Bottle” event, the administrators of Nanyang College decided to shift the focus of education and opened many subjects in relation to western commerce, science and technology, including subjects of mechanics, electronics, navigation, mining and engineering.

Although Nanyang College was by nature a modern western-style college, the college also offered some Chinese-related subjects. In fact, offering Chinese-related subjects was a common view among the practitioners in Nanyang College over its development. Before the establishment of the college, He Sikun (何嗣焜), the future principal of Nanyang College, made a visit to another premier university — Peiyang University in Tianjin. During the visit, he found that in the polytechnic university, the status of Chinese-related subjects was much lower than that of western subjects, which resulted in the relatively unsatisfactory result of students’ Chinese proficiency (Z. G. Wang, 2016). Therefore, He Sikun decided to strike a balance between Chinese-related subjects and western subjects, and to bring together the essence of western knowledge and Confucian wisdom in Nanyang College. The inclusion of Chinese-related subjects in the curriculum helped to fulfill the original objective of Nanyang College — imparting Confucian knowledge to students to foster nationalism as the basis of their values, and complied with the fundamental principle of the Guimao Education System, namely, achieving a balance between Chinese knowledge and western knowledge in modern education.

An example to show the balance between Chinese-related subjects and western subjects was the proportion of Chinese-related subjects in the curriculum. As mentioned in the diary

of Bai Zuolin (白作霖), a former student in the School of Teacher Training in 1897, in his weekly academic schedule, the hours devoted to the Chinese-related subjects were equal to the hours devoted to western subjects. In order to help students concentrate on Chinese language learning, Nanyang College prohibited students from reading western books when they attended Chinese-related subjects. Those who were found to lose their concentration in the courses and those who failed in the Chinese-related examinations would be severely penalized at the college (Bai, 1899).

The inclusion of Chinese-related subjects and western subjects in the curriculum was conducive to the equilibrium between Confucian knowledge and western knowledge in Nanyang College. It not only corresponded to the fundamental spirit of modern education in the post-1895 China, namely that providing students with Confucian education to maintain their identity as Chinese and western education for practical use, but also achieved the founder Sheng Xuanhuai's ideas of establishing a westernized college with a Chinese soul.

The choice of MOI for western content subjects

There was a heated debate over the choice of MOI for western content subjects in Nanyang College. Some argued for the use of Chinese as the MOI in order to facilitate students' understanding of western knowledge. For instance, Wang Fengzao (汪鳳藻), the Principal of Nanyang College in 1902, suggested that teachers at the college should impart western knowledge to students in Chinese (Wang Fengzao: 'A correspondence with Sheng Xuanhuai'). He added that the use of students' native language as the MOI would advance students' understanding of western knowledge, particularly for those students who had a flimsy foundation in foreign languages and had difficulties in adapting to EMI. However, an important precondition for CMI was the availability of translated textbooks on western

knowledge. In order to alleviate the shortage of textbooks on rudimentary western knowledge in the primary school, School of Textbook Translation¹⁶⁶ was established in 1898 as an affiliated school of Nanyang College (Sheng Xuanhuai: ‘A memorial on the establishment of School of Textbook Translation in Nanyang College’).

Nevertheless, the newly built School of Textbook Translation could not address the urgent demand for textbooks in Nanyang College since it took much time to seek accurate Chinese corresponding words and translate textbooks on western knowledge. Thus, Nanyang College decided that except for the primary school, foreign languages were used as the MOI for western content subjects at other levels of schools (Zhou, 1979). Although there were few classroom reports of the education practices in Nanyang College available, the MOI could be inferred from the use of textbooks in class, the memoirs and reports of former students, teachers and administrators, and the students’ all-English assignments and experiment reports at the college¹⁶⁷. According to the education report from Liu Kunyi (劉坤一) and Sheng Xuanhuai (盛宣懷), the two main administrators of Nanyang College, original English textbooks were widely used for students at the senior level in secondary schools:

“Students use the Chinese translated textbook of mathematics at first, and later they use the original English textbook. When students advance to a senior level in secondary schools, they take a wide variety of western content subjects such as world history, world geography, natural sciences, physics, chemistry, law and economics. Except for the subject of Natural Sciences in which both English and

¹⁶⁶ The list of textbooks translated by the School of Translation in Nanyang College is presented in Appendix O.

¹⁶⁷ The original assignment and experiment reports of students in Nanyang College are presented in Appendix P.

Chinese textbooks are used, students use only English textbooks for other western content subjects.”

(Liu Kunyi and Sheng Xuanhuai: ‘A memorial on establishing a hall in commemoration of He Sikun, the Principal of Nanyang College’, *The Collection of Records on Sheng Xuanhuai*, 6, p. 3)

(‘數學先用中文本，後亦改用英文本。迨學生級數遞增，分別增添世界史地、博物、理化、法制、經濟等課，除博物中英本遞用外，餘概用英文本。’)

Despite the fact that Chinese might be occasionally used in class when Chinese teaching assistants provided explanation in class, foreign languages were probably used as the MOI for western content subjects as most foreign teachers could not find suitable Chinese terms to describe western knowledge in late imperial China (Ou, 2012).

As for the tertiary-level education in Nanyang College, foreign languages were the MOI for western content subjects, which could be confirmed by the education report of the Principal Tang Wenzhi in 1908. In the report, Tang said that except for the subjects of Painting and Physical Education, all the western content subjects were taught in English in order to create an all-English environment for students and ensure the accuracy of lecture delivery. The finding could also be substantiated by the memoir of Yang Yaowen (楊耀文), a former student in Nanyang College. He recalled that the textbooks used for western content subjects were original English textbooks or the original ones with a few Chinese translations¹⁶⁸. The foreign teachers gave lectures in foreign languages, and the examinations in western content subjects were conducted in foreign languages in Nanyang

¹⁶⁸ The pictures of the original textbooks used in Nanyang College are presented in Appendix Q.

College¹⁶⁹. The students were also required to complete their assignment and experiment reports in English (Yang, 1936).

The use of foreign languages as the MOI was not restricted to the regular education practices in class, but also in extracurricular activities in the Students' Society. In Nanyang College, the Society of English was established to develop students' English proficiency and sharpen their skills in English communication and public speech ('The constitution of the Society of English in Shanghai Senior Industrial College'). Since the main purpose of the Society of English was to help students adapt to all-English environment at the College, the students were prohibited from speaking Chinese when they participated in the activities organized by the Society of English. If students were found to speak Chinese in the activity, they would be penalized (Shanghai Senior Industrial College: 'The constitution of the Society of English in Shanghai Senior Industrial College').

Adding practical courses in the bilingual curriculum

Apart from theoretical courses in class, Nanyang College also offered some practical courses. For instance, after completing the theoretical courses and experiment courses, students in the Department of Railway were required to participate in a one-month internship in the neighboring regions of Shanghai (such as Hangzhou 杭州 and Wuxi 無錫) (Z. G. Wang, 2016). In September, 1909, under the leadership of eleven American teachers and engineers, all the junior students in the Department of Railway in Shanghai Senior Industrial College went to Mount Baoyun (寶雲山) in Hangzhou for surveying and mapping ('The report on the internship outside the campus in the Department of Railway in Shanghai Senior Industrial College')¹⁷⁰. The students were required to report their

¹⁶⁹ An example of the original examination paper is presented in Appendix R.

¹⁷⁰ The picture of students' internship in Hangzhou is presented in Appendix S.

findings to the American teachers in English and wrote down their daily reflexive journals in English. When the content of bilingual education in Nanyang College changed from expertise in western politics and law to expertise in modern science and technology in 1905, the college offered a growing number of practical courses to broaden students' hands-on experience. For instance, in the Department of Navigation, all the students were required to go aboard to observe the changes in ocean currents, tides, the direction of wind, and reefs before they graduated and reported their findings to the foreign teachers. (The Ministry of Education: 'Approving of establishing the Department of Navigation in Shanghai Industrial College').

6.4.3.4 The teacher recruitment

Since Nanyang College was established to cultivate Chinese intellectuals in the field of modern industries, law and diplomacy, it needed teachers who had ample and advanced knowledge of those academic disciplines. The college initially intended to hire only Chinese teachers because employing Chinese teachers and using Chinese as the MOI would save much money and facilitate students' understanding of the lectures in western content subjects. However, as by the early 20th century few Chinese teachers had understood western knowledge, the administrators had to employ foreign teachers at first, and established a normal school to train potential Chinese teachers in Nanyang College.

The employment of foreign teachers

Upon the establishment of Nanyang College, Sheng Xuanhuai drew references to the education practices of Peiyang University to hire a foreigner as the head teacher of western subjects. Initially, Sheng Xuanhuai intended to hire John Fryer, an English missionary who had served as a teacher at Peking Translation College from 1861 to 1863 and had been working as a translator in Jiangnan Machinery Manufacture Bureau (江南機器製造局) for

three decades (Z. G. Wang, 2016). Despite the willingness and enthusiasm of John Fryer to be the head teacher in Nanyang College, the plan was shelved as John Fryer had already signed an employment contract with Jiangnan Manufacture Bureau and the Bureau did not allow John Fryer to work in other places (Wang, 2006). Later, Sheng Xuanhuai chose John Calvin Ferguson, an American missionary who was the Principal of Nanking University in 1888 and had rich first-hand education experience in China, to be the first head teacher of western subjects in Nanyang College.

As shown in Article 9 of *Statutes of Nanyang College* in 1897, 31 foreigners were also employed as teachers of western subjects in Nanyang College. Similar to other modern schools, the head teacher John Calvin Ferguson was granted the right of employing foreign teachers and organizing a faculty. When he took office in 1897, he employed many western teachers from the mission schools, such as Leacey Sites, Charles Leavenworth, Lotimore and Walter A. Mitchell, to be the chief teachers of western subjects. In addition to western teachers, when School of Japanese was established in 1901, an increasing number of Japanese teachers such as Fujita Toyohachi, who graduated from modern universities and had a strong interest in Chinese culture, were employed as chief teachers of the Japanese-related subjects in Nanyang College (Z. G. Wang, 2016).

When the nature of Nanyang College changed to be a modern industrial college in 1905, the College still kept the tradition of hiring foreign teachers for western subjects. From 1907 to 1909, 22 foreign teachers were hired, which accounted for one fifth of the total teachers at the College (Nanyang College: ‘The statistics of teachers in Shanghai Senior Industrial College (1907-1909)’). The name list of some main foreign teachers employed in Nanyang College is presented in Table 15 on Page 426. With regard to the quality of foreign teachers, most of the foreign teachers graduated from well-known western universities and had rich

experience in teaching Chinese students as they were selected from other famous modern schools or mission schools in China. The high quality of foreign teachers can be confirmed by the comment of Tang Wenzhi (唐文治), the Principal of Nanyang College. For instance, in his letter to the Ministry of Transport, he thought highly of the foreign teachers in the Department of Electronics, “All the foreign teachers, who are American experts, have rich teaching experience. Their performance at the College is highly praised by their students and colleagues.”¹⁷¹ (Tang Wenzhi: ‘A correspondence with the Ministry of Transport’).

The employment of Chinese teachers

Apart from foreign teachers, a large number of Chinese were employed as deputy teachers or teaching assistants for western content subjects. A common characteristic of those Chinese teachers was that they had studied overseas, or graduated from the modern schools and mission schools during the Self-Strengthening Movement. For instance, Lu Zhiping (陸之平), who graduated from Shandong Dengzhou Mission University, was employed as the deputy teacher of Physics and gave instructions on students’ experiment. Wu Guangjian (伍光建), who graduated from Royal Naval College and University of London, served as the deputy teacher of Physics and Mathematics in Nanyang College (‘The name list of Teachers in School of Teacher Training in Nanyang College’, 1897). Similar to the other modern universities, Nanyang College also employed some Chinese teachers as teaching assistants of foreign teachers to bridge communicative gaps between foreign teachers and Chinese students. For instance, Xu Zhaoxiong (徐兆熊), a graduate from the secondary school attached to Nanyang College, was hired as a teaching assistant at the college after he had graduated in 1905 (Z. G. Wang, 2016).

¹⁷¹ The original text is “均系美國專家，教授極有經驗，為大部所嘉許”.

It can be concluded that the administrators of Nanyang College organized an international faculty team that consisted of foreign teachers being chief and deputy teachers for western subjects, Chinese teachers being deputy teachers and teaching assistants for western subjects, and some other Chinese teachers being teachers of Chinese-related subjects.

Table 15: The main foreign teachers employed in Nanyang College (1897-1911)

Name	Nationality	Subject
J.C.Ferguson	American	The head teacher of western subjects
K.Koutarou	Japanese	Japanese
F.Toyohachi	Japanese	Japanese
Father Scherer S. J.	German	German, French
Dr. C.M.L. Sites	American	Economics, Law
Dr. Lotimore	American	Commerce, Western History
C.Leavenworth	American	English, French
Dr. S.M.Cox	British	Medicine
W.A. Mitchell	American	Commerce
Porter	American	Railway, Civil Engineering
Wm. E. Palten	American	Railway, Civil Engineering
E.P. Stocker	American	Railway, Civil Engineering
Mathewman	British	Electrical Machinery
S.R. Sheldon	American	Electrical Machinery
Austin	British	Navigation

(Source: ‘The name list of teachers in Nanyang College’. (1902). *The Original Archives of Sheng Xuanhuai*. Archives No.: 044551-1; Z. G. Wang. (2016). *The History of Shanghai Jiaotong University*.)

6.4.3.5 *The assessment of bilingual education*

The assessment of bilingual education in Nanyang College consisted of monthly examinations, term examinations, semester examinations, graduation examinations and the reexamination held by the Ministry of Education. As stipulated in Article 4 of *Statutes of Nanyang College* in 1897, monthly examinations would be held every three months and a semester examination would be held before the commencement of summer holiday.

The scheme for award and punishment was closely linked to their scores for examinations. Teachers ranked students based on their scores for monthly examinations and daily performance, and then the administrators presented the top students awards (*Statutes of Nanyang College*, 1897). Specifically, the administrators paid special attention to students' scores for Chinese-related subjects and English. According to "The regulations on awarding students with high score for the Chinese examination" (<扣獎加並中文佳者並諭>) in 1897, "The classification of stipends depends on the total marks of Chinese-related subjects, mathematics and English. However, if a student fails in any of the three types of subjects, he shall not be awarded any stipends"¹⁷² (p. 187). The particular importance attached to students' examination score for Chinese and English indicated the high status of the two subjects, which corresponded to one of the main educational objectives of Nanyang College, namely producing intellectuals with high proficiency in Chinese and foreign languages.

As western subjects were the foci of the bilingual curriculum, students' studentship hinged on the examination scores for western content subjects. Those students who scored over 90

¹⁷² The original text is "視中課、算學、英文三項積分而定，一項不及格者皆不獎".

on average would be awarded two taels of silver and those who scored over 80 but less than 90 on average would be awarded one tael of silver (*Statutes of Nanyang College*, 1897). By contrast, those students who failed the examinations in western content subjects would be penalized or even expelled from school. As recorded in the memoir of Zhou Haoquan (周浩泉), a student who studied in Nanyang College for twelve years, the number of admitted students was three or four times larger than that of graduates. Among the fourteen students who were admitted to the primary school in 1909, for instance, only eight graduated and the other six were expelled from Nanyang College because they could not pass the examinations (Zhou, 1979).

It can be seen from students' transcripts in School of Teacher Training that foreign language examinations in Nanyang College consisted of the written English language examination and the oral English examination ('The transcripts of students' monthly examinations in western subjects in the School of Teacher Training (1899-1901)'). It suggested the School of Teacher Training attached importance to students' oral English proficiency because most graduates in the School of Teacher Training would be potential teachers or teaching assistants in Nanyang College, and would teach western subjects in foreign languages.

The stringent assessment means of bilingual education ensured the high quality of education in Nanyang College, bore satisfactory results and even exerted a deep impact on the promulgation of the Guimao Education System, which will be expounded on in the next section.

6.4.3.6 The results and effects of bilingual education at Nanyang College

The students' scores in the nation-wide reexamination can confirm the first-class quality of bilingual education in Nanyang College compared to other senior industrial colleges.

According to the policy from the Ministry of Education on “sending graduates in the senior industrial College to participate in the reexamination (a higher examination) in Peking” (<各省高等學堂畢業生一律調京復試>), the graduates from the Department of Railway in Nanyang College in 1909 and 1910 were chosen to take the reexamination in Peking. The examination results demonstrate the better quality of bilingual education in Nanyang College than the other modern industrial colleges in late imperial China. All the test-takers who graduated in 1909 were in the front rank of the list, and 3 out of 5 test-takers who graduated in 1910 came out top in the national reexamination (Z. G. Wang, 2016). Among the total 140 test-takers in the national reexaminations in 1909 and 1910, only six students won the first prize based on their performance in the examinations and half of them were graduates of Nanyang College.

The quality of bilingual education was also reflected in the comments on Nanyang College. From the perspective of insiders including some teachers and students, Nanyang College was the best industrial college in late imperial China. In Sheng Xuanhuai’s memorial in 1905, he quoted the comments of John Calvin Ferguson, the first head teacher of western knowledge in Nanyang College:

“Thanks to the joint efforts and great dedication of foreign teachers, Nanyang College achieves a world reputation for its high educational quality. All the graduates can be admitted to any university or industrial college in foreign countries to further their education.”

(Sheng Xuanhuai: ‘A memorial on awarding the foreign teachers in Nanyang College’, *The Collection of Records on Sheng Xuanhuai*, 11, p. 6)

(‘南洋公學之名傳播東西洋，遊學諸生皆得直入各國專門學校，亦賴該洋員盡心教授不懈益虔。’)

Similarly, Leacey Sites, one of the main foreign teachers who had been teaching in Nanyang College for more than a decade, maintained that those graduates were eligible for admission to well-known western universities (Zhang Meiyi: ‘A memorial on submitting the list of graduates in 1904 and the award scheme’).

Apart from the teachers’ comments, the students also spoke highly of the quality of bilingual education in Nanyang College. Jiang Menglin (蔣夢麟), a former student of the secondary school attached to Nanyang College, thought highly of the bilingual education practices in Nanyang College and its positive impact on his English proficiency:

“The secondary school attached to Nanyang College modeled on American secondary schools and was viewed as a preparatory school to American universities. A good many American professors were employed to teach subjects of modern knowledge. Having studied in Nanyang College for two years, I found it less difficult to read English books.”

(Jiang, 2014, p. 84)

(‘南洋公學的預科，一切按照美國的中學學制辦理，因此南洋公學可說是升入美國大學的最好階梯。學校裏有好幾位教授現代學科的美國人。在校兩年，在英文閱讀方面已經沒有多大困難。’)

Jiang Menglin’s positive comments on the bilingual education in Nanyang College were in agreement with the voices of other former students such as Zou Taofen (鄒韜奮) and Ling Hongxun (凌鴻勳). Zou Taofen maintained that the bilingual education practices in Nanyang College brought unforgettable benefits to his future career, and in Ling Hongxun’s memoir, he attributed his remarkable improvement in English proficiency to the strong all-English ambience on campus and the carefully designed bilingual curriculum in Nanyang College (Z. G. Wang, 2016).

From the perspectives of outsiders, the bilingual education practices of Nanyang College achieved a satisfactory result and provided an example for other modern industrial colleges in China. For instance, Zhang Baixi (張百熙), the Minister of Education in China since 1902, praised Nanyang College as “one of the best modern schools outside Beijing, being equal as the well-known Hubei Self-Strengthening School”¹⁷³ (Zhang Baixi: ‘A memorial on preparing for the establishment of modern universities in China’, in ‘Authorized School Regulations — Related Memorials’, p. 3132).

The results of the bilingual education practices in Nanyang College were in some sense linked to the career development of graduates. As one of the premier industrial colleges in late imperial China, Nanyang College cultivated numerous social elites in various fields. Some representatives included the geologist Tong Shiheng (童世亨), the famous physicist Li Fuji (李復幾), the Chinese physician and pharmacist Ding Fubao (丁福保), the well-known agriculturalist Xu Xuan (許璿), the famous architect Bei Shoutong (貝壽同), the expert on Finance and law Xiang Xiang (項驤), the well-known banker Zhou Zuomin (周作民), the zoologist Ma Heng (馬衡), the modern educationalist Jiang Menglin (蔣夢麟) and the linguist Tang Qingyi (唐慶詒). Some graduates served as teachers of the college, which filled the void of teachers and cut the expenditure on hiring foreign teachers. Among all the 24 teachers in Nanyang College in 1901, except for 7 western teachers, the other 17 were all graduates of the College (Zhang, 1949).

Admittedly, the students’ career development may not be a direct indicator of the educational quality of Nanyang College since students’ achievements might also result from

¹⁷³ The original text is “查京外學堂，辦有成效者，以湖北自強學堂、上海南洋公學為最”.

their personal efforts, opportunities and educational experiences after graduation. Nevertheless, as bilingual education was the main education model of Nanyang College and its positive impact was confirmed by the above insiders and outsiders' comments, it cannot be denied that the bilingual curriculum laid a solid linguistic and cognitive foundation for the students and was instrumental in their further education.

The bilingual education practices of Nanyang College also exerted considerable effects on the establishment of the Guimao Education System. As a premier modern university established before the promulgation of the Guimao Education System, Nanyang College was the first modern university in China to include the three-tier educational components in one school¹⁷⁴. The practices of bilingual education in the three-tier education levels provided the policymakers with illuminating insights into establishing and refining the nation-wide education system, particularly in the aspect of formulating clearly-articulated objectives of bilingual education at each level of education and attaching importance to the transition of bilingual education from a low level to a high level.

Another significant effect of the bilingual education in Nanyang College was its impetus to the advancement of modern education in China. The establishment of Nanyang College satisfied the social yearning for learning from the West after the Sino-Japanese Naval War. As one of the most influential industrial colleges in late imperial China, Nanyang College attracted a large number of young students to give up the traditional bureaucracy road, learn foreign languages and acquire western knowledge. It can be seen from the student enrollment that even a large number of students who had passed the Imperial Examination chose to study in Nanyang College. The satisfactory results of bilingual education, as well

¹⁷⁴ The three-tier educational components included the primary school, the secondary school and the college.

as the promising employment prospect of students in Nanyang College, facilitated the acceptance of modern education and western knowledge in the Confucian society and created a favorable context for the further development of Nanyang College and other industrial colleges in late imperial China.

6.4.4 The bilingual education practices at other schools

Apart from the three premier universities in late imperial China, other types of schools including pre-university schools, and specialized colleges such as normal colleges and industrial colleges also offered bilingual subjects to achieve their educational objectives. In this section, the practices of bilingual education in various types of modern schools will be summarized.

6.4.4.1 The bilingual education practices at the pre-university schools

As stipulated in the Guimao Education System, at least one pre-university school should be established in the capital of each province in late imperial China. As recorded in *The Yearbook of China's Education* (1933), after the promulgation of the Guimao Education System, approximately 56 pre-university schools were established in 18 provinces to offer preparatory subjects for students before entering university. Those pre-university schools were further categorized into three types according to the academic disciplines in universities. The first type included the disciplines of Classical Learning, Politics and Law, Literature and Commerce in universities; the second type consisted of the disciplines of Natural Sciences, Engineering and Agriculture; and the third type was for students who intended to major in Medicine in universities. The Guimao Education System also imposed rules on the choice of foreign languages in different academic disciplines and the hours spent on foreign languages every week. The details of hours spent on each subject every week have been presented in Table 9 on Page 332 - 334.

The Guimao Education System provided direct guidance for the bilingual education practices in some pre-university schools that were established during the “New Policies” Reform. For instance, Jiangsu Liberal Arts Pre-university School (江蘇文科高等學堂), which intended to prepare students for pursuing their academic study in liberal arts in universities, consisted of two departments — the Department of Philosophy and the Department of Literature. As Jiangsu Liberal Arts Pre-university School fell into the first type of pre-university school, the school offered English and German language subjects in the Department of Philosophy, and Latin language subject in the Department of Literature (Shen & Yuan, 1907).

Similarly, Guangdong Pre-university School (廣東高等學堂), which was a comprehensive pre-university school established in 1908, also imposed different requirements on the choice of foreign languages for students majoring in the three different types of academic disciplines. The students majoring in the first or second type of discipline were required to learn English as a compulsory subject and choose either German or French as the elective subject. Students who aspired for studying Chemistry, Electronics, Engineering, Mining Science and Metallurgy studied English and German. Students majoring in the third type of academic discipline took German as a core subject, English or French as the elective subject (Shen, 1964).

Upon the introduction of the regulations on the choice of foreign languages at pre-university schools by the Guimao Education System, some schools like Jiangsu Liberal Arts Pre-university School and Guangdong Pre-university School acted accordingly. Nonetheless, the bilingual education practices of schools in the underdeveloped areas of hinterland China did not comply with the Guimao Education System. For example, due to the limited

availability of language teachers, Shanxi Pre-university School did not offer subjects of different foreign languages to students majoring in different academic disciplines but mixed them together in one class ('A Report on Shanxi Pre-university School'). Similarly, Jiangxi Pre-university School only offered English language subject to all students despite their major ('A Report on Jiangxi Pre-university School').

The Ministry of Education in late imperial China found that the inconsistent choice of foreign languages in the pre-university schools led to the embarrassing situation that the students majoring in the same academic discipline had acquired different foreign languages, which also created difficulties for bilingual education in universities. In order to tackle the problem, the Ministry of Education in late imperial China advocated another policy on the standardization of foreign language choices at pre-university schools on May 9, 1909:

“Those students majoring in the first type of academic disciplines shall choose English as the first foreign language, French or German as the second foreign language. Those students majoring in the second type of academic disciplines shall select English as the first foreign language and German as the second foreign language. Those students majoring in the third type of academic discipline shall take German as the first foreign language, English as the second foreign language, and Japanese or Latin as an elective foreign language. Except those students majoring in the first type of academic disciplines, the students do not need to learn French. The Guimao Education System did not include Russian in the list of core subjects at pre-university schools. However, in light of the growing communication between the provinces in Northwestern China and Russia in recent years, students who intend to study Sino-Russian relations in universities of law and politics and Russian Literature in the School of Literature shall take Russian as an elective subject of the pre-university school. Those students

majoring in the second or third type of academic disciplines do not need to learn Russian.”

(The Ministry of Education: ‘The standardization of foreign language choices in the curricula of pre-university schools in all provinces’, *The Official Reports of the Government*, 90, pp. 2-3.)

(‘是第一類之外國語，宜以英語為主科，德語或法語為兼習科；第二類以英語為主科，德語為兼習科；第三類以德語為主科，英語為兼習科至日語及拉丁語可作為隨意科，法語除第一類外，均無庸習。俄語則原定高等學堂章程中本無此科，惟近來西北諸省俄事交涉日繁，其預備入法政大學研究中俄交涉及預備入文科大學之俄國文學門者，自不妨於高等學堂中添習俄語，應將俄語一門亦作為第一類之隨意科；第二、三類均無庸習。’)

The complementary policy on the choice of foreign language removed French out of the subjects for the second and third type of academic discipline but added Russian as an elective subject to the first type of academic discipline to satisfy China’s practical demands for Russian translators and interpreters in the early 20th century. It also facilitated the standardization of foreign language choices for all pre-university schools and facilitated the transition for students from pre-university schools to universities.

The Guimao Education System did not make definitive regulations on the teacher employment and the choice of MOI at pre-university schools probably because it was uncertain for the pre-university schools in different provinces that whether they were able to employ sufficient faculty to teach foreign languages and impart western knowledge in foreign languages to students. In some cases where the schools had sufficient financial support from the local gentry-merchants, like Sichuan Pre-university School (四川高等學堂), the school was able to recruit a team of foreign teachers to teach students foreign

languages and western content subjects. Since the foreign teachers such as Prof. Blaum, Prof. Hoffman and the Japanese teachers were not able to speak Chinese, they had to use foreign languages as the MOI for western subjects. Sichuan Pre-university School also employed some Chinese translators as teaching assistants, to translate foreign textbooks into Chinese and bridge the communicative gap between foreign teachers and Chinese students in class (Lu Dianyu: 'A report on Sichuan Pre-university School').

However, in contrast with Sichuan Pre-university School, some pre-university schools could not recruit sufficient teachers, which exerted a negative impact on the educational standards of those schools. For example, in Zhili Pre-university School (直隸高等學堂), the bilingual education practices were criticized to be too superficial and far from satisfactory because of inadequate teachers in the school. The low educational standard of Zhili Pre-university School can be confirmed in the final examination of Geography in 1907. The questions were merely simple questions such as providing evidence of confirming the roundness of the earth and presenting the theories of eclipse of the sun and the moon. (The Ministry of Education: 'A Report on Zhili Pre-university School').

The shortage of faculty was a severe obstacle to the bilingual education practices of most pre-university schools in late imperial China. The problem partly resulted from the fact that the previous foreign language schools established during the Self-Strengthening Movement only focused on developing students' English or French proficiency. Thus, few Chinese teachers were able to teach students other foreign languages such as German, Japanese, Russian and Latin. Nor did they use these "less popular" foreign languages as the MOI for western content subjects. The shortage of teachers might also result from the limited financial resources of modern schools in the post-1895 China. As foreign teachers were generally given a high salary, the poor financial situation of the pre-university schools could

not satisfy the increasing demand for foreign teachers in late imperial China (Jiangsu Provincial Government: ‘A memorial on allocating funds to Jiangsu Province in operating modern schools’). According to the statistics released by the Ministry of Education in late imperial China, up until 1907, China had 59,177 modern schools that needed more than 50,000 foreign teachers, but the modern schools in late imperial China only had altogether 64,470 teachers in different academic disciplines (*The Graph of the First Education Statistics*, 1907). Thus, every modern school had no more than two teachers and on average each modern school only had one foreign teacher. It is thus evident that an increasing number of modern schools and a growing demand for foreign teachers far exceeded the speed of producing intellectuals with high foreign language proficiency in China’s modern schools.

In fact, the designers of the Guimao Education System took account of the problem of faculty shortage when they established the education system. In contrast with the wary attitudes from the Qing government towards employing Protestant missionaries as teachers in modern schools during the Self-Strengthening Movement, the policymakers in the early 20th century agreed to employ western missionaries to fill the void of faculty in the pre-university schools. Those missionaries were supervised by Chinese officials to ensure that they would not convert students to Christianity through education. As stipulated in Section “Principles of Education” of the Guimao Education System,

“If modern schools employ western missionaries as teachers, school administrators shall sign restrictive contracts with them in that the missionaries are not permitted to spread their religions or speak religious words in the name of imparting knowledge of modern science to students, otherwise they shall be fired immediately.”

(‘Presented School Regulations — Principles of Education’, 1904, p. 21)

(‘如所聘西師系教士出身，須於合同內訂明：凡講授科學，不得借詞宣講涉及宗教之語，違者應即辭退。’)

6.4.4.2 The bilingual education practices at the specialized colleges

In late imperial China, bilingual education was also a main education model of specialized colleges such as industrial colleges, agriculture colleges, commerce colleges, politics & law colleges and normal colleges. Those specialized colleges were quite similar to today’s vocational colleges that were established to develop students’ technical skills for performing the tasks of a particular job. According to the statistics in Wang’s study (2000), after the promulgation of the Guimao Education System in 1904, almost 200 specialized colleges were established in China and cultivated almost 17,000 graduates who aided China’s gradual economic recovery during the “New Policies” Reform.

In accordance with the requirements of the Guimao Education System, the specialized colleges offered foreign language subjects as the basis of bilingual curricula and offered content subjects to impart specialized knowledge to students. Among all the specialized colleges that were established during the “New Policies” Reform, Nanyang College was one of the best specialized colleges in China. As the premier government college, Nanyang College obtained unflagging financial support from the imperial and provincial government in the post-1895 period, which spurred its development over the ten-year “New Policies” Reform. By contrast, the other specialized colleges did not gain such solid support from the government and some of them did not have enough financial resources or teachers, which exerted adverse effects on the education practices of those industrial colleges.

The Guimao Education System did not impose a strict regulation on the choice of foreign languages for different academic disciplines in specialized colleges, which caused the

confusion of education practices in some specialized colleges. Without explicit regulations from the Ministry of Education in late imperial China, some specialized colleges, even for the same type of college, made their own decisions on the choice of foreign languages and the MOI for content subjects. For instance, in Jiangnan Military College (江南陸師學堂) and Jiangxi Military College (江西武備學堂), German was a compulsory foreign language subject for all students and German army officials were employed to teach content subjects in German. By contrast, in Zhejiang Military College (浙江武備學堂) and Sichuan Military College (四川武備學堂), Japanese was the compulsory foreign language subject and the MOI for content subjects (Ji & Chen, 2007).

In order to clear the confusion of bilingual education practices in specialized colleges, the Ministry of Education in late imperial China enacted a complementary policy on the choice of foreign languages and the MOI in specialized colleges on September 14, 1909:

“Students in junior agriculture colleges shall learn English as a compulsory subject while students in senior agriculture colleges shall choose German as a mandatory subject. Students in industrial colleges shall learn English while for students in commercial colleges, no fixed rules are imposed on them but English is a desirable choice. ... In senior industrial colleges, the courses shall be conducted in foreign languages, and original textbooks without translations shall be used in class.”

(The Ministry of Education: ‘Requesting the Ministers of Education in all provinces to straighten out educational affairs in specialized colleges’, *The Imperial Decrees in Qing Dynasty (1908-1910)*, 7, pp.1-2.)

(‘農業應習英文；高等農學科者應習德文；工業應習英文；商業雖未經明定，要以肄習英文為宜。。。高等實業學堂應用西文直接聽講，所用課本無庸移譯。’)

However, the policy was not fully translated into practice as a wide range of academic disciplines in specialized colleges created buoyant demands for teacher employment and textbook compilation. Some specialized colleges were established to place excessive reliance on translated textbooks. For instance, all textbooks in Fujian Senior Police College (福建高等巡警學堂) were translated versions that were too superficial for students and much poorer, in terms of quality, than those in specialized colleges schools of foreign countries (Song Shou: 'A memorial on the establishment of Fujian Senior Police College').

In order to complement the original regulations on the choice of textbooks in specialized schools and encourage the senior specialized schools to use original foreign textbooks for western content subjects, the Ministry of Education in late imperial China enacted another policy on the choice of textbooks for bilingual education in specialized colleges:

“Our specialized colleges still use translated books that lose the originality and accuracy of western knowledge. ... For all the senior industrial colleges, except for subjects of Confucian Ethics, Chinese Literature, History and Geography, original English textbooks shall be used in western content subjects because English, as the most widely used language in the world, is the earliest foreign language to be spread to China and the most popular foreign language in China.”

(The Ministry of Education: 'On modifying the curricula of foreign language education, the textbooks and the choice of foreign languages in specialized colleges', *The Imperial Decrees in Qing Dynasty (1908-1910)*, 7, pp. 4-8.)

(‘現在各處學堂慣用譯本，既失科學之精神。。。各國語言文字以英國語文最為通行，傳入中國最早又最廣。嗣後，各省開設高等實業學堂及現設高等實業學堂續招學生，所授功課，除人倫道德、中國文學、歷史、地理各科外，其關係實業之學科，擬飭一律用英文課本。’)

It can be concluded that the education practices of the three government-funded premier universities exerted a considerable impact on the promulgation of the Guimao Education System in 1904 in aspects such as the division of academic disciplines, curriculum design and teacher employment. The education practices of the three premier universities not only built instructive models for other schools, but also provided profound insights to the drawers of the Guimao Education System. Thus, it was not surprising that the education practices of the three premier universities after 1904 in large measure complied with the Guimao Education System and even complemented it. However, the education practices of specialized colleges and pre-university schools were quite diverse. Most of the schools were confronted with many practical challenges such as inadequate teachers to teach western content subjects. Some schools in the poverty-stricken areas suffered a heavy financial burden and struggled for existence in the final decade of Qing Dynasty, which resulted in the confusion of bilingual education practices in different schools and the discrepancy between the policies and practices in the post-1895 China.

6.5 Chapter summary

This chapter presents a detailed account of bilingual education in the post-1895 period of China. The bilingual education policies in this period included the “Renyin Education System” in 1902, the “Guimao Education System” in 1904 and three complementary regulations on bilingual education issued in the last three years of Qing Dynasty. The content of those bilingual education policies demonstrated two remarkable characteristics, namely the equal status between Chinese (Confucian) education and western education, and the close relationship between foreign language education and modern knowledge acquisition. The former characteristic addressed the long-standing conflict in language beliefs during the late Qing period, namely the conflict between learning foreign languages

to modernize China and preserving Chinese cultural identity through Confucian education. The promulgation and implementation of the “Guimao Education System” in 1904 provided the practitioners with a central plan to achieve an equilibrium between western education and Confucian education in their curriculum. The latter characteristic reflected the policymakers’ advanced idea of maximizing the practical benefits of foreign language education and integrating foreign languages with content knowledge. Although the Guimao Education System was not an exclusive policy on bilingual education, the policymakers skillfully included bilingual education in the broader policy scope of modern education, which suggested the close link between foreign languages and western knowledge in China’s modern education system in the early 20th century.

We find that the Chinese policymakers adopted Japan’s model of bilingual education because of the considerable similarities in educational contexts and cultural traditions between Japan and China. They also gained considerable insights from the education practices of modern schools in the post-1895 period of late imperial China. There were two main effects that the bilingual education practices exerted on the Guimao Education System and the development of bilingual education in China. Firstly, the education practices of the premier universities provided the policymakers with illuminating insights into drafting and revising the regulations on the bilingual education, such as the aspects of teacher employment and curriculum design. Secondly, after the promulgation of the Guimao Education System, the education practices of the three premier schools fulfilled the requirements of the “abstract” national regulations on bilingual education and offered instructive examples for other modern schools. The bilingual education policies in this period were also subject to constant adjustments. When policymakers found the confusion of education practices in some pre-university schools and specialized colleges, they formulated three complementary policies to enforce tighter regulations on the choice of

MOI and textbooks in all modern schools. The constant “fine-tuning” of education policies in this period provided sharp contrast with foreign language education in British Hong Kong in the same period. As discussed in Section 2.4.2, in the early colonial administration, British colonizers applied the British model of education to the Anglo-Chinese schools in Hong Kong, which led to the dilemma that “the curriculum, textbooks, and methods used in the school were wholly inappropriate for Chinese students in Hong Kong” (Evans, 2016, p. 39).

Another noteworthy issue of the bilingual education in this period was the sociopolitical context where the policies were formulated. Ample historical evidence has demonstrated that the bilingual education policies in the post-1895 period of China were issued in the particular sociopolitical context where the Qing government was confronted with tremendous challenges such as the “scrambles” of foreign powers. Thus, the bilingual education policies were affected by a multitude of favorable socio-political variables such as the growing voice for institutional reforms among the scholar-officials in the Qing government and the gradual spread of science and technology from coastal China to hinterland regions. The policymaking process of bilingual education also indicated the growing centralization of power in educational affairs in the post-1895 period. In contrast with the Self-Strengthening Movement when the Qing government granted more autonomy in education to individual schools, in the post-1895 period, the Qing government regained the decision-power of bilingual education in China. Having found that shirking the governmental responsibilities to school practitioners had caused confusion and inconsistency of education practices in modern schools during the Self-Strengthening Movement, the Qing government decided to standardize the bilingual education practices through the establishment of a nation-wide education system. The Guimao Education System and the three complementary policies on bilingual education were thus promulgated

in succession, which signaled the greater participation of the Qing government in bilingual education in the early 20th century.

In spite of the fact that the Qing domination collapsed in the Revolution of 1911, the value of bilingual education policies and practices in the final decade of Qing Dynasty cannot be underestimated. In fact, the development of bilingual education in the post-1895 period exerted a considerable impact on China's social change in the early 20th century. The establishment of the Guimao Education System demonstrated the firm determination and institutional support of the Qing government to develop bilingual education. It helped to alter people's deep-rooted negative attitudes towards foreign languages and to awaken Chinese to realize the link between acquiring modern knowledge and saving China from the edge of colonization. Through the joint efforts of imperial governors, provincial governors, local gentry-merchants and social elites, a multitude of modern schools at various levels sprang up in late imperial China. In the context of anti-colonization and modernization, bilingual education gradually replaced the role of traditional education and became the main education model to acquire advanced western knowledge and to strengthen the country. The widespread social tide for overseas study in post-1895 China as well as the practical value of foreign languages, such as seeking well-paid jobs, also facilitated the general acceptance of bilingual education in late imperial China.

The significance of bilingual education policies in the post-1895 period also lies in their value to the systematization of bilingual education in China. In contrast with the "scattered" and "disorderly" development of bilingual education during the Self-Strengthening Movement, the establishment of the Guimao Education System in 1904 brought in strict regulations on the bilingual education practices of various modern schools. It thus systematized and popularized bilingual education all over China, and it also laid a solid

foundation for the development of bilingual education in the following historical period — Republic of China.

The development of bilingual education in the post-1895 period also witnessed a significant expansion in the content of bilingual education. During the Self-Strengthening Movement, bilingual education was restricted to the technological sphere while in the post-1895 period the expertise in western politics and law, which was viewed as the essence of western knowledge, was included in the bilingual curriculum of modern schools. The three premier universities, even including Peiyang University as a polytechnic university, all founded the Department of Politics and Law and offered subjects of western law, politics and diplomacy. The introduction of expertise in western political and legal systems in China accelerated the dissemination of revolutionary ideas such as “democracy”, “freedom” and “nationalism” among Chinese students (Hsü, 2000), which was instrumental in shaking the foundation of feudal monopoly and laying an ideological basis for Revolution of 1911.

Chapter Seven

Conclusion

This study has examined the nature, purposes, results and consequences of bilingual education in mainland China between 1840 and 1911. In particular, it has analyzed how and why the bilingual education policies and practices changed during the late Qing period, and has examined the relationship between the bilingual education policies and the external sociopolitical contexts. This chapter firstly summarizes the study's main findings of the six research questions raised in Section 1.3. Then it assesses the broader significance of the findings in a wider geographic region. In addition, this chapter also discusses the historical legacy left to today's bilingual education policymakers and practitioners in China, and finally it points out the limitations of the study and makes suggestions for future research.

7.1 Summary of findings

Since the present study concentrates on the policy dimension of bilingual education in late imperial China, the six research questions center on the three core components of education policy research — policy content, policy values and policymaking process (Shen, 2012). Research Questions 1, 2, 4 and 5 are in connection with policy content and values, which investigate the purposes, content, characteristics and results of the bilingual education policies in late imperial China. Research Questions 3 and 6 pertain to the decision-making process of bilingual education policies, which identify the main policymakers as well as the socio-political factors shaping the formulation, implementation and revision of the bilingual education policies in late imperial China. In the following parts, I will present and discuss the principal findings in relation to each of the six research questions.

Research Question 1: What were the nature and purposes of bilingual education in late imperial China?

The nature and purpose of bilingual education is a fundamental issue to be explored if we intend to deconstruct and interpret the bilingual education policies in late imperial China. As China was an important country of the western “Informal Empire” in the 19th century, there was a heated debate over whether bilingual education and the spread of foreign languages to late imperial China resulted from western linguistic imperialism (Phillipson, 2009) or China’s own need after the First Opium War.

Based on the evidence of the textual data presented in Chapters Four, Five and Six, it can be seen that similar to the scenario in Hong Kong, a British crown colony in East Asia, the westerners did not impose their linguistic wills on the subjugated countries like China. Nor did they even actively involve themselves in the policymaking process of bilingual education in late imperial China. The only noticeable participation of western powers in China’s bilingual education in the late Qing period was their official sanction for sending teachers, specialists and technicians to teach Chinese students in modern schools and assist Chinese in the modernization project. The evidence therefore suggests that the western powers had no direct interference in the policymaking process of bilingual education in late imperial China and the leadership of bilingual education was still in the hands of the Qing government.

In reality, the western colonizers’ attitudes towards bilingual education in late imperial China were subtle and complex. On the one hand, in order not to incur the wrath of indigenous people, the western governments were unwilling to intervene too much in their far-flung “semi-colonies” in East Asia and to impose their languages on the subjugated countries (Evans, 2008a). On the other hand, since China’s Self-Strengthening Movement

in 1861, the western governments had been offering their help to China in dispatching their experienced teachers and sending original textbooks to China's modern schools, which suggested their implicit support for bilingual education in late imperial China. Although monetary inducement was probably one of the main reasons for those western teachers to come to China, the western governments might have chosen to forbid the western teachers to work in China's modern schools if they viewed the development of bilingual education and China's modernization movement as a threat to their control over China. Instead, the western governments were willing to lend their support to the Qing government in China's Self-Strengthening Movement. From the perspective of western imperialists, offering assistance to China's modernization would give them a plausible excuse to manage their affairs in China, thus concealing their "colonial" intention (Dean, 1976). More importantly, a modernized and strengthened central government in China would ensure the social stability and sustain the westerners' political and commercial interests in late imperial China.

Though the western imperialists had limited participation in the decision-making process of bilingual education in late imperial China, their profound influence over China created a favorable environment for the gradual spread of western languages, modern science and technology to China and led to the rise of bilingual education in government schools. When China was forced to open its treaty ports to the West after the Opium Wars, a large number of western diplomats, businesspersons and missionaries arrived in China, which increased Sino-western diplomatic, commercial, military and judicial communication. As we saw in Section 5.2, it was the Qing government's realization of communicative barriers in diplomatic talks that initiated government-led bilingual education in late imperial China. Although Zongli Yamen was founded in 1861 as a special agency to handle the growing foreign affairs and to give the emperor suggestions for diplomacy, the Chinese scholar-officials' inability to understand foreign languages put them at a disadvantage in the

negotiations. Therefore, the Qing government was eager to develop bilingual education in the government schools and train translators and interpreters to overcome the language barriers in treaty negotiations with western envoys.

Apart from overcoming the communicative obstacles in diplomatic negotiations, bilingual education also addressed China's desperate need for gathering western military intelligence during the Opium Wars. Based on the evidence of the memorial dated August 20, 1862, it is evident that Yi Xin, the head of Zongli Yamen, recognized the crucial importance of learning foreign languages in gathering military intelligence of western armies. The strong determination to learn foreign languages among the Chinese scholar-officials laid a basis for the establishment of Peking Translation College — the first government-funded modern school in late imperial China.

The initial purposes for Chinese to pursue bilingual education were to facilitate their communication with the West and to collect western military intelligence for China's coastal defense. However, the purpose of bilingual education changed over time in the late Qing period. In reality, the development of bilingual education after the Opium Wars was an epitome of China's relentless pursuit of modernity in the historical period. As detailed in Chapters Four and Five, China's fiasco in the war ended its long-term "Closed-Door" policy, awakened a group of progressive scholar-officials who realized the considerable disparity between China and the West and appreciated the benefits of foreign language education and western knowledge. From the Self-Strengthening Movement to the collapse of Qing Dynasty, despite the fact that the purpose of bilingual education changed from gaining advanced knowledge of western science and technology to imbuing knowledge on western politics and law, foreign languages had been always viewed as the indispensable

tools for modernizing China and enhancing its national competitiveness in the international arena.

Thus far, we have been examining the nature and purposes of bilingual education in late imperial China. The development of bilingual education did not result from linguistic imperialism of the western powers, but from China's urgent need for communicating with the West and strengthening the country by learning from the West. Seen from the perspective of western imperialists, China's bilingual education advanced their interests of exerting enduring influence over one of their largest "semi-colonies" and opening a large overseas market for trade. It can thus be concluded that bilingual education in the late Qing period was, in terms of its nature and purposes, a shared interest between the western colonizers and Chinese progressive scholar-officials and an optimal solution to the bitter conflicts between the West and China after the Opium Wars.

After identifying the nature and purpose of bilingual education, it is also important for us to explore how the bilingual education policies were formulated and developed to serve the purpose. We should not take it for granted that the bilingual education in late imperial China was static over time. In reality, since China's internal and external sociopolitical contexts changed dramatically in the late 19th and early 20th century, its bilingual education policies and practices also underwent some changes accordingly. The following section will address Research Question 2, tracing and analyzing the changes in the development of bilingual education in different phases of the late Qing period.

Research Question 2: When, how and why did bilingual education policies and practices change?

When examining the historical development of bilingual education in the late Qing period, I have identified three chronological phases according to the objectives and content of bilingual education: the period of Opium Wars (Phase 1: 1840-1860), the period of the Self-Strengthening Movement (Phase 2: 1861-1894) and the post-1895 period (Phase 3: 1895-1911). The bilingual education policies and practices in the three phases were respectively detailed in Chapter Four, Chapter Five and Chapter Six.

The period of the Opium Wars witnessed no government policies of bilingual education. In this period, since the Qing government was preoccupied with repelling western inroads and suppressing massive internal uprisings, it had no spare capacity to reflect on the traditional education system and policies. However, this historical period provided a crucial pretext for the subsequent government-led bilingual education practices in the Self-Strengthening Movement. After China had signed the *Treaty of Nanking*, the western Protestant missionaries gained permission to undertake preaching activities in China's treaty ports. In order to fulfill their fundamental mission of converting Chinese to Christianity, the western missionary societies decided to proselytize through education and establish a large number of mission schools. As detailed in Section 4.2.3, those mission schools during the Opium Wars provided Chinese language education, English language education and even imparted rudimentary technological knowledge to Chinese students in English, which initiated the development of bilingual education in China.

This finding on bilingual education practices of the mission schools provides a corrective to Fu's (1986) claim that foreign language education in modern China only started from the establishment of Peking Translation College in 1862. It also draws our scholarly attention

to the impact of bilingual education at the mission schools on the education practices of government schools in late imperial China. In contrast with the harmonious relationship between British government and mission schools in British colonies (Howatt & Widdowson, 2004), those mission schools failed to receive official recognition in late imperial China because the Qing government, as the highest power agency, was wary about the spread of western religions to mainland China. Nonetheless, the bilingual education practices in those mission schools provided an instruction template for the government schools to design bilingual curriculums and organize educational activities, which had a positive impact on the development of bilingual education in China.

Apart from the practices of bilingual education in mission schools, this phase (1840-1860) also witnessed the earliest government proposals for bilingual education outlined by a few progressive Chinese scholar-officials such as Lin Zexu, Wei Yuan and Feng Guifen. After witnessing China's fiasco in the Opium Wars, the enlightened officials and social elites recognized the disparity in military strength between China and the West, and they realized the void of technical education in China's traditional education system. As we observed in Section 4.3, having identified the direct relationship between learning foreign languages and acquiring western knowledge, the progressive scholar-officials such as Wei Yuan and social elites like Feng Guifen submitted their proposals for establishing modern schools to teach Chinese foreign languages and to impart knowledge on modern science and technology to students.

However, the Qing government's stance on bilingual education in the first phase was difficult to tell. What we have discussed above was only the evidence on the pioneering practices of bilingual education in mission schools or some governors' viewpoints on foreign language education and modern science education, but there was no convincing

evidence to suggest the attitudes of the Qing government towards bilingual education in this phase. As detailed in Chapter 4, ample evidence¹⁷⁵ has indicated that the emergence of bilingual education in those mission schools and the proposals for bilingual education did not disrupt the original Confucian education system. Western science and technology were still viewed by most Chinese scholar-officials as inferior techniques that should not be a part of their formal education. In fact, it was not until the Self-Strengthening Movement (Phase 2) that the Qing government started to realize the benefits of foreign languages and western knowledge.

The second phase (1861-1894) witnessed the earliest bilingual education practices in China's government schools, which was a barometer of the government attitudes towards bilingual education in late imperial China. A crucial government decision on the development of bilingual education was not to establish Peking Translation College since it was actually a continuation of the original Russian Language School, but to found the Department of Modern Mathematics and the Department of Astronomy at Peking Translation College. As detailed in Section 5.2.3.2, in 1867 when Peking Translation College had been open for five years, there was an intense debate among the imperial governors over whether the college should offer subjects of astronomy and modern mathematics. The progressive scholar-officials such as Yi Xin firmly believed that western knowledge on modern science and technology was essential to the realization of China's modernization. By contrast, conservative scholar-officials such as Wo Ren clung to the conventional view that western knowledge would dampen the Chinese morality. They also

¹⁷⁵ The evidence includes a few essays on the impact of western languages and knowledge on China's education such as Wang Tao's (王韜) "On the national strength" (答〈強弱論〉), and the relatively low enrollment of mission schools during the Opium Wars.

believed that only Confucian ethics and courtesy could help China guard against western imperialism and colonialism.

After a six-month fierce debate, Empress Dowager Cixi, the de-facto decision-maker in the Qing government since 1861, sanctioned the proposal of adding two departments of western science at Peking Translation College. Despite the severe criticisms on western knowledge from the conservative scholar-officials, the highest court adhered to the view that western expertise in astronomy and modern mathematics was of practical use to China's modernization, and western knowledge was important to Chinese officials and social elites. The hard-core conservative scholar-officials were even criticized as the narrow-minded officials who only cared about empty essays but had a limited horizon of the world affairs. As indicated in the imperial edicts¹⁷⁶ in 1867, Empress Dowager Cixi had great determination to engraft western content subjects onto the Confucian curriculum in the premier government school.

The decision to add western content subjects at Peking Translation College suggests a dramatic change in the imperial attitudes towards western knowledge in the second phase of the late Qing period. In the first phase, when Lin Zexu (林則徐) launched the grand "Translation Project" to translate western texts and newspapers, he received no financial support from the Qing government but had to fund the project by his own salaries. The proposals of those progressive scholar-officials for foreign language education were even regarded as gross nonsense by Emperor Daoguang (道光皇帝). The drastic change in the imperial stance on western knowledge partly resulted from the affinity Empress Dowager Cixi had for the progressive scholar-official Yi Xin (奕訢). More importantly, it was

¹⁷⁶ The three imperial edicts were issued on March 5, 1867, April 25, 1867 and June 30, 1867 in the name of Emperor Tongzhi. However, the de-facto imperial order sender was Empress Dowager Cixi.

attributed to the change in the focus of the Qing government agenda and the approach to social conflicts in different phases. During the Opium Wars, the Qing government paid more attention to dealing with the internal and external threats to safeguard its feudalistic control over China. By contrast, during the Self-Strengthening Movement, the temporarily and relatively stable social milieu in China afforded the Qing government an invaluable opportunity to reflect on the previous military defeat and to draw up a long-term plan for self-strengthening and modernization.

Another important reason for the change in the Qing government's attitudes towards foreign languages and western knowledge was its realization of the growing endangered situation of China. In the first phase, Emperor Daoguang was not fully aware of the severe consequence of western colonization in China and still believed the superiority of Chinese wisdom to the westerners. However, in the second phase when China further fell into the trap of western colonization after signing the *Convention of Tientsin* and *Convention of Peking*, Empress Dowager Cixi was worried that China would become a joint colony of western powers in the near future. In order to prevent China from being colonized and bolster her dictatorial regime, she agreed with the progressive scholar-officials' plans for imbuing expertise in western military technology in the premier government schools. In such different social-political contexts in the first and second phase of the late Qing period, the change in the imperial attitudes towards western knowledge can be understood.

Abundant evidence has suggested that the favorable attitudes of the Qing government towards western knowledge accelerated the development of bilingual education in late imperial China. In 1867, Fujian Naval College, as the first premier modern college in western military technology, was established to develop students' practical skills of shipbuilding and navigation. As in the mid-19th century few Chinese possessed the

expertise in shipbuilding and navigation, a multitude of foreign teachers, specialists and technicians were employed as discipline-specific teachers, and original textbooks were used at the college. Foreign languages were used as the MOI for western subjects while Chinese was used as the MOI for Chinese-related subjects. Because of the successful results of bilingual education at Fujian Naval College, the other technical colleges adopted its education model, which facilitated further integration between foreign languages and western technical knowledge in the education practices of those modern schools during the Self-Strengthening Movement.

The Sino-Japanese Naval War demarcated the transition from the second phase to the third phase (1895-1911) of bilingual education in late imperial China. As we saw in Section 6.1, China's fiasco in the war signaled the end of the Self-Strengthening Movement and revealed the limitation of modern education including bilingual education in the second phase. Through a deep reflection upon the military defeat, a host of Chinese scholar-officials found technological modernization could not save China from the endangered situation and what China needed was a fundamental institutional reform. With respect to the educational reform, they proposed that the content of bilingual education should expand from acquiring western technical expertise to gaining knowledge of western politics and law. This finding corroborates Fairbank's (2006 b) view that the outdated political system and lack of democracy in the Qing government were the root causes for the failure of the Self-Strengthening Movement and were also the starting point for subsequent institutional reforms such as the "New Policies" Reform. It also suggests the close relationship between significant historical events and the development of bilingual education in the late Qing period.

Two pieces of important historical evidence confirm the changes in the content of bilingual education from Phase 2 to Phase 3. One was the influential “New Policies” Reform in 1901. As documented in the imperial edict dated January 30, 1901, Empress Dowager Cixi declared to implement the institutional reform and accentuated the importance of learning from the West. As the head of the Qing government, Cixi’s powerful voices of including western politics and law in China’s modern education set the tone of the “New Policies” Reform, and expertise in western politics and law thus became the focus of bilingual education in this phase.

The change in the content of bilingual education was also reflected in the curriculum design of the premier modern universities established after the Sino-Japanese Naval War. As detailed in Chapter 6, it can be seen from the curriculum list at Imperial Peking University and Nanyang College that subjects of western politics and law were included in the bilingual curriculum. It is found that offering subjects of western politics and international law not only satisfied China’s growing needs for negotiating with the West about signing treaties and developing trade relations, but also responded to Cixi’s calling for learning western politics and law in the “New Policies” Reform.

Apart from the change in the content of bilingual education, the third phase of the late Qing period also witnessed the establishment of the first nationwide bilingual education system in China and the three complementary policies on bilingual education. The previous education practices in the second phase were criticized to be the largely uncoordinated efforts in different places of China, which lacked a central plan to regulate and standardize bilingual education practices. Thus, during the “New Policies” Reform, the Qing government was devoted to implementing a complete modern education (including bilingual education) system in China. After discussions and modifications, the Renyin

Education System and the Guimao Education System were established and the Guimao Education System was the first bilingual education system to be implemented in China.

As the foremost government policy on bilingual education in late imperial China, the Guimao Education System regulated the bilingual education practices at different levels of schools in the aspects of educational objectives, curriculum designs, admission requirements, teacher employment and educational facilities. The Guimao Education System also imposed different regulations on the threshold level of Chinese and foreign language proficiency that students should attain at each level of education. Nevertheless, despite the fact that the Guimao Education System was drawn after careful considerations, it still had some gray areas such as the choice of foreign languages at pre-university schools and specialized colleges, and the choice of MOI and textbooks in specialized colleges. The void of the Guimao Education System resulted in the confusion and inconsistency of bilingual education practices in the pre-university schools and specialized colleges. Thus, the Ministry of Education in late imperial China, which was founded in 1905, implemented three complementary policies in 1909 and 1910 to fill the void of the Guimao Education System, and regulate bilingual education practices in various schools.

The findings trace the historical development of bilingual education in three different phases of the late Qing period. This finding fills the void of Zhang's (2011) historical study that views foreign language education in the late Qing period as a static stone. It also indicates that bilingual education in late imperial China gradually moved alongside of the wide sociopolitical and sociolinguistic contexts. The purpose and main content of bilingual education in the late Qing period changed from converting Chinese children to Christianity in mission schools in Phase 1 to training interpreters to overcome linguistic barriers in

international communication in Phase 2. It later expanded from gaining knowledge of western military technology to acquiring expertise in western politics and law in Phase 3.

The 70-year historical development of the late Qing period also witnessed the gradual improvement and systematization of bilingual education in mainland China. The government-led bilingual education emerged from the half-baked ideas of some progressive imperial and provincial governors in the early 1860s. The ideas subsequently became more definite during the Self-Strengthening Movement. The founding of two departments in relation to western science at Peking Translation College initiated the development of bilingual education in China's government schools. Later bilingual education became a main pedagogical model of imparting western knowledge to students in the military technical schools that were established in coastal China from the late 1860s to 1894. In the post-1895 period, bilingual education developed from the coastal cities to the hinterlands of China. After the promulgation of the Guimao Education System in 1904, bilingual education became entrenched in China's modern education system, which facilitated the popularization of foreign languages and western knowledge in mainland China. It is worth recalling that these explicit changes in bilingual education policies and practices in the late Qing period were also closely tied to the ideologies of various actors or agencies in the education policymaking processes, which will be discussed in the following section.

Research Question 3: Who was the main actor or agency in the policymaking process of bilingual education in late imperial China?

As discussed in Section 2.2.3, a detailed investigation of the main actors or agencies of bilingual education policymaking in late imperial China will advance our understanding of the language ideologies and power distribution behind the policymaking process. According to Johnson and Johnson's (2015) theoretical model of power distribution in

language policymaking processes, an exploration of main policymakers is not confined to the identification of policy drawers but is also an examination of the different degree of power that policymakers at different levels exhibit and how education policies were issued through efforts of various policymakers. Since main policymakers of bilingual education in late imperial China enjoyed a relatively high status in the political system, it is essential to explore the political system in the late Qing period before identifying leading actors and examining their amount of power in the policymaking process.

As shown in Figure 3 and Figure 4 on Page 454 and 455, the political system in late imperial China consisted of three strata of government: (1) the Emperor or Empress at the highest level, (2) the agencies of the Qing government including the Grand Council, Six Boards and other parallel agencies such as Zongli Yamen, and (3) the provincial government.

Figure 3: The Political System in Late Imperial China (The Qing government)

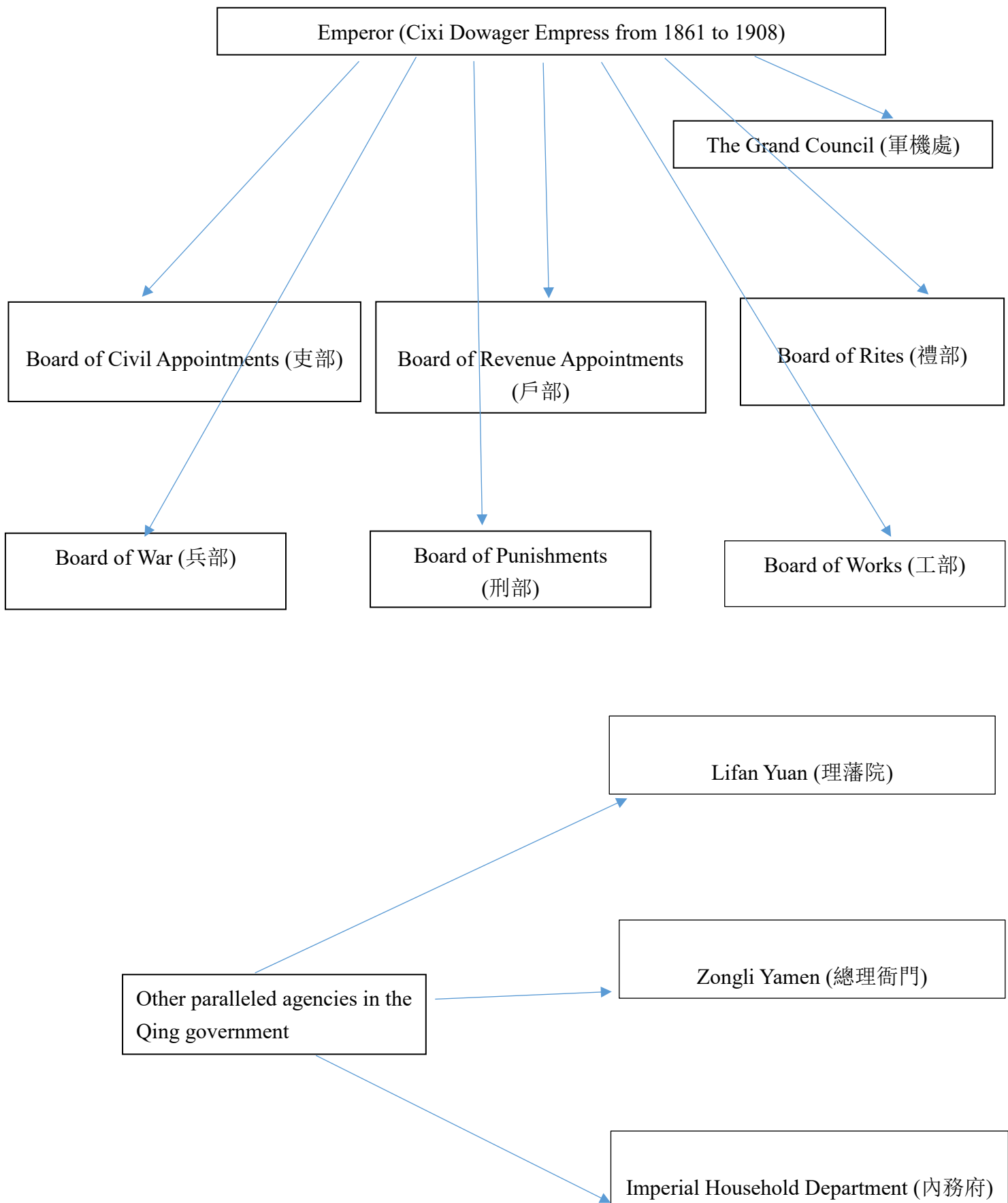
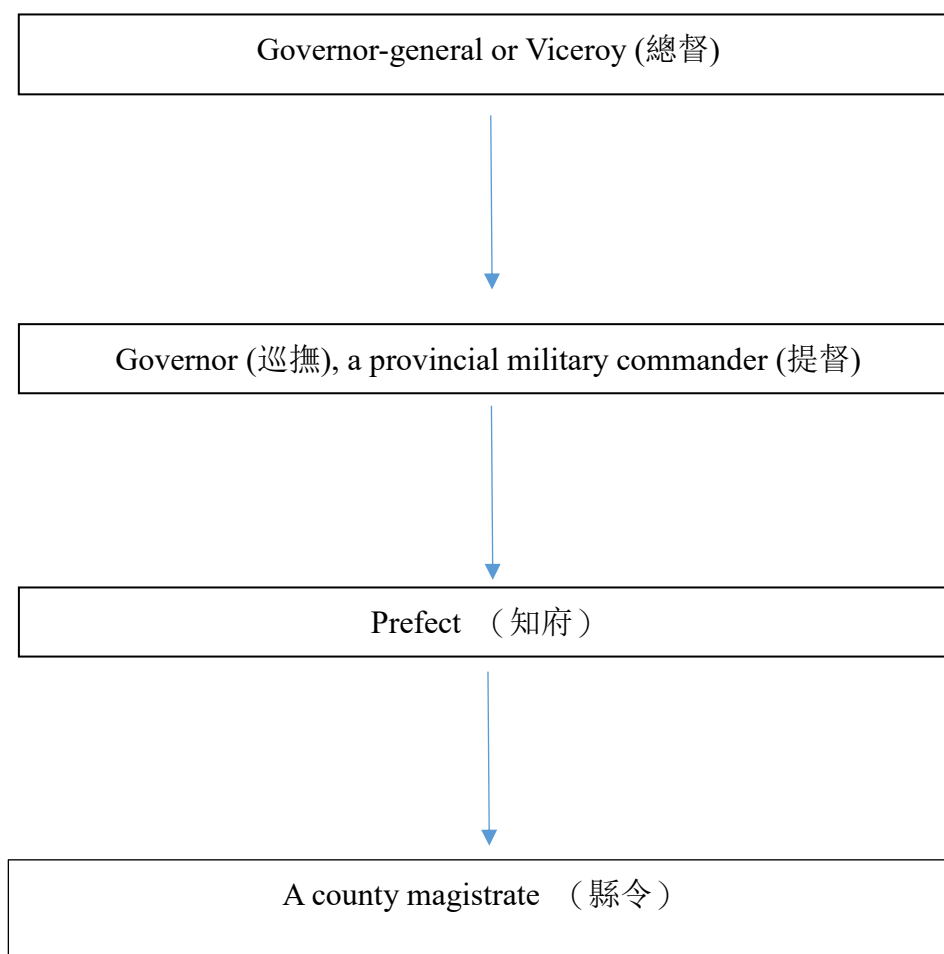


Figure 4: The Political System in Late Imperial China (The Provincial Government)



At the top of China's political system in the late Qing period was the emperor. Though he did not directly participate in the policymaking process, he was the de-jure policy arbiter who made the final decision in all policy proposals. After the imperial or provincial governors had submitted their memorials to the throne, the emperor reviewed the memorials and issued imperial edicts to accept or reject the policy proposals. Over the 70 years of the late Qing period, five emperors reigned over China including Emperor Daoguang, Emperor Xianfeng, Emperor Tongzhi, Emperor Guangxu and Emperor Xuantong. However, Empress Dowager Cixi was the de-facto highest ruler of China during most of the late Qing period (1861-1908). After Emperor Xianfeng passed away in 1861, Empress Dowager Cixi launched Xinyou Coup d'état, ousting some prince regents and assuming the highest power

in the Qing government. She later strengthened her control over China when her nephew (Emperor Guangxu) became the successor to throne in 1875. When Emperor Guangxu reigned over the country, Empress Dowager Cixi was the real ruler and the policy arbiter because she had already assumed her supreme political and military authority in the Qing government.

Since Empress Dowager Cixi had her absolute control over China during the Self-Strengthening Movement and most of the post-1895 period, her beliefs about foreign languages and western knowledge were crucial to the development of bilingual education in late imperial China. As the highest power actor in the autocratic feudalistic system, Cixi was loath to adopt the model of western democratic government and reject any new ideas related to the West. She also had intense hatred for foreigners after she witnessed the unwarranted foreign intrusion on China during the Opium Wars, the Sino-Japanese Naval War and the Boxer War. However, the historical evidence shows that Cixi gave her firm support to bilingual education in China's modern schools and viewed it as a primary means of China's technological and military reforms to resist foreign attacks and quell internal rebellions.

Ample evidence demonstrates Empress Dowager Cixi's favorable attitudes towards bilingual education. For instance, in the fierce debate in the Qing government over founding the Department of Modern Mathematics and the Department of Astronomy at Peking Translation College, Cixi lent her support to the establishment of the two departments and the introduction of western knowledge to China's government schools. Her strong determination in some sense secured the decisive victory of progressive reformists over the conservative hard cores in the debate and facilitated the development of bilingual education in the Self-Strengthening Movement. Empress Dowager Cixi also agreed to allocate funds

to support bilingual education at Fujian Naval College though China was suffering from a financial crisis after the Opium Wars. After the devastating Boxer War in 1901, she decided to implement an institutional reform all over the country and to establish a nationwide bilingual education system in China. As the most powerful policymaker in late imperial China, Empress Dowager Cixi had a strong motive for developing bilingual education and spreading western knowledge to China. After witnessing China's crushing defeat in the wars and experiencing a narrow escape from westerners' capture in the Boxer War, she realized that developing bilingual education and implementing an institutional reform was a fundamental means to save China from colonization, satisfy the urgent demand for modernization and strengthen her control over the country. Therefore, despite the fact that Cixi was the head of "Conservative Camp" who cared more about crushing the opposition forces of radical reformists and consolidating the feudalistic control over China, her supportive attitudes towards foreign languages and western knowledge as well as her decisive actions fostered the development of bilingual education in the late Qing period.

Apart from the emperor (or empress) at the highest stratum of the Qing government, the imperial and provincial governors as well as the agencies affiliated to the Qing government were also important policymakers of bilingual education in the late Qing period. In reality, they were the policymakers of bilingual education who made detailed suggestions for bilingual education to the emperor. In the Qing government, Zongli Yamen, which was established in 1861 to handle increasing foreign affairs after the Opium Wars, was an important agency to formulate policies on bilingual education. Because of his affinity to Empress Dowager Cixi, Yi Xin was appointed the head of Zongli Yamen, and exerted an important impact on the decision-making process of bilingual education in the Qing government. Plentiful evidence has suggested that during Yi Xin's administration in Zongli Yamen, he was a pioneer in promoting the development of bilingual education and

encouraging the spread of western knowledge to late imperial China. Specifically, he was the founder and administrator of Peking Translation College, and a firm advocate for offering western content subjects at the college. During the debate over whether the Department of Modern Mathematics and the Department of Astronomy should be added at Peking Translation College, Yi Xin submitted two lengthy memorials¹⁷⁷ to convince Empress Dowager Cixi of the superiority of western technical knowledge and the benefits of bilingual education brought to Chinese students.

It can be seen from Yi Xin's career that his favorable attitudes towards bilingual education were related to his experiences of diplomatic negotiations. As we observed in Section 5.2.1.1, Yi Xin was appointed as the head of Zongli Yamen (being equal to Minister of Foreign Affairs in power) to negotiate with western envoys about signing treaties after the Opium War. Through close communication with westerners, Yi Xin recognized China's linguistic barriers in international communication and the vast disparity in military technology between China and the West. His personal experience compelled him to adopt a favorable attitude towards foreign languages, western knowledge and bilingual education.

After the Boxer War, the Ministry of Education was established to replace Zongli Yamen as the central committee to deal with the educational affairs in China. The Ministry of Education in late imperial China took charge of formulating policies of bilingual education and making revisions or adjustments to the Guimao Education System according to the education practices. A group of modern educationalists including Zhang Zhidong, Zhang Baixi, Luo Zhenyu and Yao Yingguang were invited to join the newly established Ministry of Education. Among all the members in the Ministry of education from 1905 to 1911,

¹⁷⁷ See Yi Xin's memorial on April 6, 1867 and April 23, 1867 for details in Section 5.2.3.2.

Zhang Zhidong, who was appointed the Minister of Education in the late Qing period in 1907, played a central role in the policymaking process of bilingual education. As we saw in Section 6.1, Zhang Zhidong was a leader in regulating bilingual education practices in the last few years of Qing Dynasty, and an important policymaker of the Guimao Education System. Because of Zhang Zhidong's extensive experiences of developing modern industry and modern education in China as well as his frequent communication with the westerners, Empress Dowager Cixi accepted his proposals for "mild education reform". His educational ideas that combined Confucian ethical knowledge with western practical knowledge became the guiding principle of education reform in the "New Policies" period.

Apart from the agencies affiliated to the Qing government, a few imperial governors also played important roles in the decision-making process of bilingual education in China. For example, Lin Zexu, the Imperial Commissioner to handle British opium trade in 1839, was one of the earliest scholar-officials who advised the emperor to strengthen China's coastal defense by learning western superior weaponry. Although Lin Zexu did not mention bilingual education in the memorials, his epoch-making proposals for learning from the West and the far-reaching "Translation Project" had a considerable impact on the progressive scholar-officials in the Qing government and made it easier for them to accept western languages and knowledge.

Some influential provincial governors and ministers also submitted invaluable memorials on bilingual education and affected imperial decision. At the end of the Opium Wars, Wei Yuan, the Prefect of Jiangsu Province, advised the emperor to employ western specialists to teach Chinese how to build modern gunboats and cannons. Greatly influenced by Wei Yuan's ideas, some provincial governors such as Zuo Zongtang realized the close link between learning foreign languages and acquiring knowledge of superior western military

technology. They frequently memorialized the throne to reiterate the importance of bilingual education, participated in China's modernization projects such as building modern dockyards, arsenals and machinery factories and founded modern schools in China. As stated in the imperial edict on April 23, 1867, Empress Dowager Cixi accepted the suggestions of the provincial governors for including modern knowledge in the bilingual curriculum of Peking Translation College, which indicated the profound impact of provincial governors in the decision-making process of bilingual education.

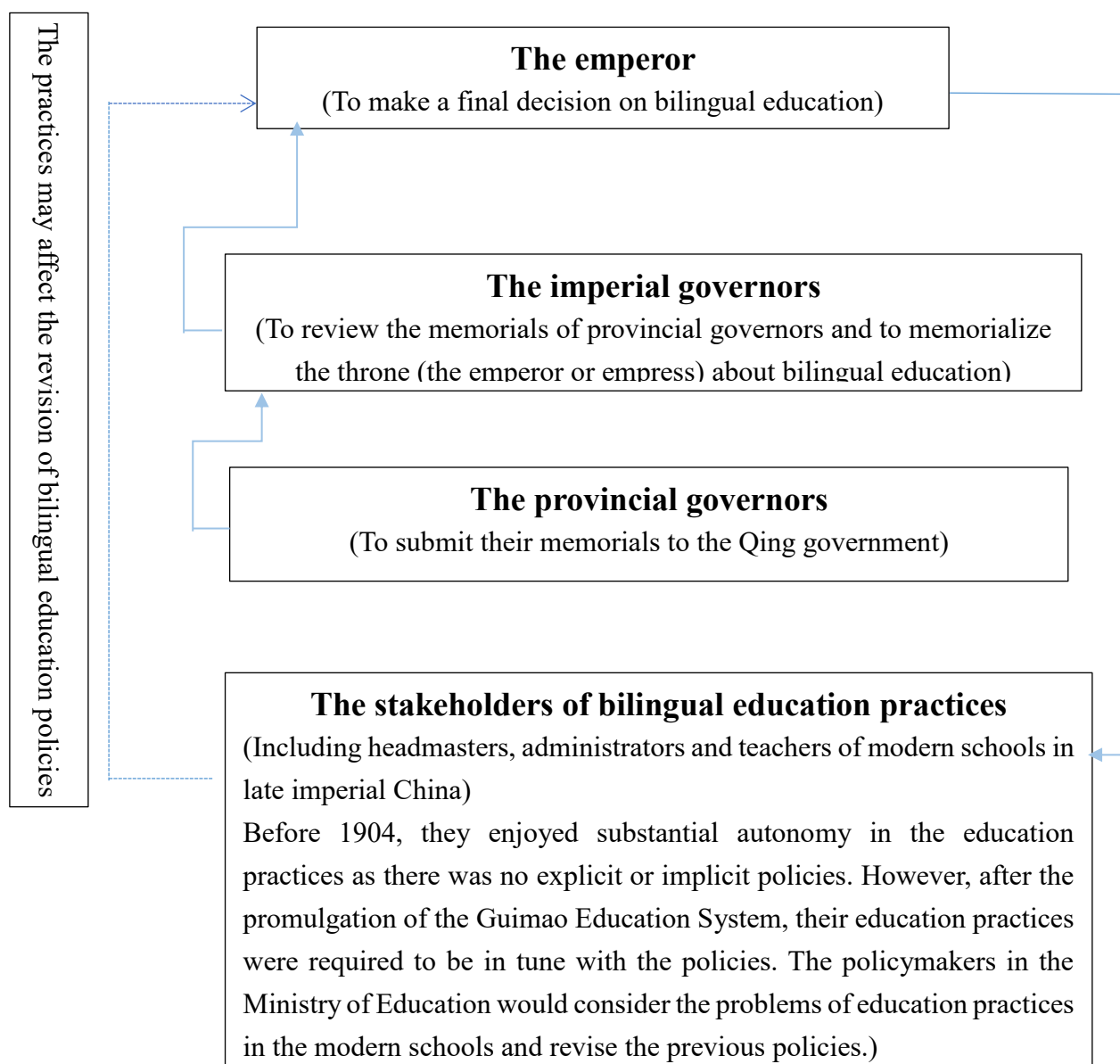
Thus far, we have shed light on the power of the main actors or agencies in the imperial and provincial government in the policymaking process. It becomes apparent that the promotion of bilingual education in late imperial China rested upon the ideas of some imperial and provincial governors and the favorable attitudes of Empress Dowager Cixi towards foreign languages and modern knowledge. Those ideas and beliefs were closely tied to the policymakers' personal experiences in diplomatic affairs and their awareness of the benefits bilingual education brought to China. The ideas were later tested, revised, developed and then applied to education practices in the late Qing period. For instance, as mentioned in Section 6.4.1.1 and Section 6.4.3.1, the famous entrepreneur Sheng Xuanhuai (盛宣懷) conceived the idea to establish a modern university to cultivate talents for China's modernization after he had engaged in business negotiations with westerners since the 1860s. With the support of the imperial and provincial government, he put his ideas into practice and founded two modern universities in China — Peiyang University and Nanyang College.

The identification of those policymakers in the imperial and provincial government suggests a typical top-down process of educational policymaking in late imperial China. However, the stakeholders of bilingual education practices such as school administrators,

headmasters, and teachers also played certain roles in the policymaking process and affected the final imperial decision on bilingual education. Since bilingual education was a novelty in late imperial China, the policymakers in the Qing government had limited knowledge of how to promote it in the Confucian country and they had to adjust their policies constantly according to the education practices of headmasters and teachers in the modern schools. Concrete evidence has confirmed the important role of headmasters and teachers of the modern schools in the bilingual education policymaking process. For instance, as stipulated in the Renyin Education System, all the modern schools should send the textbooks or teaching materials to the Ministry of Education for examination and authorization before using them in practice. However, the teachers in modern schools reflected that the long time the Ministry of Education spent examining textbooks would create difficulties in practice as many schools did not have textbooks available when the semester began. After receiving the feedback, the drawers of the Guimao Education System revised the regulation on textbook examination. Foreign teachers in the modern schools were allowed to use their own teaching materials temporarily before sending the materials to the Ministry of Education for examination. It can be seen that the drawers of the Guimao Education System gained much insight from the education practices, which reveals the important role of the educational practitioners in the policymaking process of bilingual education.

The findings on the main actors or agencies in the policymaking process of bilingual education in late imperial China demonstrated the interplay of policymakers in the imperial and provincial government, and the stakeholders such as headmasters and teachers of modern schools at the bottom of policymaking process. The details of policymaking process of bilingual education in the late Qing period are presented in Figure 5 on Page 462.

Figure 5: The Policymaking Process of Bilingual Education in the Late Qing Period



It can be seen from Figure 5 that once bilingual education policies in late imperial China were formulated and implemented by the Qing government (including the emperor and imperial government), they were open to interpretations by those headmasters and teachers of modern schools who were expected to implement it in practice. The top-down policymaking process of bilingual education in late imperial China, from the theoretical perspective of curriculum implementation, fitted in with the Fidelity Model when curriculum implementers in the modern schools followed the principles and requirements

of curriculum design prescribed in the education policies. However, Figure 5 also indicates a “bottom-up direction” of the education policymaking process in late imperial China. The bilingual education practices in schools introduced amendments to the policies according to contextual demands, which was similar to the Mutual Adaptation Model. As mentioned in Section 6.4.4.2, for instance, the Guimao Education System did not make definitive regulations on the choice of foreign languages for different academic disciplines in specialized colleges, which led to the inconsistent choice of foreign languages and the confusion of education practices in some specialized colleges. In order to tackle the problem of education practices, the Ministry of Education in late imperial China implemented another complementary policy on regulating the choice of foreign languages at pre-university schools on September 14, 1909. Thus, the policymaking and policy implementation of bilingual education in late imperial China could be, from the perspective of curriculum implementation, viewed as a combination of the Fidelity Model and the Mutual Adaptation Model. Both top-down governmental imposition and bottom-up efforts from school headmasters and teachers in education practices played important roles in the policymaking process and affected the development of bilingual education in the late Qing period.

Though both the government and the stakeholders of education practices played their part in affecting the imperial decision on bilingual education, the history shows a tendency for the increasing participation of the Qing government in education affairs. During the first two phases of the late Qing period, the Qing government was unwilling to play a leading role in education. Instead, the government granted more autonomy to individual schools, headmasters and teachers to develop their bilingual education practices. By contrast, in the post-1895 period, the Qing government became the main provider and leader of bilingual education, which was reflected in the establishment of the Guimao Education System in

1904 and three complementary policies on bilingual education in 1909 and 1910. The change of governmental participation in the bilingual education can be interpreted as a sign of increasing centralization in the policymaking process and the tendency towards the standardization, popularization and systematization of bilingual education in late imperial China.

Research Question 4: What were the results of bilingual education in the late Qing period?

Caution needs to be exercised if we intend to make a fair evaluation of the results of bilingual education in the late Qing period. As discussed in Section 2.5.2, some scholars criticized the educational results of bilingual education in late imperial China for its inherent problems such as the shortage of bilingual teachers and the inconsistency in the education practices over history. They also belittled the value of bilingual education in late imperial China on the ground that bilingual education failed to strengthen the Qing control over China and reverse China's military defeats in a series of wars from the mid-19th century to early 20th century (Huang, 2006). It is apparent that those "critical" studies fall into the trap of "presentism", that is, to make partial judgement on the history from today's perspectives. Since the educational context has undergone dramatic transformations over the century, it is difficult to make direct comparisons between the results of bilingual education in the late Qing period and those of bilingual education programs in today's schools and universities. We should not directly and solely attribute the military defeat and the collapse of Qing Dynasty to the failure of bilingual education because the decline of Qing Dynasty was such a complex process that no single factor could account for. It would be more appropriate for us to comment on the result of bilingual education from a historical perspective. Although bilingual education could not fundamentally alter the fate of late imperial China, it still exerted a positive impact on China's social change, technological modernization, and even

the emergence of revolutionary and democratic thoughts to topple the two-century-old Manchu ruling house in China.

In order to make a fair evaluation of the results of bilingual education in the late Qing period, we should examine whether the education policies and practices achieved their fundamental objectives and brought benefits to China's social change. The idea to develop bilingual education was borne out of China's reaction to the national crisis including the western attack and internal uprisings since 1840. Bilingual education was thus viewed by the Qing government as a necessary means of strengthening and modernizing China to guard against the foreign attackers and safeguarding the Manchu control over the country. Comparing the objectives of bilingual education with educational results in the late Qing period, we find that although bilingual education failed to prolong the life of dynasty, it achieved the goal of strengthening and modernizing the Confucian country and promoting China's social advancement to a new era — the Republic of China.

The positive results of bilingual education in the late Qing period were reflected in the following five aspects. To start with, bilingual education enhanced the overall educational quality of modern schools in China and some schools such as Peiyang University could even match the well-known schools in western countries. The high quality of bilingual education in the government schools was reflected in the comments of external visitors and examiners. For example, as detailed in Section 5.3.3.7, after the western specialists had inspected the education practices of Fujian Naval College, they praised the Chinese students for their "correct and good English with no jargon of Pidgin English" (*North China Herald*, 21/4/1870, p.279). The external examiners and inspectors also spoke highly of the students' understanding about western knowledge and the overall educational quality of modern schools. As detailed in Section 6.3.1.7, for instance, because of the first-class educational

quality and outstanding reputation of Peiyang University, the American universities classified it as the A1 (top) university in China, and formulated preferential admission policies for Chinese students to pursue a postgraduate degree. The graduates of Peiyang University could be admitted to any American university for postgraduate study without taking entrance examinations.

The modern schools in late imperial China cultivated a large number of prominent bilinguals in various fields. Some graduates of the modern schools became translators and interpreters to bridge the communicative gap between Chinese officials and western diplomats. The excellent graduates also played important roles in the fields of modern science and technology such as shipbuilding, navigation, mining, metallurgy, aircraft manufacture, railway, mathematics, geology, physics, pharmacy, agriculture, architecture, zoology and the fields of social sciences such as finance, law, modern education and translation. It may be an exaggeration to attribute all the graduates' bright employment prospect to the bilingual education they received in modern schools as they were also tied to their personal ambition, efforts, talent and the opportunities afforded to them. However, based on the comments of insiders and outsiders on the education practices of modern schools, it can be seen that bilingual education in the modern schools achieved their original objectives of improving students' foreign language proficiency. Bilingual education also broadened their knowledge of modern science, technology and politics, sharpened their skills in a specialized field and cultivated leaders in each field of modernization in late imperial China.

The development of bilingual education in the late Qing period also laid a solid foundation for the education modernization in the historical period that followed. The establishment of the Guimao Education System in 1904 marked the establishment of the first bilingual

education system in China. The Guimao Education System not only systematized and popularized bilingual education all over China, but also facilitated the continual advancement of bilingual education in the following historical period — Republic of China. If we compare *Education Act* promulgated in Republic of China with the Guimao Education System in the late Qing period, we can see that the modern education system in Republic of China bore much resemblance to the Guimao Education System in the aspects of educational objectives, curricular designs, teacher employment and textbook choices.

In spite of the fact that graduates of the premier modern schools could not save China from falling into the western “colonized” trap within such a short period, there is no denying that those prominent bilinguals and experts in various fields made important contributions to the growth of China’s national strength. Having been immersed in the traditional Confucian culture for almost five millennia, China mounted stiff resistance to the introduction of alien languages, western education and culture. Bilingual education, as a primary education model of China’s modern schools in the Self-Strengthening Movement and the post-1895 period, expanded the Chinese horizons, promoted the spread of foreign languages and western knowledge to China and accelerated China’s modernization in multifarious fields. Abundant evidence has demonstrated how far China’s modernization had developed in the late Qing period with the help of bilingual education. As we observed in Section 5.3, before the establishment of Fujian Naval College, the Chinese were ignorant of how to build and navigate modern warships and had to purchase expensive British weapons to guard against the western attackers in the naval wars. However, after almost thirty years of modernization (1861-1894), China was able to build its own modern navy and had the best shipbuilding factory in the Far East. China’s Imperial Peiyang Fleet became the largest fleet in Asia and the eighth largest fleet in the world during the late 1880s, only next to the western powers such as Britain, France and the United States (Li, 1979). Despite the fact that Peiyang Fleet

was crushed in the Sino-Japanese Naval War for various reasons¹⁷⁸, we should not overlook the remarkable progress China had achieved over the years of modern education (including bilingual education) if we compare it with China's weak military power during the Opium Wars.

Apart from the contributions to China's advancement in technological modernization, the bilingual education in late imperial China also facilitated the dissemination of advanced social ideas including freedom, equality, democracy and human rights. The evidence suggests that in the post-1895 period, many Chinese students, educationalists and other social elites, who had received bilingual education in the modern schools and had a solid foundation in foreign languages and western knowledge, furthered their education in foreign countries. After returning to China, they brought in the republican and democratic ideas and advocated their political views, which inspired an increasing number of Chinese to stand up and overthrow the aristocratic control of the Qing government in the Revolution of 1911.

When Qing governors decided to promote bilingual education in China, they held the idea that bilingual education was essential to addressing the external and internal threats and consolidating their regime, but they were not fully aware of its far-reaching consequences for ending their political control in 1911. However, seen from the perspective of China's modernization and social advancement in the long term, the development of bilingual education in the late Qing period brought about the fundamental change in Chinese attitudes towards western knowledge and foreign languages, which promoted the progressive transition from the authoritarian feudalistic society to the republican society in China.

¹⁷⁸ The main reason for the military defeat in Sino-Japanese Naval War was not the disparity in the power of weapons, but the overall military strategy and command.

Research Question 5: What were the curricular characteristics of bilingual education in late imperial China?

When examining the bilingual education policies and practices in late imperial China, we find the following seven curricular characteristics: (1) clear and discipline-specific objectives of bilingual education, (2) synthesis of foreign language education and content knowledge acquisition, (3) balance between western subjects and Chinese-related subjects in the bilingual curriculum, (4) flexible choices of MOI according to the level, objectives, content of education and students' foreign language proficiency, (5) organization of international faculty teams and the application of team teaching in the education practices, (6) integration of theoretical and practical courses in the bilingual curriculum, and (7) adoption of stringent elimination systems in schools to ensure the effectiveness of bilingual education.

The first striking characteristic of bilingual education in late imperial China was its clear and discipline-specific objectives. It can be seen from the statutes of the premier modern schools and the Guimao Education System that different types of schools had their own educational objectives based on the requirements of academic disciplines. With respect to Peking Translation College, as reflected in the three versions of *Statutes* in 1862, 1865 and 1898, the main objectives of bilingual education at Peking Translation College were to enhance students' translation skills and broaden their knowledge of modern mathematics and astronomy. At Fujian Naval College, a bilingual curriculum was designed to help students gain requisite skills of shipbuilding and navigation to the extent that they were able to build modern ships and navigate the ships abroad independently. After the Guimao Education System was established in 1904, because of the increasing disciplinary specialization in modern schools, each academic discipline had its own educational

objectives and requirements for foreign languages. The clear and discipline-specific objectives of bilingual education in different schools were bound up with other curricular issues such as curriculum design and implementation, which helped administrators to examine the effectiveness of bilingual education.

The second typical characteristic was the close relationship between foreign language education and content knowledge acquisition. Considerable evidence has suggested that the foreign languages enjoyed a high status in the bilingual curriculum of modern schools in late imperial China. Since a high foreign language proficiency would lay a solid foundation for students' acquisition of western knowledge, foreign languages were core subjects in the bilingual curriculum of foreign language schools, modern technical schools and western-style universities. As detailed in Section 6.3.2.2, for example, at Imperial Peking University, foreign language courses occupied the longest period of the weekly course timetable for students majoring in Commerce, Medicine, Translation and even in some Chinese-related academic disciplines such as Confucian Classics and Confucian Literature. As stipulated in the Guimao Education System, all the secondary schools in late imperial China should offer foreign language subjects to help students acquire western knowledge, study abroad and translate foreign textbooks. Even some primary schools in the treaty ports such as the one attached to Nanyang College taught students foreign languages as regular subjects in the third or fourth academic year. It was also apparent from the Guimao Education System and statutes of the three premier universities that some students were required to learn a second foreign language at pre-university schools or modern universities. Students majoring in British literature at Imperial Peking University, for instance, were required to learn Latin as the second foreign language since Latin was a main language to understand western classical literary works. Thus, the choice of foreign language for students in modern schools was entirely dependent upon the requirements of different academic disciplines, which

suggested the close relationship between learning foreign languages and acquiring content knowledge.

The balance between western subjects and Chinese-related subjects in the bilingual curriculum was another distinct characteristic of bilingual education in late imperial China. As detailed in Section 6.3, the policymakers of the Renyin and Guimao Education stressed the balance between Chinese language education and foreign language education, and imposed requirements on the education practices to achieve the equilibrium between Confucian knowledge and western education in their curriculum design. Despite the fact that “westernization” was the main direction for modern education in late imperial China, the administrators of modern schools also attached tremendous importance to Chinese language education in the bilingual curriculum and regarded students’ Chinese proficiency as one of the fundamental requirements in the admission examination. For instance, the bilingual curriculum of those western-style modern schools that were established during the Self-Strengthening Movement, such as Fujian Naval College, included some Chinese-related subjects such as Four Books and Five Classics, Chinese Language, China’s Ancient History, Confucian Ethics and China’s National Affairs.

When it turned to the post-1895 period, under the influence of Zhang Zhidong’s “Ti-Yong” educational principle, the policymakers of bilingual education in China arrived at a broad consensus that Confucian knowledge was a cornerstone to China’s national identity while western knowledge was a complement to Confucian knowledge and was important to handle practical problems. Thus, the three premier modern universities offered some Chinese-related subjects and included Chinese proficiency test into the assessment system. For example, at Imperial Peking University, students majoring in British Literature were required to take Chinese Literature as a compulsory subject and China’s History as an

elective subject. Similarly, Nanyang College imposed rigid admission requirements on students' Chinese proficiency. As detailed in Section 6.3.3.3, the examination score for Confucian classics and the Chinese language was the first determining factor in students' admission in Nanyang College. Students who passed foreign language tests but failed in Chinese language tests would not be admitted. The balance between Chinese-related subjects and western subjects in the bilingual curriculum in some sense mitigated the trenchant criticisms of conservative scholar-officials in the Qing government on the excessive westernization of China's modern schools. It also addressed the long-term conflicts in China's modern education between pursuing practical benefits of western education and maintaining China's national identity.

The balance between western subjects and Chinese-related subjects in the curriculum suggests that the bilingual education in late imperial China, according to Baker's typology of bilingual education (2006), consisted of the "Mainstream Education with Foreign Language Teaching" Model and the "Mainstream Bilingual Education" Model. The former model was mainly applied in secondary schools and pre-university schools while the latter model was applied in universities and other tertiary institutions. According to the Guimao Education System, students attended general foreign language courses in secondary schools and discipline-specific foreign language courses at pre-university schools to lay a linguistic foundation for tertiary education. In addition to foreign language courses, in secondary and pre-university schools, students were also required to take western content subjects and Chinese-related subjects through Chinese to build a cognitive basis in Confucian and western knowledge. In tertiary institutions, students received enrichment bilingual education. A foreign language was used as a main MOI for western content subjects and the Chinese language was used as the MOI for Chinese-related subjects. A combination of the two models indicates that the bilingual education in late imperial China was by nature

additive bilingual education. The fundamental aim of the bilingual education was not to replace students' native language by a foreign language but to develop students' bilingualism or multilingualism to acquire western knowledge and communicate with the outside world.

The way of differentiating different models of bilingual education is dependent upon the MOI in classroom (Baker, 2006). In late imperial China, there was an intense debate in the Qing government about the choice of MOI for western content subjects. The prevailing view of the conservative scholar-officials was that using foreign languages as MOI was a sign of cultural inferiority and would downgrade the status of Chinese in modern education. By contrast, the progressive scholar-officials and social intellectuals such as Yan Fu contended that the use of foreign languages as the MOI would facilitate the accurate delivery of information to students in class because the late imperial China lacked corresponding terminologies about modern western knowledge.

The debate over the choice of MOI ended in 1904 when the Guimao Education System was established. The policymakers took account of China's educational context and adopted a flexible policy on the choice of MOI according to the level of education and students' foreign language proficiency. Specifically, as stipulated in the Guimao Education System, students' mother tongue should be used as the MOI in primary and secondary education while foreign languages should be used in tertiary education. Regarding the choice of foreign languages in universities and specialized colleges, the choice of MOI should depend on the native language of a country with world-leading technology or skills in a certain specialized field. For instance, at Fujian Naval College, French was largely used as the MOI for the subjects related to shipbuilding as France was the leading country in shipbuilding in the 19th century. Similarly, English was chosen as the MOI for the subjects of navigation as

Britain had the most advanced navigation skills, and English was the lingua franca for world navy officers in the mid-19th century.

However, despite the benefits of using foreign languages as the MOI for western content subjects, plentiful evidence has suggested that “mixed-mode instruction” was provided in the bilingual education practices of universities and pre-university schools in late imperial China. As stipulated in the Guimao Education System, some Chinese teachers were recruited as teaching assistants to translate parts of lectures delivered by foreign teachers when students had difficulties in understanding the lectures. The education practice was thus probably a mixture of foreign language instruction and Chinese translation in class.

The successful application of “mixed-mode instruction” to the education practices also rests upon the effective cooperation among faculty members. In late imperial China, the clear labor division and close cooperation between foreign teachers and Chinese teachers was another salient characteristic of bilingual education practices in those modern schools. Since China lacked its own faculty who understood western knowledge in the 19th and early 20th century, foreigners were employed as main teachers for western content subjects. Abundant evidence has demonstrated that an international faculty team was organized in the premier schools of late imperial China. At Fujian Naval College and Imperial Peking University, for example, a large number of foreign teachers were employed to teach foreign languages and western content subjects. In addition to foreign teachers, some Chinese who had experiences of studying abroad were hired as teaching assistants or foreign language teachers in modern schools. At Fujian Naval College, since some local students had difficulty in understanding Standard Mandarin, the teachers who were able to speak the local dialects of Fujian and Canton Province (the mother tongue of the students) were hired as the teaching assistants and language teachers at the beginner’s level. The effective

cooperation among teachers in the modern schools was also reflected in frequent communication with each other. One classic example was the faculty team at Fujian Naval College. As we saw in Section 5.3.3.2, before class the western discipline-specific teachers held meetings with the Chinese language teachers in identifying educational objectives, analyzing students' target needs and discussing pedagogical issues. After class, the western discipline-specific teachers reflected on the lessons with the Chinese teachers and exchanged their views on the future improvement in pedagogy.

The integration of theoretical and practical courses in the curriculum was another remarkable characteristic of bilingual education in late imperial China. In a traditional sense, the bilingual education practices normally took place in classrooms. However, probably because bilingual education in late imperial China was in strong connection with developing students' practical skills, the bilingual curriculum included some out-of-class activities, practical courses and internships. Fujian Naval College, for instance, operated a three-year internship program including factory practical courses and ship practical courses. As detailed in Section 5.3.3.5, in the ship practical courses, the Chinese students were required to follow instructions or commands of the British officers aboard in English and to keep a log of their voyage in English. Similarly, in Nanyang College, the students in the Department of Railway took one-month internship for surveying and mapping. During the internship, the students were required to write their internship reflexive journals in English and to present main findings to their American teachers. It is especially noteworthy that the practical courses facilitated students' understanding and internalization of the theoretical knowledge that they had learned in theoretical courses, and the practical courses also created opportunities for students to use target foreign languages to perform real-life tasks.

The satisfactory results of bilingual education in the late Qing period were also attributed to rigorous assessment systems in the modern schools. Despite the relatively low enrollment of students, the premier government schools, particularly those established after the Sino-Japanese Naval War, adhered to the principle of “Quality First” in the admission screening process. The evidence has suggested that the modern schools in late imperial China normally had multiple examinations including entrance examinations, seasonal examinations, annual examinations and graduation examinations to test students’ grasp of knowledge in both western subjects and Chinese-related subjects. Apart from those examinations, a probationary examination was also administered at Fujian Naval College for the new students three months after they registered. The probationary examination tested students’ Chinese, English or French language proficiency and mathematics knowledge, and determined whether they should continue their study at the college. The rigidity in the assessment system of bilingual education was also reflected in the rigorous elimination system of those modern schools. As we saw in Section 5.3.3.6, for instance, if a student at Fujian Naval College received three consecutive third grades in the monthly examinations, he would be expelled from the college. It can therefore be understood why only 39 out of the 105 students who were admitted in 1867 graduated after their eight years’ learning at Fujian Naval College.

The examination scores for foreign languages and Chinese accounted for a large weighting of the overall assessment, which suggested the high status of language subjects in the bilingual curriculum of the modern schools in late imperial China. For instance, if a student in Nanyang College failed in either foreign language or Chinese language examinations, he would not be granted any stipends even if he obtained high scores in western content subjects. The rigorous examination system imposed demanding requirements on students, which enhanced the quality of bilingual education in the modern schools.

The findings on the pedagogical characteristics of bilingual education in late imperial China inform us of how pedagogical factors like the availability of bilingual teachers and the communication between foreign and Chinese teachers affected the development of bilingual education in the late Qing period. However, as Ferguson (1977) maintains, the language education policy can only be interpreted in the particular settings. Therefore, in order to examine the underlying reasons for the development of bilingual education in late imperial China, it is better not to constrain ourselves to the pedagogical factors. We should also investigate the socio-political factors beyond bilingual education in late imperial China. The following part will address Research Question 6 and shed light on the implicit link between the development of bilingual education and the dynamic sociolinguistic context in China from the 1840s to 1900s.

Research Question 6: What were the contextual factors contributing to the development of bilingual education policies and practices in the late Qing period?

The changing political situation was one of the most important contextual factors that affected the development of bilingual education in late imperial China. The bilingual education developed in response to the changing social-political milieu throughout the seven decades. The educational objectives and content of bilingual education changed alongside China's adjustment in the approaches to addressing the national crises in different phases and its pressing need for international communication and modernization in the late Qing period.

The historical evidence reveals that China's military defeat in the wars against foreign incursion in different periods was a key factor contributing to the development of bilingual education in the late Qing period. Specifically, the heavy blow in the First Opium War

shocked the Qing government and threatened its political control over China. A group of progressive scholar-officials subsequently recognized the inextricable link between transferring western military technology and consolidating the Qing regime. Nevertheless, due to the strong influence of the Sino-centric view, most of the officials in the Qing government and the emperor were not convinced of the value of western knowledge. Nor were they fully aware that the western imperialists would continue colonizing China after the victory of the First Opium War. Therefore, the Qing government did not formulate any central plan for bilingual education from 1840 to 1860.

It was not until the end of the Second Opium War in 1860 that the Qing government had a period of respite to reflect on the military defeat. Having witnessed the sophisticated western weaponry in the Opium Wars, an increasing number of officials in the government realized the necessity of learning western military technology to guard against western colonizers, and the importance of learning foreign languages for acquiring western knowledge. Since there were not sufficient Chinese faculty and translated textbooks on western knowledge, foreign languages were used as the MOI for western content subjects in the modern schools to impart expertise in modern science and military technology to students, which constituted the model of bilingual education.

However, China's decisive defeat in the Sino-Japanese Naval War provoked bitter criticisms among the Chinese social elites on bilingual education in the previous Self-Strengthening phase. After sober reflections on the naval war, the Chinese scholar-officials and social elites found that bilingual education in the Self-Strengthening Movement was limited to western military technology but overlooked the essence of western knowledge, that is, the western political and legal system. Therefore, the content of bilingual education in the modern schools expanded from western military technology to western law and

politics in this period. With respect to the model of modern education, having witnessed Japan's tremendous military power in the Sino-Japanese Naval War, China followed Japan's path for modernization and imitated Japan's model of modern education. Drawing reference to Japan's modern education system, the Chinese educationalists established the Renyin Education System and the Guimao Education System, and the latter was the first bilingual education system to be implemented in mainland China.

The development of bilingual education in three different historical periods was closely tied to different political situations beyond education. When a significant political event such as the Opium War, the Self-Strengthening Movement and the Sino-Japanese Naval War took place, the goals, content, methods and conditions of bilingual education changed according to the sociolinguistic context and China's overall strategy to deal with the national and international crisis in different historical phases.

In addition to the external threats in the late Qing period, the internal opposition from conservative scholar-officials and the debate over bilingual education between progressive and conservative scholar-officials also became major political forces shaping bilingual education policies and practices in late imperial China. Greatly influenced by the Sino-centric view, those conservative scholar-officials had intense hatred for foreign languages and western knowledge, and they opposed the introduction of foreign languages in government schools. A typical example of the conservative officials' opposition was their hostility towards the plan of founding the Department of Astronomy and the Department of Modern Mathematics at Peking Translation College. Since Peking Translation College was the premier government college to teach Chinese scholar-officials, the conservative scholar-officials were afraid that western knowledge may contaminate their soul and thus memorialized the throne to resist founding the two departments of western knowledge.

Although Empress Dowager Cixi emphatically rejected their proposals, the administrators of Peking Translation College added two more regulations on students' Chinese proficiency and their command of Confucian knowledge in the 1898 amended version of *Statutes of Peking Translation College* as a way to mitigate the bitter criticisms of conservative officials on the westernized curriculum at the College.

Apart from the political factor, some social factors such as the acceptance of western knowledge and foreign languages in the mainstream society and the gradual decline of the Imperial Examination also affected the development of bilingual education in late imperial China. The change in China's social attitudes towards bilingual education was reflected in the enrollment of students in the modern government schools in late imperial China. In 1867, when the two departments of western knowledge were founded at Peking Translation College, the student enrollment was quite small. Because of the rumor spread by the conservative scholar-officials and the social craze for the Imperial Examination, there were deep-rooted negative social attitudes towards foreign languages in late imperial China. Few students were willing to study western subjects, and thus the college administrators had to award the academic degrees and government posts as incentives to attract more students to study at Peking Translation College.

However, the social attitudes towards bilingual education gradually changed at the later stage of the Self-Strengthening Movement and the post-1895 period. When an increasing number of modern schools began to admit students from ordinary and poor families, foreign languages and western knowledge gradually spread to the majority of people in late imperial China. The social tide for bilingual education reached its climax after China had received a painful blow in the Sino-Japanese Naval War. A host of social elites lent their voices to the institutional reform including the establishment of the first bilingual education system in

China. The increasing criticisms on Confucian education and the Imperial Examination, together with the growing value of foreign language skills in job markets, also created a favorable social milieu for bilingual education in the late Qing period. An individual who was proficient in foreign languages and had a high command of western knowledge acquired a superior social status to other people, which further promoted the social acceptance of foreign languages and western knowledge in late imperial China. The change in people's attitudes towards bilingual education could be reflected in the increasing number of applicants to the modern schools. As detailed in Chapter 6, despite the demanding admission requirements for students' prerequisite knowledge, a multitude of students desired to study in the three premier modern universities. Even some students who had passed the Imperial Examination applied for admission to those modern universities, which suggested a dramatic change in people's attitudes towards bilingual education.

Another factor behind the development of bilingual education in late imperial China was the strong educational influence of foreign countries. As bilingual education was a novelty in the Confucian society in the 19th century, the Chinese policymakers and educational practitioners had to derive insights from or even copy the model of modern education in other foreign countries. During the Self-Strengthening Movement, greatly shocked by the British and French destructive weapons in the Opium Wars, China took the two countries as learning targets. As detailed in Section 5.3, many British and French teachers and marine specialists were employed and original textbooks from the British and French naval colleges were used in the modern military schools. It can therefore be understood why English and French were used as the MOI for western content subjects at Fujian Naval College and why they had a superior status to other foreign languages in China's bilingual education during the Self-Strengthening Movement.

However, after the Sino-Japanese Naval War, the progressive Chinese scholar-officials started to learn how Japan rose from China's tributary country to a militarily powerful country and what roles bilingual education played in Japan's rise during the Meiji Restoration. Because of the similarities in educational objectives, cultural traditions and even native languages between China and Japan, China switched its learning targets from the West to Japan. A few education missions were sent to inspect Japan's modern schools, communicate with well-known educators and government officials in Japan and assemble many educational policies, law and regulations from Japan. After those Chinese educationalists and scholar-officials returned to China, they expressed their educational views and made detailed suggestions for the development of bilingual education in China, which facilitated the establishment of the Guimao Education System in 1904.

The Guimao Education System was in some sense emblematic of Japan's profound influence on China's bilingual education. Similar to Japan's modern education system, the Guimao Education System imposed strict regulations on the starting age of learning foreign languages, the relative status and role of foreign languages and the native language in the bilingual curriculum and the choice of MOI in primary schools, secondary schools, modern universities and specialized colleges. The Guimao Education System also covered some practical issues of bilingual education including the choice of foreign language in different academic disciplines, the choice of textbooks, faculty team organization and educational facilities. Despite minor modifications according to China's context, the Guimao Education System had much resemblance to Japan's modern education system in the aspects of educational objectives, division of academic disciplines, admission requirements and teacher employment, which indicated the strong influence of Japan on China's bilingual education in the post-1895 period.

In summary, the bilingual education policies and practices in the late Qing period were influenced by a multitude of socio-political factors including China's external and internal situation, the social acceptance of bilingual education and the educational influence of other countries. The findings corroborate Spolsky's (2012) view that non-linguistic factors play a large role in affecting policymakers' language ideologies. The decisions on the bilingual education in late imperial China were not merely dependent on educational or linguistic factors such as the availability of bilingual teachers and the standardization of the national language. Rather, the policies on developing bilingual education in China were also underpinned by the policymakers' beliefs about political stabilization, military modernization, social advancement and national identity, which was closely linked to the changing sociolinguistic context of China in the 19th and early 20th century.

From the perspective of language policy, we can see that the findings of the six research questions fit into Spolsky's tripartite framework of language policy (2004)¹⁷⁹. The findings indicate that the three components of Spolsky's framework — language ideologies, language practices and language management are not distinctly separated but closely interrelated. The policymakers' attitudes or beliefs about the status and function of foreign languages and the Chinese language in late imperial China affected their decisions on language management, which could be best illustrated by the example of establishing the Guimao Education System to standardize the bilingual education practices in late imperial China. The policymakers' language management also influenced the language practices in government schools as teachers implemented the bilingual education policies in schools. The language practices in schools, in turn, had a direct impact on the follow-up amendments to the policies when some new ideas or practical issues arose from the education practices.

¹⁷⁹ Spolsky's tripartite framework of language policy (2004) has been elaborated on in Section 2.2.2.

Thus, the three components of language policy affected each other and constituted the dynamic bilingual education policies in late imperial China.

7.2 Bilingual education and the spread of English to East Asia in the 19th century

The findings in relation to the six research questions deepen our understanding of how bilingual education emerged and developed in late imperial China. Seen from the perspective of the worldwide spread of English, the history of bilingual education in late imperial China also reveals how English spread to East Asia¹⁸⁰ in the 19th century. Reynolds (1993) maintains that as an important country in East Asia, China exerted considerable political, cultural and educational influence over other East Asian countries in Qing Dynasty. Since English spread to China mainly through bilingual education in government schools, a detailed study on the history of bilingual education in late imperial China helps us to identify the main pattern of the spread of English to East Asia in the 19th century.

It has been frequently mentioned throughout the thesis that the bilingual education in late imperial China was not limited to English education but included teaching other foreign languages such as French and Japanese and choosing these foreign languages as the MOI for western content subjects. Nonetheless, it should be admitted that English, as the most influential language in the field of global technology and commerce, acquired a high status in China's bilingual education in the late Qing period. The high status of English was reflected in the national education system. As mentioned in the Guimao Education System

¹⁸⁰ In this part, I will focus on the spread of English to two most influential and representative East Asian countries — China and Japan in the 19th century.

in 1904, English was a core subject for all students in secondary schools, pre-university schools, universities and specialized colleges.

Before analyzing how English spread to China and other East Asian countries, it is essential for us to review previous studies on the global spread of English, and to identify the research lacuna. As we discussed in Section 2.3, in the field of World English, Kachru's theoretical model of "Three-concentric Circles" (1992) is one of the most influential frameworks to analyze the spread of English to diverse contexts. Although Kachru's "Three-concentric Circles" theory concentrates on the linguistic aspects of English rather than the global use of English as the lingua franca, he also briefly mentions the historical background of the spread of English to different circles. In contrast with his clear statement that English spread to the "Outer" Circle through colonization and British (or American) imperial expansion, Kachru fails to provide detailed and convincing explanations for the spread of English to countries in the "Expanding" Circle. Instead, he only states that English plays no historical role in those countries. However, if English had not exerted any historical impact on countries of the "Expanding" Circle, how could it have been able to spread to the places far from the Anglophone countries, particularly to the country (like China) which had established a standard national language and mounted natural resistance to foreign languages before the arrival of foreigners?

Kachru's "Three-concentric Circles" theory has aroused a growing interest among scholars in the varieties of English in different places. Nevertheless, previous studies have a tendency to focus on the linguistic aspects of English varieties rather than the use and users of English in the target community. Few of the previous studies have sufficiently investigated the history behind the spread of English. As detailed in Section 2.4, among the few historical studies on the worldwide spread of English, most of them focused on the

former British colonies (e.g. Evans, 2016), or made a general summary of the historical spread of English to countries with no formal British or American colonial history (e.g. Howatt & Widdowson, 2004). The spread of English to those countries was generally attributed to factors such as trade, empire building, missionaries' activities, the influence of British industrial revolution, technological advancement and globalization in the current information age (Ostler, 2005). However, those simplistic and general accounts did not build up a comprehensive picture of the spread of English to different countries. Nor did they take full account of possible conflicts between English and the native languages throughout the spread of English. Thus, questions central to the worldwide spread of English are the following: How and why did English spread to countries of the "Expanding" Circle? What was the status of English vis-à-vis the indigenous language in history? How and why did their statuses and roles change over history?

Based on the niche in previous studies, it is essential for us to identify the historical pattern of the spread of English to East Asia, an important region of the "Expanding" Circle. An investigation of the spread of English to East Asia in the 19th century will also provide a sociolinguistic history to linguistic research on the varieties of English in East Asia such as Pidgin English and inform us of the relationship between language use and the sociopolitical context in East Asia.

As mentioned at the beginning of this section, in view of the considerable impact Qing Dynasty had exerted upon other East Asian countries, the development of bilingual education in late imperial China provided a quintessential example for the spread of English to East Asia. The spread of English to late imperial China, as detailed in Section 7.1, was a natural result produced by China's desire to collect western military intelligence, to facilitate military, commercial, diplomatic and judicial communication with westerners

after the Opium Wars, and to enhance her national competitiveness by adopting western technology. The governmental participation in the provision of bilingual education since the 1860s indicated that the Qing government had supportive attitudes towards the spread of English to China. English education was viewed as an indirect but critical approach to countering external threats, to consolidating the feudalistic control and to saving China from the dangerous situation in the late Qing period.

The spread of English was also tied to British influence over China after the First Opium War. As detailed in Section 5.2.2, during the Opium Wars, English became a *lingua franca* in China's diplomatic negotiations. Even some western countries that did not have English as native language also chose English as the medium of communication with Chinese diplomats. If there was some misunderstanding in the treaty content, the English version of treaties was viewed as the final and correct one. The British influence also extended to some important organizations such as Imperial Maritime Customs Service in Beijing, in which English was the working language. Since many youths were eager to find employment in those organizations as they would get a high pay and acquire a high social status, there was a craze among the Chinese for learning English. Therefore, it can be concluded that China's military, commercial and diplomatic need for English and the British influence over China were two factors contributing to the spread of English to late imperial China. However, since there was almost no direct or intentional interference of the British government in China's policymaking process of language education, China's internal need for English was the major motive behind the spread of English. This finding corroborates Ricento's (2006) view that the worldwide spread of English is not merely from the "Inner" Circle to the "Expanding" Circle, but also addressed the desperate need for English in the countries within the "Expanding" Circle.

Tracing the history of the spread of English to late imperial China, we find that the spread and popularization of English was not without any obstacles. In reality, the prevailing Sino-centric view held by Chinese scholar-officials made it difficult for English to be fully accepted by Chinese and to be entrenched in China's education system. Thus, during the seven decades of the late Qing period, English had been in constant conflicts with the Chinese language, and the status of English vis-a-vis Chinese was changing according to the dynamic sociopolitical contexts and the language ideologies of the policymakers in late imperial China.

Concrete historical evidence has reflected the changing status and conflicts between English and Chinese in late imperial China. During the Opium Wars, the emperors and an overwhelming majority of scholar-officials in the Qing government still looked down upon English education and western knowledge. Despite the fact that the British had demonstrated their superior military strength in the Opium Wars and made China succumb to their control, the Qing government was still not fully aware of the importance of English and western knowledge. The English language and western knowledge were even regarded as wicked crafts. Thus, during the Opium Wars, English education only existed in mission schools, which did not lower the status of orthodox Confucian education in government schools.

The status of English gradually rose in China during the Self-Strengthening Movement. It was a core subject in the modern government schools and even the MOI for western content subjects in the military schools. The rise of the status of English was attributed to Chinese progressive scholar-officials' growing awareness of the importance of English. Specifically, after having witnessed the enormous power of British weapons in the second Opium War, the Qing government recognized the central importance of acquiring English as a means

for absorbing knowledge of modern military technology. Nevertheless, the rise of English did not downgrade the status of Chinese or replace the role of traditional Confucian education in China's education system. For example, as detailed in Section 5.2.3, in the initial period of the Self-Strengthening Movement, a vast majority of Chinese people still attended traditional Confucian schools in order to pass the Imperial Examination and work in the government. Even when an increasing number of Chinese recognized the practical benefits of English education and chose to study in modern schools, the Chinese policymakers, educational practitioners, school administrators and even students themselves still attached great importance to Chinese education. The balance between English and Chinese education could be confirmed by the equal status of English and Chinese language subjects in the bilingual curriculum and the strict admission requirements for students' Chinese proficiency in modern technical schools.

In the post-1895 period, English was officially entrenched in China's national education system. Guided by the fundamental principle of China's modern education — “taking Confucianism as the basis of country and acquiring western knowledge for practical use”, Chinese and English were core subjects of all secondary schools, pre-university schools, specialized colleges and universities. Though the Guimao Education System stipulated that students in primary schools were not allowed to study English or other foreign languages, some elementary schools in the treaty ports offered English language courses to satisfy the strong need for English education among Chinese people. In this historical period, for the young Chinese, English was not only a critical means of international communication, but also an essential skill for finding decent jobs, gaining admission to modern universities and studying abroad.

It will afford us a panoramic view of the spread of English to East Asia if we focus on the cases of other East Asian countries such as Japan. When tracing the historical development of English education in Japan, as we discussed in Section 2.4.2.3, we can see that the spread of English to Japan bore many similarities to China's case. The emergence of English education in Japan also resulted from the strong influence of western powers and Japan's pursuit of modernization in Meiji Restoration. Similar to the First Opium War, Japan's military defeat against the United States in the "Black Ship Turmoil" in 1853, together with the subsequent *Kanagawa Treaty*, ended its isolation and made Japan a trading port of the United States. In order to collect military intelligence and strengthen Japan's military power, the progressive Japanese launched a westernization movement, which was called the Meiji Restoration. During the first half of the Meiji Restoration, since English provided an important access to modern knowledge, the Japan's government implemented a "pro-English" education policy (Koike & Tanaka, 1995). English was thus included in Japan's modern education system at all levels including primary schools and became the MOI for western content subjects in Tokyo University. The rising status of English in Japan's education during the early stage of the Meiji Restoration harmonized with the American intention of sustaining its economic interests in Japan, and more importantly, satisfied Japan's military need for strengthening the country against western imperialism.

However, the later stage of the Meiji Restoration witnessed a fundamental shift to the anti-English policy in Japan. The dramatic change in the government attitudes towards English education primarily resulted from Japan's growing military power and the nationalism ('Nihonjin' in Japanese) in the early 20th century. As detailed in Section 2.4.2.3, the Meiji Restoration brought substantial growth to Japan's economic and military power, and thus contributed to its successive victories in the Sino-Japanese Naval War in 1895 and the Russo-Japanese War in 1905 (Kaisor, 2003). The rise of Japan provoked the growing anti-

English sentiment in Japan, which resulted in the downturn of English education in Japan. As detailed in Kawasumi's study (1999), the hours of English language courses in secondary schools was reduced and there was even a heated debate over whether English education should be removed from Japan's education system. In contrast with the declining status of English education, the importance of learning Japanese and the traditional Shinto values was accentuated in Japan's education, which further fostered nationalism in Japan in the early 20th century.

Despite the contextual differences between China and Japan in cultural traditions and the degree of influence from the "Closed-door" policy¹⁸¹, the spread of English to late imperial China and Meiji Japan had similarities in the socio-political background, the purposes of English education and the conflicts between native language education and English education in the historical development of modern education. It therefore reveals the pattern of the spread of English to East Asia in the 19th century. The spread of English was not one-way linguistic governance of the Anglophone countries, but satisfied the needs of both the West and East. For the western empires, the spread of English to East Asia strengthened their control in their faraway trading markets and sustaining their political, commercial and judicial interests. For the East Asian countries, English education served their purpose well: collecting military intelligence, absorbing advanced western knowledge and enhancing the countries' national power.

However, the spread of English to East Asia in the 19th and early 20th century did not follow a smooth path. Similar to the formal British or American colonies where indigenous people resisted the colonial language (English), the East Asian people also had a deep-rooted

¹⁸¹ For the details of the contextual differences between China and Japan in the 19th century, please refer to Section 2.5.

ideology of maintaining their national identity against western imperialism, and it thus affected the development of English education policies in East Asia. In late imperial China, English education was excluded from curriculums in government schools during the Opium Wars and it was not until the post-1895 period that English education became entrenched in China's education system. In Meiji Japan, there was a fundamental shift from the pro-English policy at the early stage of Meiji Restoration to the anti-English policy at the later stage of Restoration.

We find that the comparative national strength of East Asian countries and western powers was a principal factor affecting the status of foreign languages and the native language in the education system. If we take Japan as an example, we can uncover the reason for the changing status of foreign languages and the native language. When Japan thought it was almost equal in its national strength to Britain and America¹⁸² and demonstrated its power in the international arena¹⁸³, English was difficult to be fully accepted by the mainstream indigenous people because of their long-held nationalism and self-importance. By contrast, when Japanese were aware of the inferiority to Anglophone countries from military defeat, their practical need for western knowledge overwhelmed their inherent nationalism. A pro-English policy was thus implemented to reduce the power disparity, to strengthen the country and thus to restore its national pride.

7.3 The historical legacy left to today's bilingual education and foreign language education in China

In view of the wide contextual disparity in bilingual education between late imperial China and the current 21st century, we may not copy or apply the bilingual education policies and

¹⁸² Japan became a military power in the last few years of Meiji Restoration.

¹⁸³ For example, Japan won the Sino-Japanese Naval War and Russo-Japanese War.

practices a century ago to today's education practices in an indiscriminate manner. Nevertheless, the history provides valuable opportunities for today's policymakers and practitioners to reconsider the current bilingual education and foreign language education in China from a historical perspective and gain some significant insights from the history. Since bilingual education is by nature a practice-oriented education model, a bilingual education policy involves multiple micro-pedagogical issues such as formulation of educational objectives, curriculum designs, choices of foreign languages for different academic disciplines, choices of MOI for different subjects, teacher employment, assessment methods, educational facilities and transition across different levels of education. Thus, the history of bilingual education in late imperial China may leave legacy to today's bilingual education or foreign language education policymaking and practices in China. The main historical lessons for today will be summarized in the following six aspects.

(1) Achieve a combination of foreign language education and discipline-specific knowledge acquisition.

The bilingual education policies in late imperial China built up a close relationship between foreign language education and the acquisition of discipline-specific knowledge. It is apparent from the Renyin Education System, the Guimao Education System and the complementary policies in 1909 and 1910 that the bilingual education policies in late imperial China highlighted the instrumental value of foreign languages to understanding western knowledge.

As mentioned in Section 1.1.1, one of the acute problems in today's foreign language education in China is the separation between foreign languages and content knowledge in various academic disciplines (Cui & Wang, 2018; Hu, 2015; Yu & Xiao, 2013). Thus, many Chinese students find it difficult to identify the inherent relationship between foreign

language education and their future professional development, which in turn dampens their enthusiasm for learning foreign languages (Gu, 2009; Yu & Yuan, 2005). With regard to the bilingual education policies in current China, as discussed in Section 1.2, the policymakers are still not fully aware of the dual objectives of bilingual education in imparting content knowledge to students and improving their foreign language proficiency. Some of them even viewed bilingual education as only a means of improving foreign language proficiency without a full consideration of its effects on students' content learning (Li, 2007). Without a clear understanding of the concept, purposes and benefits of bilingual education, it is not surprising that the current bilingual education policymakers in mainland China fail to propose a clear definition of bilingual education in the policies and introduce specific regulations on the education practices. Therefore, the bilingual education policies in the late Qing period may inspire the policymakers to revisit the current policies and practices of bilingual education in China, link foreign language education with students' content knowledge acquisition, and include bilingual education into the broader modern education system. Though our needs for bilingual education have changed over the 170 years from the late Qing period to the 21st century, the development of bilingual education in late imperial China still provides historical legacy to our current research and practice. The historical precedents have justified the rationale of the current "Chinese-English bilingual education" or "Content and Language Integrated Learning" (CLIL), that is, integrating language learning into content knowledge acquisition. The aims of Chinese-English bilingual education and CLIL are not just to teach students a foreign language for general social interactions, but to develop their language competence in a specialized academic field.

The history also brings illuminating insights to current education practitioners in designing a more diversified and discipline-specific foreign language curriculum to satisfy a wide

spectrum of learners' needs, interests and capabilities. It can be seen from the Guimao Education System that the curriculum designers in late imperial China offered different types of foreign language courses to the students who majored in different academic disciplines and had different foundations in foreign languages. Back to today's foreign language education in China, as Piao and Zou (2013) criticize, "homogeneity" is such a grave problem that leads to the low efficiency of foreign language education in China. The problem is specifically reflected in the homogeneous educational content, pedagogy, curriculum designs, textbooks and assessment methods for all students despite their majors, interest and foreign language proficiency. Therefore, the historical legacy inspires the current policymakers and practitioners to take full account of these questions: Do all Chinese students need to learn foreign languages? What is the threshold level of foreign language proficiency that students in different academic disciplines need to attain? Is the threshold level of foreign language proficiency the same for all students despite their majors? How should foreign languages be taught for specific purposes with regard to the course design, the choice of linguistic input and the pedagogy?

(2) Strike an optimal balance between foreign language education and Chinese language education in the bilingual curriculum.

As detailed in Section 7.1, the policymakers and practitioners of bilingual education in late imperial China built a balanced relationship between foreign language education and Chinese language education in the curriculum, and they attached equal importance to modern western knowledge and traditional Confucian knowledge. Although "learning from the West" was the target of bilingual education in the late Qing period, the policymakers did not waive the requirements for Chinese language education and Confucian education in order to forge national identity in the minds of Chinese students against western imperialism and colonization.

The importance of Chinese was also reflected in the strict admission requirements for Chinese proficiency in modern schools during the late Qing period. Even for the universities that focused on western knowledge, students would not be admitted if they failed in the Chinese and Confucian classics examinations. With respect to the bilingual curriculum, be it a primary school, a secondary school, a university or even a specialized college, Chinese language education and Confucian teachings were preserved as an integral part of the curriculum. Because of the balanced bilingual curriculum, the students could make comparisons between Confucian knowledge and western knowledge on science, technology, political systems and culture. Therefore, the two kinds of education developed into a balanced, competitive but harmoniously co-existent relationship, which achieved a dual objective in imparting modern western knowledge to students and preserving the essence of Confucianism.

In reality, the conflict between Chinese language education and foreign language education in the bilingual curriculum is not a historical antique, but a heated topic in today's language policy-making process, which has resulted in the inconsistent bilingual education policies in mainland China. The pendulum of policy has been constantly swinging between pursuing the practical benefits of English education and lowering the status of English to maintain national identity of Chinese (Cheng, 2014; Zhang, 2015). Therefore, although we may not be able to transfer the education policies and practices in the late Qing period to today, the fundamental principle of combining foreign language education with Chinese education provides us with some historical insights into handling and balancing the longstanding conflicting ideologies in China's bilingual education policies. Specifically, the history will inspire current education policymakers and practitioners in mainland China to strike a balance between English education and Chinese education in the bilingual curriculum. The

balanced bilingual curriculum does not necessarily mean equal proportion of English and Chinese instruction time in one class but requires policymakers and practitioners to achieve the equilibrium between Chinese and English education in the curriculum design, admission requirements and subject requirements in schools, rather than to overemphasize one type of education at the expense of the other one.

(3) Provide students with a wide range of foreign language choices.

The evidence suggests that bilingual education in late imperial China did not force students to learn one or two dominant foreign languages. Instead, it provided students with a wide range of choices. The students therefore had freedom to choose the appropriate foreign language according to their major requirements, the advantages of different countries in different fields, and their own interests. For instance, as stipulated in the Guimao Education System, foreign language education in the modern universities during the late Qing period were not limited to teaching foreign languages with high status such as English and French, but included other foreign languages such as Latin, Greek, Italian and Dutch according to the requirements of different academic disciplines.

By contrast, the dominance of English in today's foreign language education in China marginalizes other foreign languages (Hu, 2011; S. R. Wang, 2016). Although English is the dominant language in most international organizations and the world academia, the other foreign languages have the values in satisfying China's needs for multilateral negotiations with the neighboring countries along the "Silk Road Economic Belt" (Wang & Yu, 2017) and implementing China's "Globalization Strategy of High Speed Railway" (Tan, 2015). The command of various foreign languages also equips students with a critical tool to access some localized non-English research papers in different countries. For instance, research students who are interested in the Sino-Japanese relations had better

acquire a high Japanese proficiency if they intend to analyze the original historical archives written in Japanese and interview eyewitnesses to history in Japanese. Providing a wider range of foreign language choices to students does not mean lowering the status of English in China's foreign language education system but informing students of the benefits of other foreign languages to China's diplomatic communication and to their academic study.

Apart from providing students with a wider range of foreign language choices, the history also inspires the current policymakers to connect the choice of foreign languages with the requirements of academic disciplines in which students specialize. For instance, as Germany is a leading country in the field of modern medicine (Kim, 2014) and philosophy (Smith, 1991), German is suggested to be taken as the core foreign language for students majoring in the two fields.

(4) Organize an effective faculty for bilingual education.

It can be seen from both the Guimao Education System and the bilingual education practices in late imperial China that the establishment of an effective faculty was conducive to enhancing the quality of bilingual education. As detailed in Section 7.1, the faculty of bilingual education in the late Qing period normally consisted of foreign discipline-specific teachers, foreign language teachers and Chinese teaching assistants. Although there was no observation report on the details of lectures in the modern schools, it can be inferred from the related memorials, the students and teachers' diaries and memoirs, teachers' employment contracts and curriculum designs that a "team teaching" model was widely used in the bilingual education practices in late imperial China.

The clear and elaborate labor division was a distinct characteristic of team teaching in bilingual education during the late Qing period. According to the Guimao Education System

and the statutes of modern schools, foreign discipline-specific teachers, foreign language teachers and Chinese teaching assistants played different roles in the curriculum. The foreign language teachers were responsible for teaching students general vocabulary, grammatical features of foreign languages and even some technical terminologies, while the discipline-specific teachers delivered lectures on specialized knowledge. When the students had difficulties in understanding the foreign teachers' lectures, the Chinese teaching assistants would do translation in class or explain the theory in Chinese.

Apart from the distinct labor division among the faculty members, in those modern schools of the late Qing period, there were also frequent interactions among the teachers to analyze the target learners' needs, to discuss the pedagogy and material choices, and to reflect on teaching after class. Because of frequent communication and collaboration among language teachers, discipline-specific teachers and teaching assistants, the language teachers would learn more about content knowledge and the discipline-specific teachers would become more aware of how to use foreign languages properly. The model of cooperative teaching used in the modern schools, Fujian Naval College as an example, provided refreshing pedagogical experiences for both foreign and Chinese teachers, and more importantly, it enhanced the quality of bilingual education as the teachers took advantage of their expertise to meet the needs of target students.

Back to today's scenario in China, a large number of scholars have argued that lack of collaboration and communication between discipline-specific teachers and language teachers is a serious obstacle to the effective implementation of bilingual education (Yao, 2017). As teachers work independently in different departments of a university, they have few opportunities to engage in co-planning interdisciplinary teaching for the bilingual curriculum and the establishment of interdepartmental communication with each other. As

China's universities lack an effective mechanism for encouraging interdepartmental team teaching, a substantial majority of Chinese teachers are unwilling to devote much time and energy to working with teachers from other departments (Liu & Fan, 2015). Thus, despite the fact that the benefits of "cooperative teaching" have been widely recognized by the teachers, the relatively isolated working system among different departments of universities hinders the development of bilingual education in China's universities. Almost all the workload of bilingual education has thus been left to the discipline-specific teachers who are not familiar with the pedagogical issues of language education or who had language problems of delivering lectures in foreign languages (Luo, 2017; Wang & Chen, 2017). Even for some bilingual education programs that involve the participation of both foreign language teachers and discipline-specific teachers, the teachers are still ambivalent towards the feasibility of team teaching in the practices of bilingual education (Ma & Liao, 2017). Consequently, the discipline-specific teachers and language teachers only focus on their respective fields and the bilingual curriculum is actually an incoherent makeup of two separate and unrelated courses.

The practices of "team teaching" in the modern schools during the late Qing period therefore provide current policymakers and practitioners with significant insights into facilitating the inter-departmental cooperation and enhancing the communication among teachers of different departments in the bilingual curriculum. Even in the context of general education in today's universities in mainland China, the "team teaching" method in bilingual curriculums will provide students with refreshing experiences in class and prepare them for their specialized study in the future (Xu, Zhang & Hu, 2017). The concept of "team teaching" does not necessarily mean that the discipline-specific teachers and foreign language teachers teach the same class simultaneously but helps to foster the awareness of

cooperation among the teachers to solve common pedagogical problems in China's bilingual education.

(5) Increase flexibility in bilingual education policies in China.

The historical evidence indicates that the policymakers and practitioners brought considerable flexibility to bilingual education in late imperial China in order to address the multiple needs of students in modern schools. For example, when the Department of Astronomy and the Department of Modern Mathematics were founded at Peking Translation College in 1867, the college offered two different types of curriculum for students of different ages. For old students who missed the optimal time for learning foreign languages, they were allowed to use translated textbooks in western content subjects. Young students were required to learn foreign languages before taking western content subjects. Similarly, the administrators of Imperial Peking University also adopted a flexible policy on students' second foreign language learning. Though the Guimao Education System stipulated that students at the pre-university school should learn a second foreign language, the practitioners at Pre-university School attached to Imperial Peking University found it difficult to implement the policy as many students had difficulties in learning the first foreign language. The policymakers later revised the regulations and decided that only those students who were proficient in the first foreign language were allowed to study the second foreign language. Students who learned more than one foreign language were given preferential award upon graduation. A flexible policy is not equal to a "grey area" in a policy, such as a void of the Guimao Education System in regulating the MOI at pre-university schools, but a more detailed policy to suit different education conditions.

Providing flexibility is also crucial to the smooth implementation of bilingual education in today's China. As stated in Section 1.1.3, the current bilingual education in China suffers

such practical problems as shortage of bilingual teachers (Tong & Shi, 2012) and proper teaching materials (Wang, 2008), and the students' flimsy foundation in foreign languages (Yu, 2008). Therefore, the historical lessons inspire current policymakers not to make any hasty decisions on bilingual education or not to formulate a single shortsighted policy to regulate diverse and complicated education practices in mainland China. Instead, before formulating bilingual education policies, the policymakers are suggested to take full account of the differences in educational contexts of different schools and to institute flexible policies to fit in with the actual context. For the education practitioners in schools, the history also advances their understanding of making appropriate adjustment to their education practices based on their educational conditions including the availability of bilingual faculty, teaching materials and students' foreign language proficiency.

(6) Attach importance to the transition of bilingual education across different levels.

What becomes clear to us is that the bilingual education in late imperial China, as having a wider concept than today's Chinese-English bilingual education (EMI or CLIL), was not limited to one level of education or one type of courses (such as English-medium courses on content subjects) but was actually a whole system of modern education. As detailed in Section 6.3, the policymakers of the Renyin and Guimao Education System gave a careful consideration of the objectives, content and relationship between different types of knowledge. The practice of using foreign languages to teach content subjects only started in tertiary education. Nevertheless, the primary schools, the secondary schools and the pre-university schools were all integral components of the bilingual education system and laid a linguistic and cognitive foundation for students who intended to specialize in one academic discipline in universities or further their education abroad.

The policymakers of the Guimao Education System attached particular importance to the sequence of education and the transition of education across different levels. It is apparent from the Guimao Education System that, at pre-university schools and junior specialized colleges, students were required to choose their preferred foreign language according to the requirements of academic disciplines that they would specialize in universities. The three-year discipline-specific foreign language education at pre-university schools helped students to reach a required threshold level for foreign languages in their academic disciplines and adapt to their academic study in universities.

Putting an emphasis on the transition of bilingual education across different levels is also conducive to enhancing the efficiency of bilingual education and avoiding the “repetition” of educational content. As mentioned in Section 1.1, the current foreign language education in China has been constantly criticized for its low efficiency, particularly the inverse proportion between abundant resources invested in education and the unsatisfactory educational results (Li, 2017; S. R. Wang, 2016). Hu (2009) attributes the problem to the repetition in educational content, objectives and methods at different levels of schools, that is, China lacks a coherent and consistent policy to make the transition in bilingual education from the low level to the high level. According to the national education system in today’s China, students are admitted to universities or specialized colleges from senior high schools after passing the college entrance examination. As there are currently no pre-university schools in China, students only understand some general vocabulary through foreign language education in high schools. When they receive bilingual education in universities, without sufficient exposure to discipline-specific vocabulary in their foreign language education in high schools, most of them fail to reach the minimum linguistic threshold and find it difficult to understand content subject courses with foreign languages as the MOI (Yan, 2008). Therefore, the focus on the transition and systematization of bilingual

education across different levels in late imperial China yields illuminating insights into marking the differences in bilingual education at various levels and emphasizing the transition across each level of education in the policymaking process.

7.4 Limitations and suggestions for future research

The study presents a comprehensive and detailed historical account of the bilingual education in late imperial China, sheds light on the pattern of the spread of English to East Asia in the 19th century, and develops our understanding of the central issues in China's bilingual education that have confronted today's policymakers and practitioners. Nevertheless, despite the scholarly contribution to current research on language policy and world Englishes as well as the practical contribution to today's bilingual education policymaking in China, the present study is not without limitations.

The main limitation of this study is that it only focuses on a particular historical period of China. The late Qing period (1840-1911), which is viewed as the beginning and the first peak time of government-led bilingual education in China (Gao, 2007; Zhang, 2011), provides a sufficient chronological span for research. Nevertheless, it should be admitted that the late Qing period is merely part of the larger historical panorama of bilingual education in China. In comparison with the following 100 years' development of bilingual education in China, the present study just reveals a certain facet or a particular historical period of bilingual education in China. The limitation of its temporal scope makes us cautious when examining the historical impact of bilingual education on today's policymaking process and practices. It has been repeatedly stated throughout the thesis that given the considerable contextual differences between the late Qing period and the 21st century, we should not make a direct comparison between the historical precedents and the current scenario of bilingual education, or copy the model of bilingual education in history

in the current education practices. Therefore, the study mainly intends to provide a historical perspective to today's policymakers and practitioners in mainland China to reconsider the current policies and practices, but not to make direct suggestions to them.

Further research is needed to investigate the bilingual education policies and practices in other historical periods of China such as the Republic of China (1912-1927) and the period after the national policy of "Reform and Opening Up" (1978-the present) if we intend to give a comprehensive historiography of bilingual education in China. Research is also needed to examine the changes in bilingual education over different historical periods of China and identify the relationship between the development of bilingual education and the changes in China's sociopolitical contexts.

The present study also has limitations on its research scope of the education practices in modern schools. The education practices, which were detailed in Chapters Four, Five and Six, are mainly the practices of some premier modern schools with solid support from the Qing government. However, the study lacks a detailed account of the bilingual education practices in other modern schools such as private schools and mission schools. Nor does the study make a detailed comparison in education practices between the premier government schools and private schools, or examining the differences in the bilingual education practices among those government schools.

This void in the scope of bilingual education practices results from the main research objectives and focus in the study. As stated in Section 1.5, the present study intends to focus on the policy dimension of bilingual education in the late Qing period, which refers to the government decisions on when, how and why to introduce and develop bilingual education in China. The reason why bilingual education practices in the premier government schools

are included is that before the establishment of the Guimao Education System in 1904, explicit and even implicit government policies on bilingual education were non-existent. It is therefore necessary to reconstruct the educational policy or government attitudes from the bilingual education practices of the premier government-funded modern schools. Nonetheless, it should be admitted that the account of education practices in other government schools and private schools will reveal a holistic picture of bilingual education in late imperial China, and help us to investigate whether there was any in-congruence between bilingual education policies and the actual practices. Thus, further research is also needed to investigate the bilingual education practices in different types of schools and to identify underlying causes for the possible differences of education practices among the modern schools.

The present study also relies heavily on document-based historical evidence. As detailed in Chapter 3, the study is based on the unpublished primary sources of data that have higher credibility and validity. Despite the fact that all the sources have been carefully examined and evaluated in terms of their originality, genesis and authorial authority before being analyzed, the subjectivity of document-based historical data cannot be avoided. For the primary sources such as governors' memoirs, diaries and private correspondences that have been used in the study, the data contain the historical witnesses' emotions and perspectives for the historical events and thus it may not reflect the real picture of history. Furthermore, because of the long interval between the focused historical period and today, it is also impossible to conduct oral history research, namely, interviewing the participants of historical events over 100 years ago to enhance the reliability of historical evidence. Therefore, as we saw in Section 3.8, throughout the data collection process I have been trying to achieve data triangulation by seeking evidence from multiple primary and secondary sources to enhance both the reliability and validity of research.

A paucity of concrete evidence on the details of bilingual education practices (e.g. class reports, audio or video records) is another limitation of the present study. The absence of sufficient direct historical documents may partly result from the wars, internal conflicts and social unrest in China in the 19th and 20th century. It may also be attributed to weak awareness among the Chinese to preserve historical archives and antiques in the past. Some of the historical data are possibly reserved in the libraries, archives or museums of foreign countries such as Britain, France and Japan as a few teachers, specialists, envoys, businesspersons, diplomats and missionaries from those foreign countries witnessed the historical events or directly participated in China's bilingual education and modernization in the late Qing period. It therefore opens up ample opportunities for an international cooperative research project in the future to seek historical evidence scattered all over the world, to reveal the comprehensive picture of bilingual education in late imperial China and to explore the historical impact on today. Thus, just as the help China obtained from foreign countries in the development of bilingual education during the late Qing period, the research project also requires international joint effort to maximize its value.

Appendix A

The picture of Fujian Naval College



(Source: The Special Collection of Archives in China Chuanzheng Culture Museum)

Appendix B

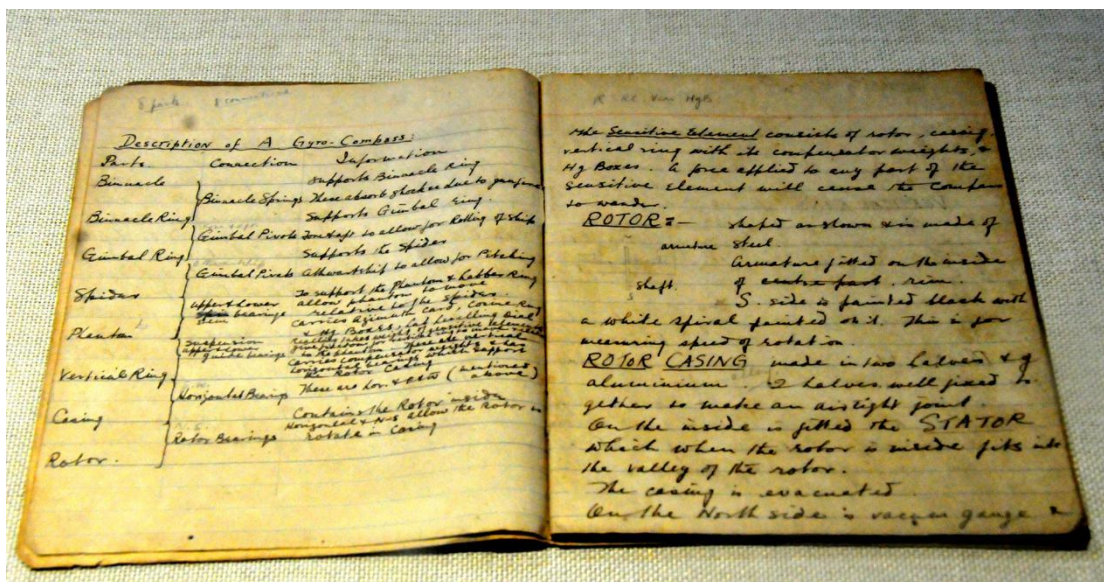
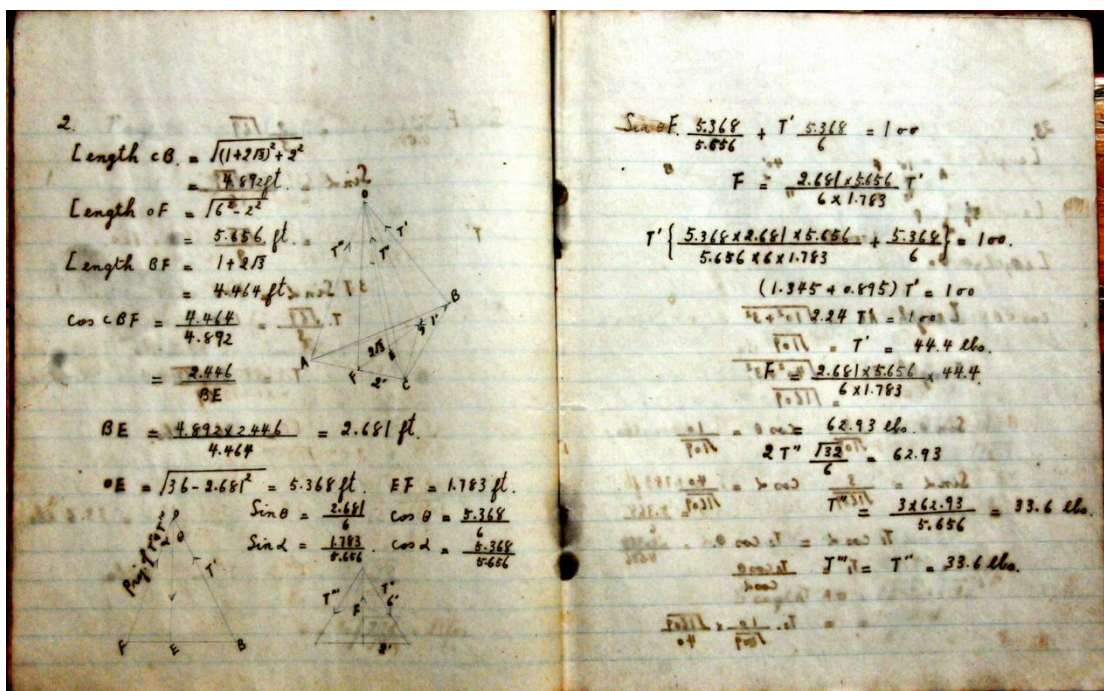
The picture of the western teachers employed at Fujian Naval College



(Source: The Special Collection of Archives in China Chuanzheng Culture Museum)

Appendix C

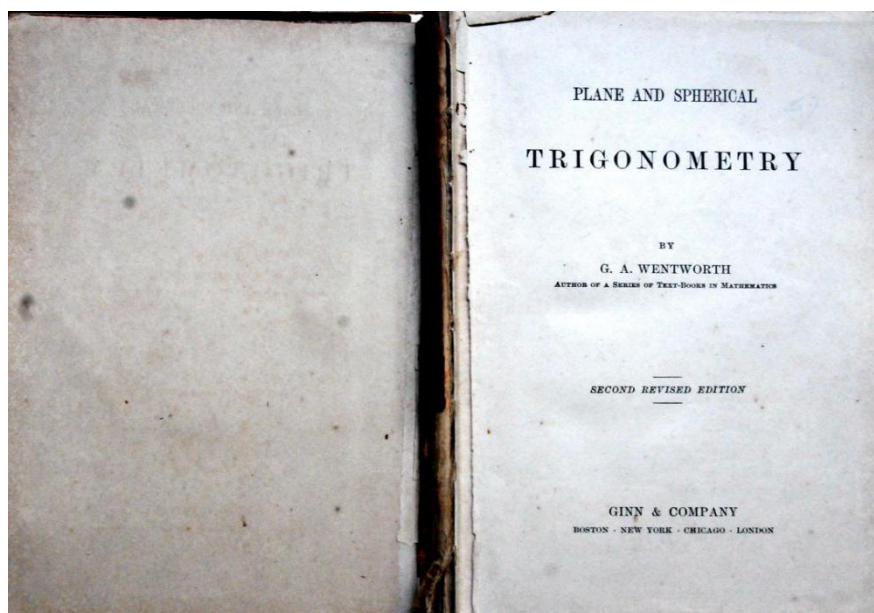
The students' notebooks at Fujian Naval College



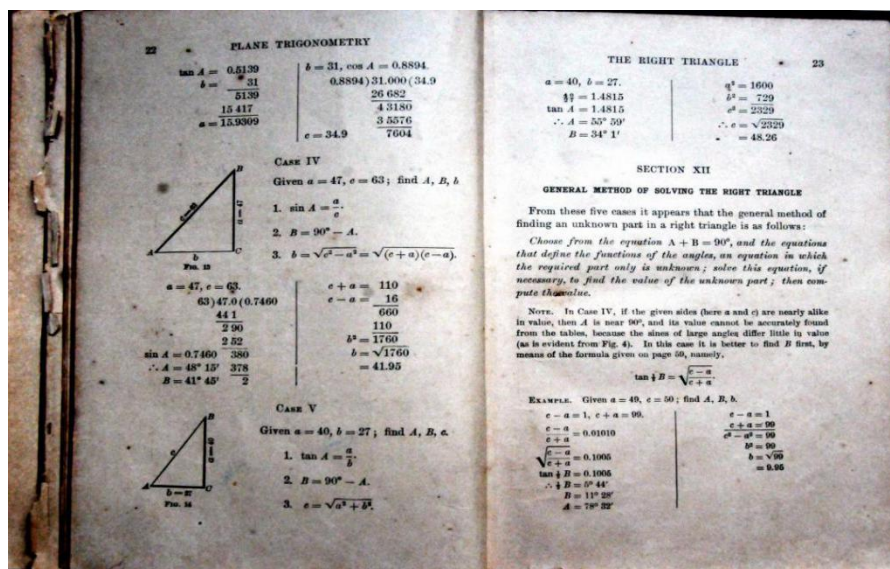
(Source: The Special Collection of Archives in China Chuanzheng Culture Museum)

Appendix D

Some original textbooks used at Fujian Naval College



The textbook *Plane Trigonometry* was used for the students majoring in Navigation.



(Source: The Special Collection of Archives in China Chuanzheng Culture Museum)

Appendix E

The pictures related to students' overseas study in the Royal Naval College

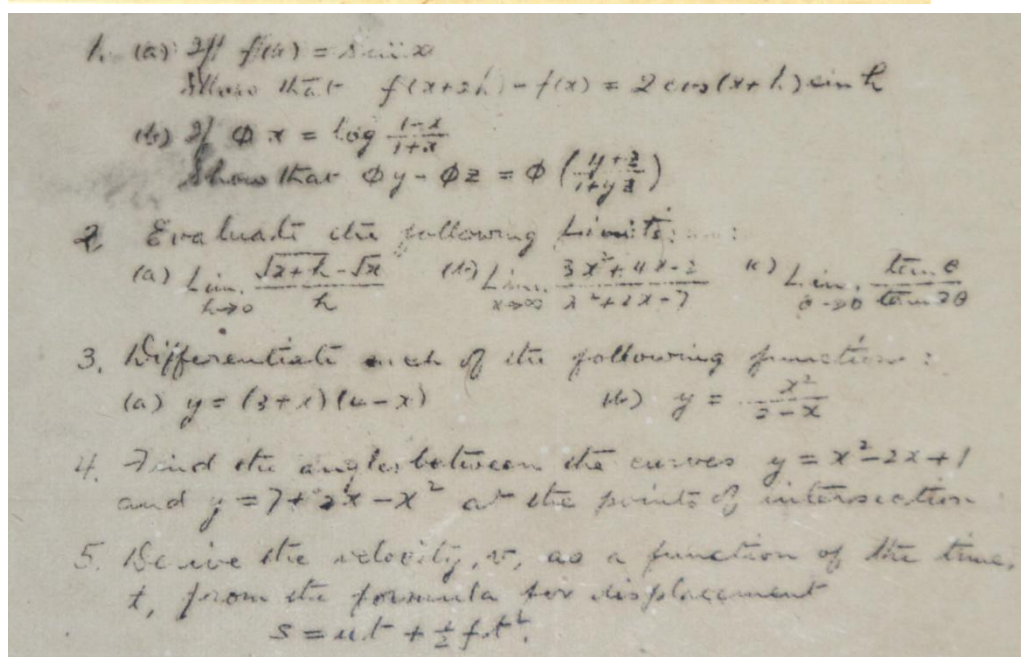
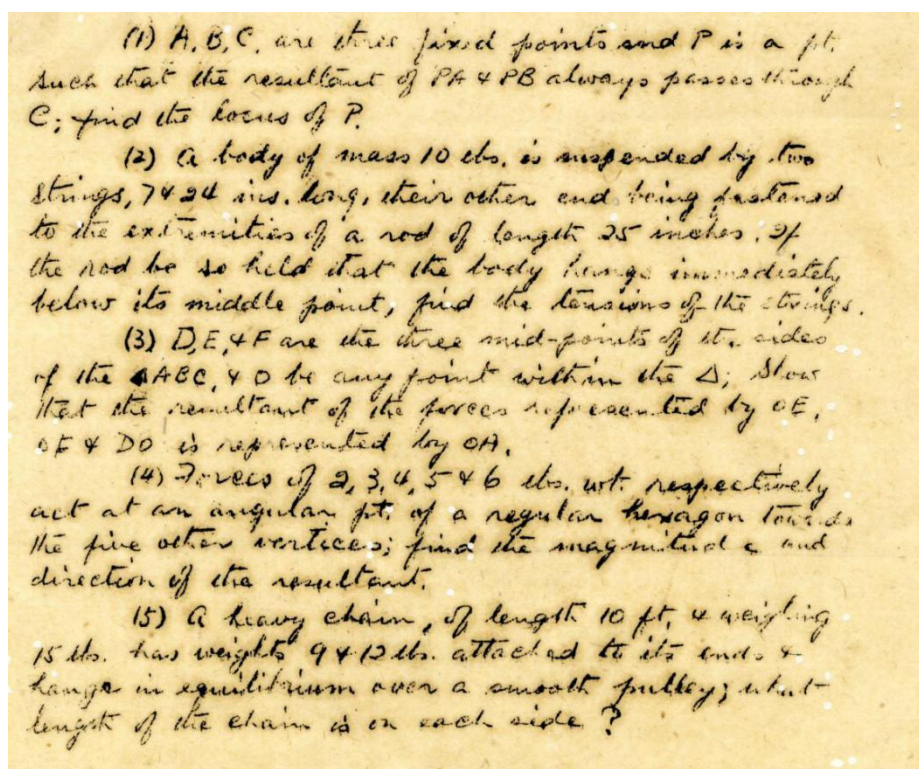


The Chinese overseas students from Fujian Navy College took pictures with western teachers at the Royal Navy College in Greenwich.

(Source: The Special Collection of Archives in China Chuanzheng Culture Museum)

Appendix F

The picture of students' monthly examinations at Fujian Naval College

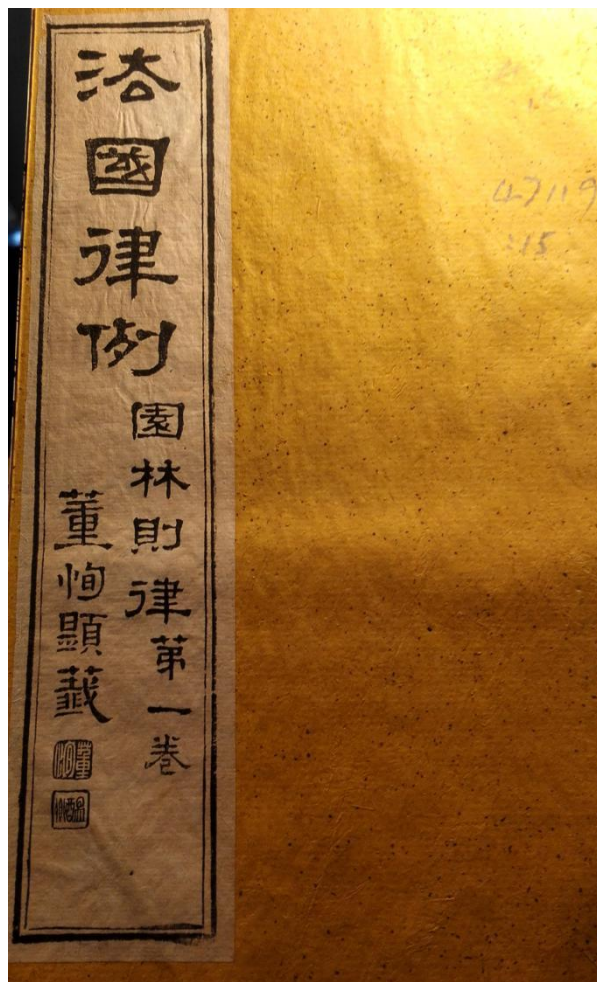


The first monthly examination paper of students majoring in Navigation
in Fujian Navy College

(Source: The Special Collection of Archives in China Chuanzheng Culture Museum)

Appendix G

The picture of the translated textbook used at Imperial Peking University

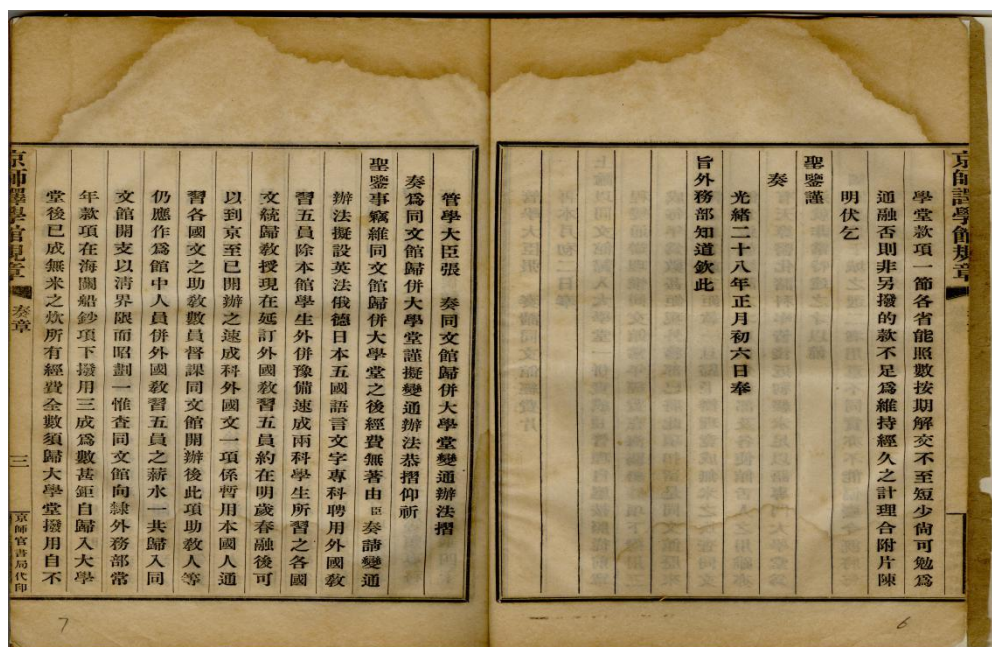
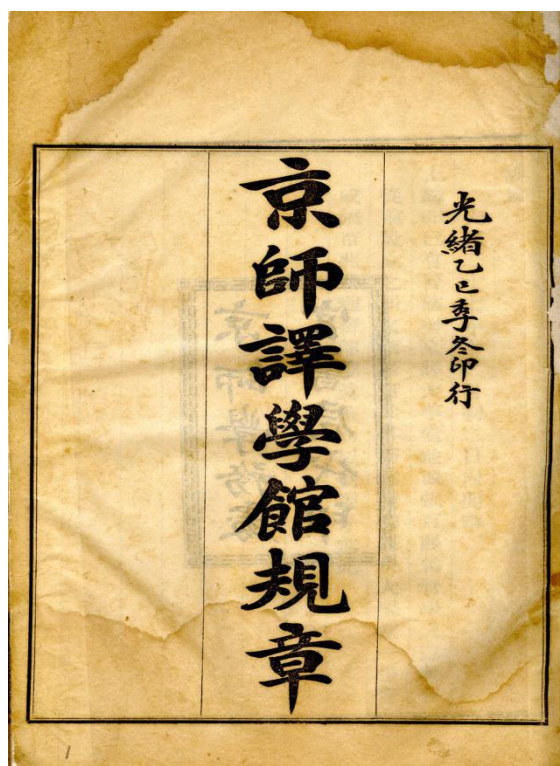


The French Law

(Source: The State Archives of the People's Republic of China (Archive No.: 121951))

Appendix H

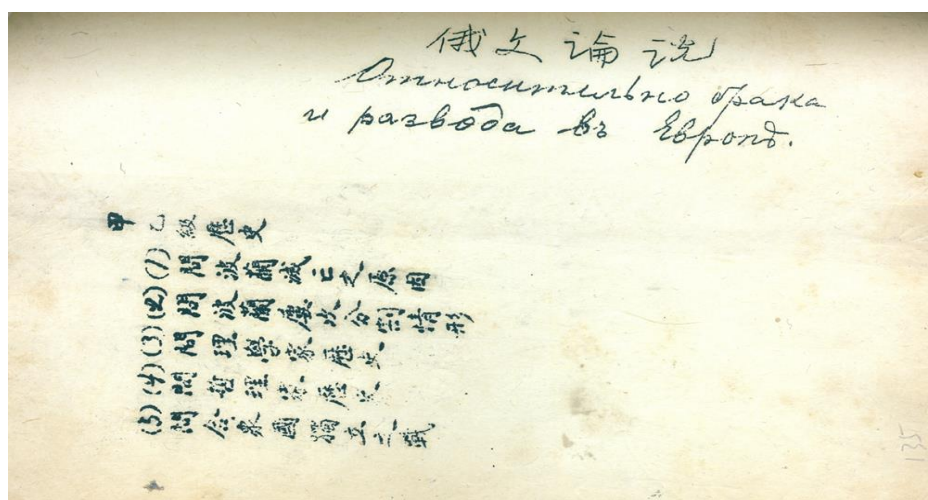
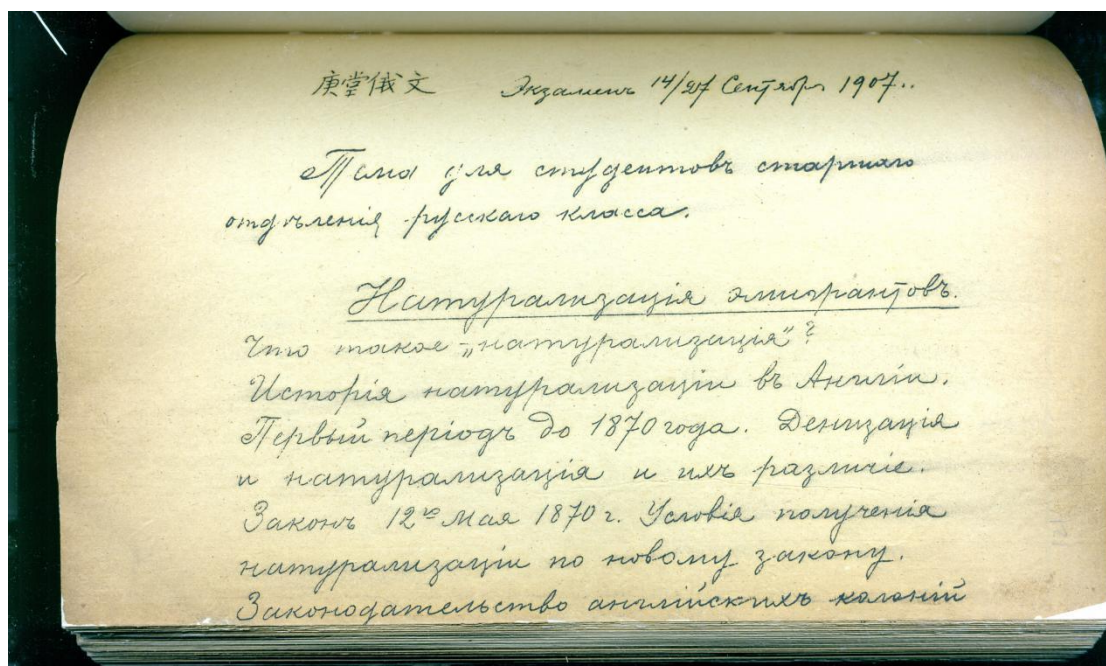
Statutes of the Department of Translation attached to Imperial Peking University



(Source: The Archives of Peking University (Archive No.: JS 0000159-003))

Appendix I

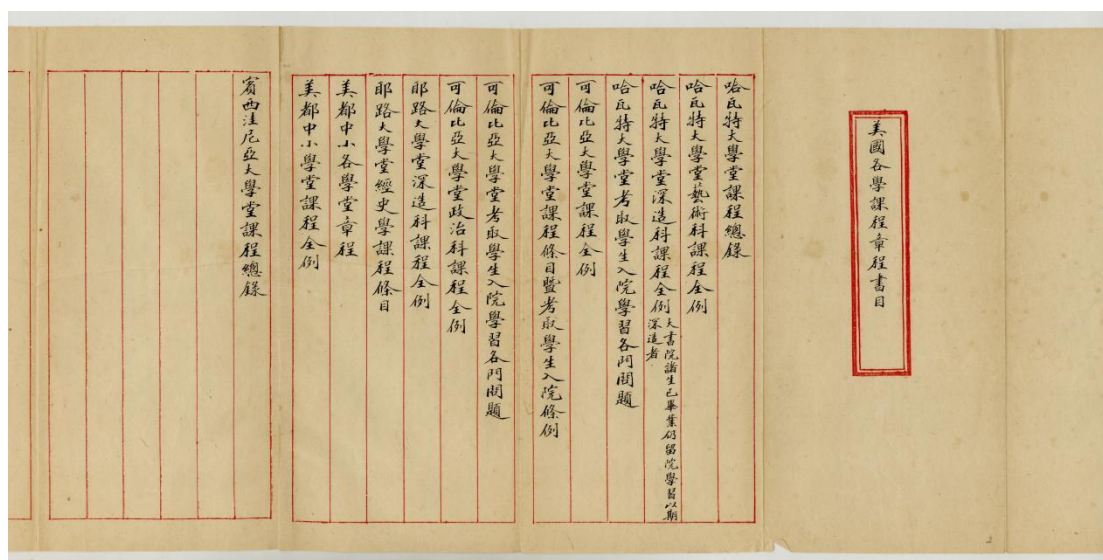
The Original Russian Examination Paper at Imperial Peking University



(Source: The Archives of Peking University (Archive No.: JS00000123-1-121 , JS00000123-1-135))

Appendix J

The Original textbooks that were imported from the United States at Imperial Peking University



(Source: The Archives of Peking University (Archive No.: JS0000016-2-001))

Appendix K

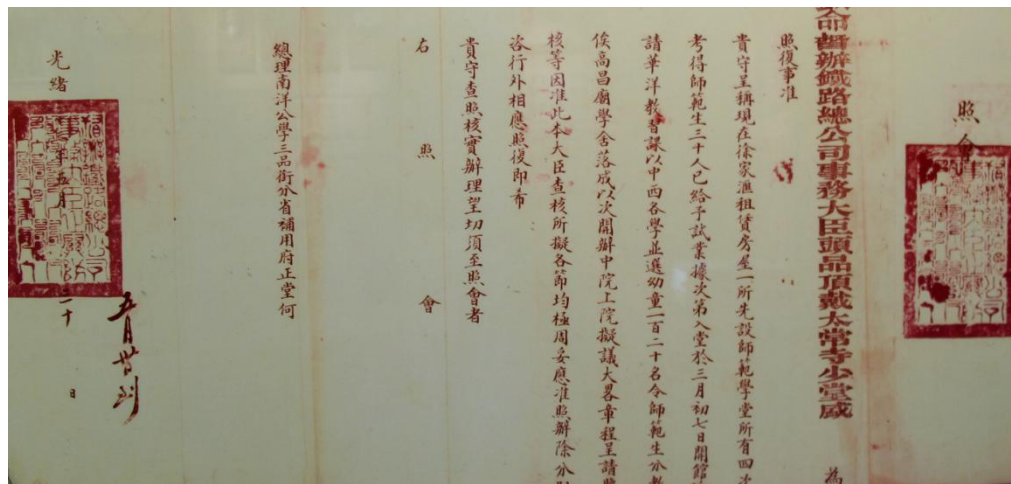
The imperial edict on commissioning the Chinese diplomats and ministers in the United States and Japan to send original textbooks to Imperial Peking University (18/3/1902)



(Source: The Archives of Peking University (Archive No.: JS0000016-1-001))

Appendix L

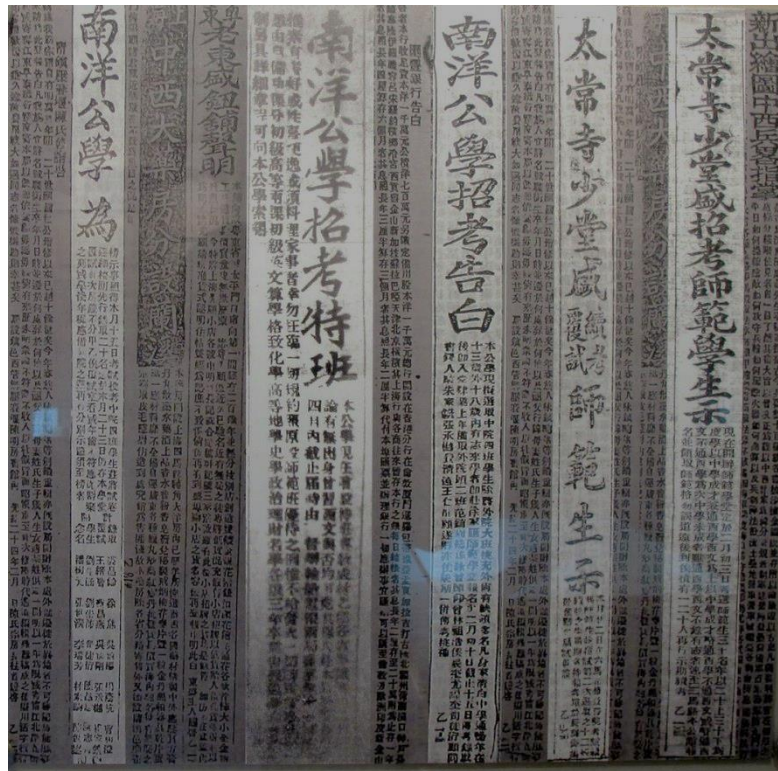
Sheng Xuanhuai's report on the establishment of Nanyang College on April 8, 1897



(Source: The Archives of Shanghai Jiaotong University (Archive No.: 7646))

Appendix M

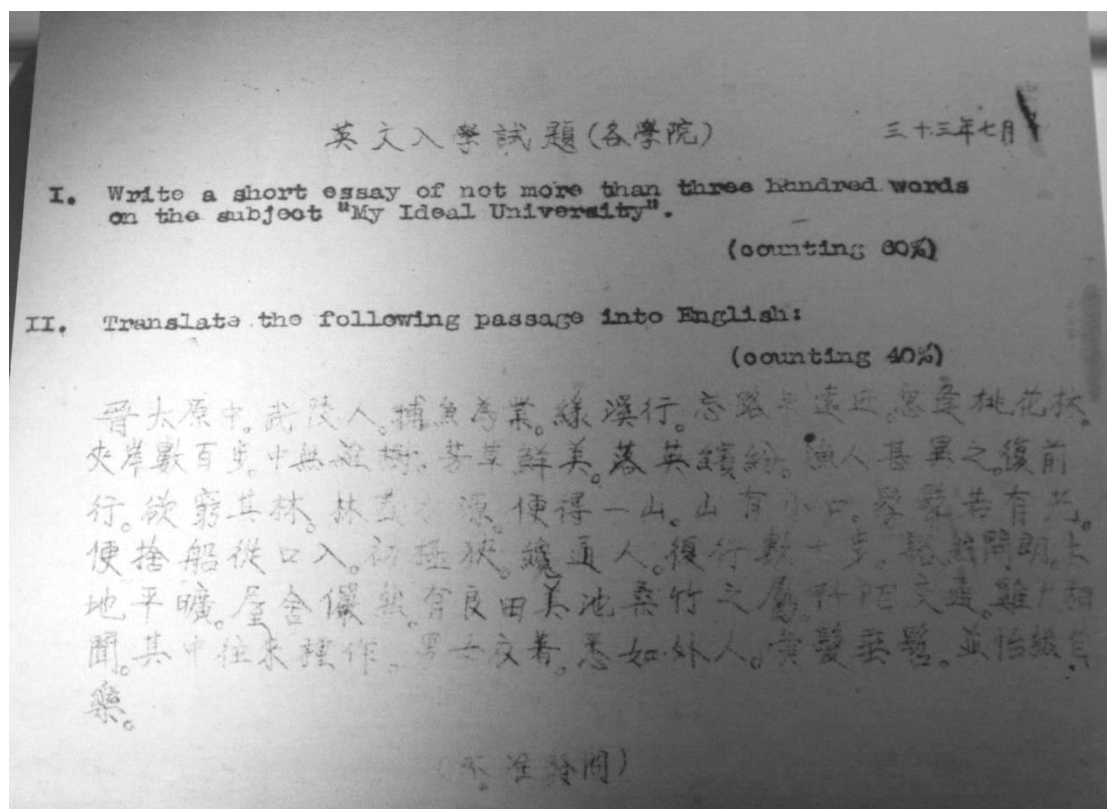
The report on the student enrollment in Nanyang College in *Shen Pao* on March 2, 1897



(Source: The Archives of Shanghai Jiaotong University (Archive No.: 7661))

Appendix N

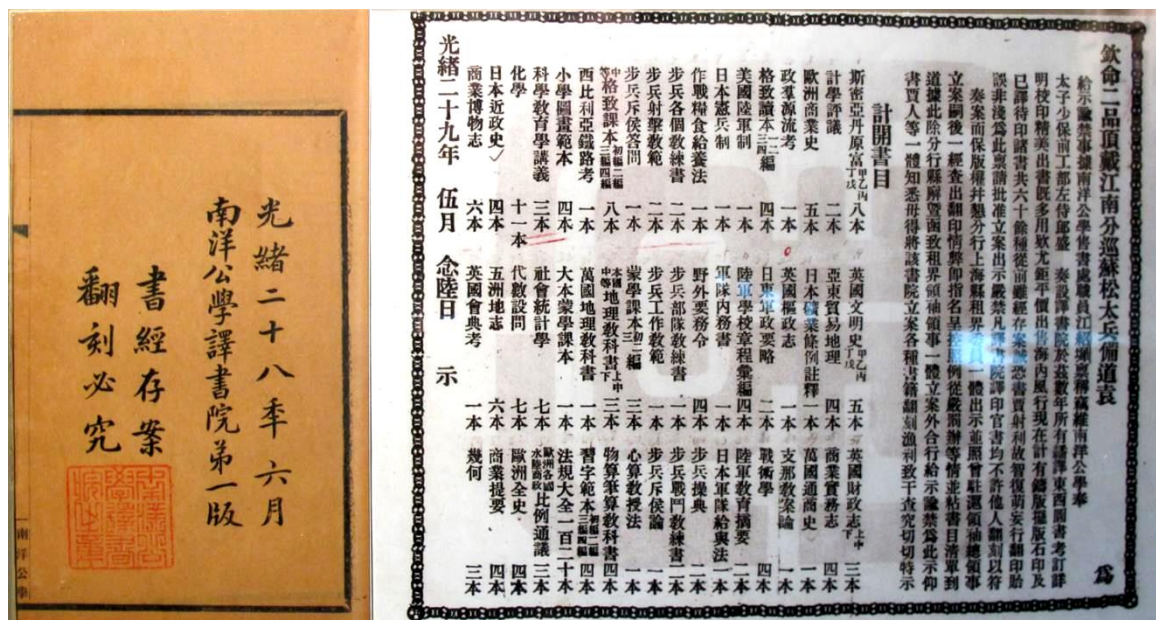
The original admission examination paper in Nanyang College
(July, 1907)



(Source: The Archives of Shanghai Jiaotong University (Archive No.: 7750))

Appendix O

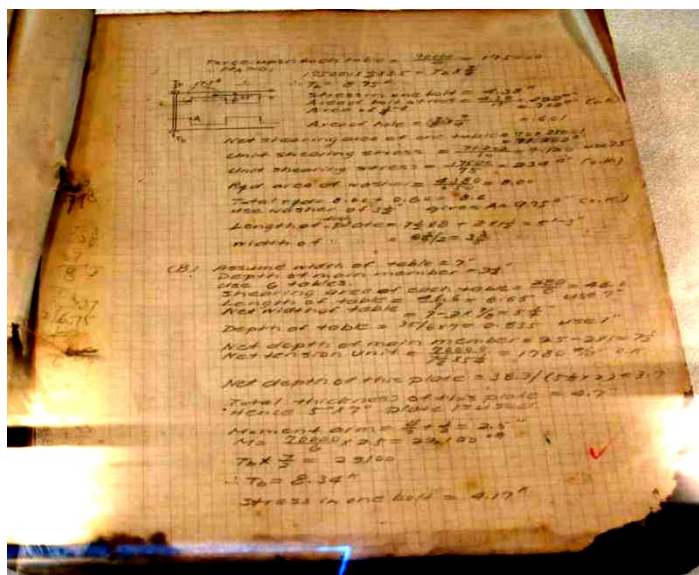
The list of textbooks translated by the School of Textbook Translation in Nanyang College



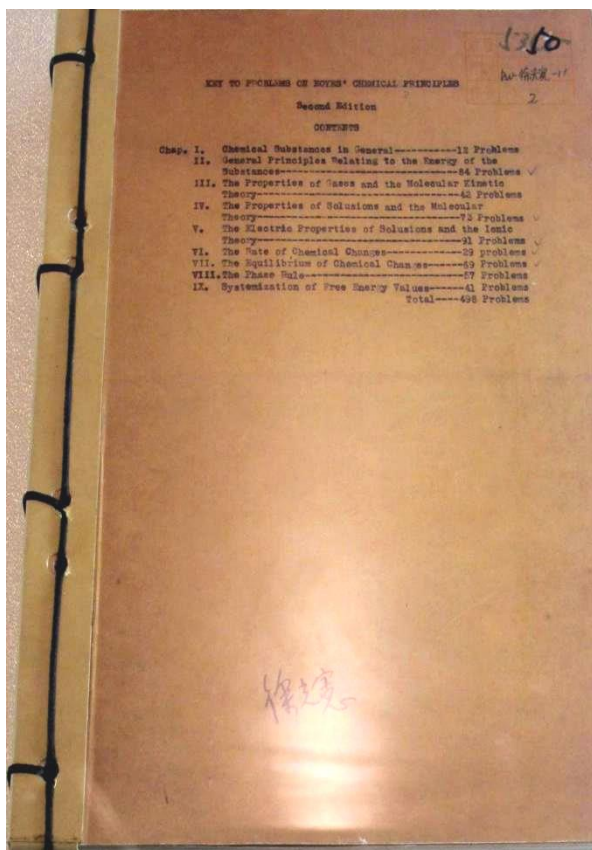
(Source: The Archives of Shanghai Jiaotong University (Archive No.: 7675))

Appendix P

The original assignment and experiment reports of students in Nanyang College



The experiment report of engineer students in Nanyang College

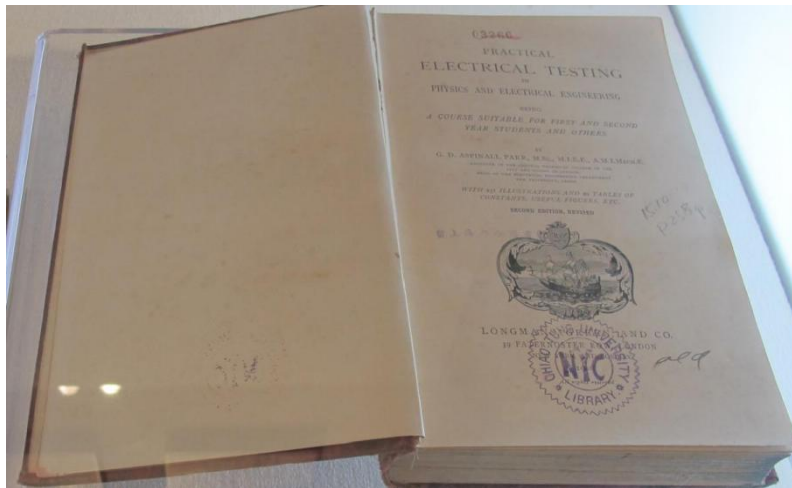


The students' assignment of Chemical Principles in Nanyang College

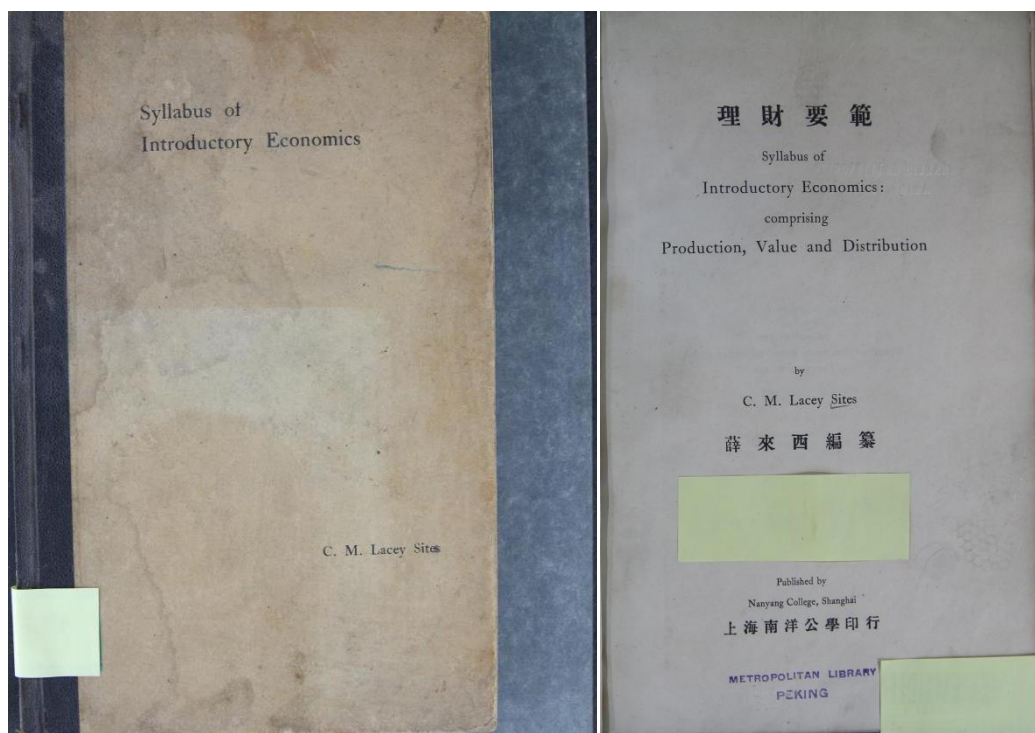
(Source: The Archives of Shanghai Jiaotong University (Archive No.: 7770, 7778))

Appendix Q

The pictures of original textbooks used in Nanyang College



The textbook *Practical Electrical Testing*

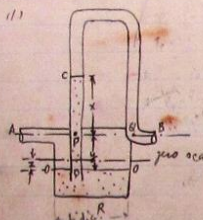


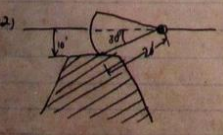
The textbook *Syllabus of Introductory Economics*

(Source: The Archives of Shanghai Jiaotong University (Archive No.: 7705) and National Library of China (Archives No.: HB171.5/S8))

Appendix R

The original examination paper in Nanyang College

(1)  The difference in pressure between P & Q
 $= (1.5 - 1.0) \times \text{ft. of water.}$
 The pressure at P - Pressure at A
 $= -1.5 \gamma + 1 \gamma = -0.5 \gamma \text{ ft. of water.}$
 $x + y - z = \text{scale of pressure diff.}$
 $\therefore \text{pressure difference} = 0.5 \gamma + 0.5 \gamma = 0.5 (x + y)$
 But $(x + y) \times 0.3 \frac{\gamma}{\text{ft.}} = z \times 6 \frac{\gamma}{\text{ft.}}$
 $\therefore z = (x + y) \times \frac{0.3}{6} = (x + y) \times \frac{0.05}{1} = (x + y) \times \frac{1}{20}$
 $\therefore \text{pressure difference}$
 If the pressure difference is 0.100 ft.,
 Then $0.100 = 0.5 (x + y)$
 $x + y = 0.20 \text{ ft.}$
 $\therefore \text{scale of pressure diff.} = 0.20 - 0.20 \times \frac{1}{20}$
 $= 0.20 - 0.01 = 0.19 \text{ ft.}$

(2)  (a) The total horizontal push of the water pressure against the gate
 $= 10' \times 5' \times \frac{1}{2} \times 62.4 \text{ H}$
 $= \frac{3120}{2} \text{ H}$
 (b) The volume of water displaced
 $= \frac{1}{2} \times 20 \times \frac{30}{360} - \frac{1}{2} \times 20 \sin 30^\circ \times 20 \cos 30^\circ$

Principal speed of wheel $= \phi \times \sqrt{gh} \quad n = h^{\frac{1}{2}}$
 But $\phi D N = \text{Principal speed of wheel}$
 $\phi = \text{a constant} \times \frac{h^{\frac{1}{2}}}{N}$
 $\therefore Q = h^{\frac{1}{2}} \times \left(\frac{h^{\frac{1}{2}}}{N} \right)^2 = \frac{h^{\frac{1}{2}}}{N^2}$
 But B.H.P. = eff. $\times Q \times h \times w$
 $\therefore \text{B.H.P.} = \frac{h^{\frac{1}{2}}}{N^2} \times h = \frac{h^{\frac{3}{2}}}{N^2}$
 $N \quad \text{B.H.P.} = K \times \frac{h^{\frac{3}{2}}}{N^2}$
 where $K = \text{a constant,}$
 $\therefore N = \sqrt{K} \times \frac{h^{\frac{3}{4}}}{(\text{B.H.P.})^{\frac{1}{2}}}$
 If the wheel the wheel is operated at 10 H.P.,
 Head, then
 $N_s = \sqrt{K} \quad \text{where } N_s = \text{specific speed of wheel.}$
 $\therefore N = N_s \times \frac{h^{\frac{3}{4}}}{(\text{B.H.P.})^{\frac{1}{2}}}$
 Rearrange, we have
 $N_s = \frac{(\text{B.H.P.})^{\frac{1}{2}}}{h^{\frac{3}{4}}} \times N$
 $N = \frac{N_s (\text{B.H.P.})^{\frac{1}{2}}}{h^{\frac{3}{4}}} \times \text{R.P.M.}$

(Source: The Archives of Shanghai Jiaotong University (Archive No.: 7747))

Appendix S

The picture of students' internship in Nanyang College



(Source: The Archives of Shanghai Jiaotong University (Archive No.: 7705))

References

Primary Sources

Memorials to the Throne concerning Education in the Late Qing Period

Chen, Q. Z. (1896, January 23). A memorial on making changes to the curriculum of Peking Translation College. *The Selected Essays in Qing Dynasty*, 14.

(陳其璋：〈請整頓同文館疏〉)

Chen, Z. Y. (1905). A memorial on the amendment of the award scheme of Imperial Peking University. *The memorials, edicts, government reports, news reports and essays during Guangxu governorship*, 31, 60-62.

(陳曾佑：〈奏請變通學堂畢業獎勵出身事宜折〉)

Ding, R. C. (1876, March 5). A memorial on recruiting students in Hong Kong. *The Collection of Memorials to the Throne on Maritime Affairs*.

(丁日昌：〈委赴香港招募學生片〉)

Imperial Peking University. (1904, June 22). A memorial on transferring the government-financed overseas students to be teaching assistants at Imperial Peking University. *The Original Archives of Peking University I*, 34.

(〈大學堂調英文助教知照各部〉)

Jiangsu Provincial Government. (1907). A memorial on allocating funds to Jiangsu Province in operating modern schools. *Education World*, 143, 2-3.

(〈蘇撫陳奏請撥款辦學折〉)

Li, D. F. (1896, June 12). A memorial on establishing modern schools in China. *The Imperial Records in the Governorship of Emperor Guangxu*, 4, 3791-3794.

(李端棻：〈請推廣學校折〉)

- Li, Z. T.** (1882, November 13). A memorial on employing western teachers to Central Navy Yard College. *Foochow Arsenal. Archives on China's Coast Defense*, 2(3), 332-333. (黎兆棠：〈為請選募洋教習諮呈總理衙門〉)
- Lin, Z. X.** (1839, March 29). A memorial on embargoing the foreign ships to China. *The Collection of Lin Zexu's Memorials*, 649.
(林則徐：〈東西各洋越竄外船嚴行懲辦片〉)
- Lin Z. X.** (1839, May 17). A Diplomatic Note to the Great Britain (the Draft). *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Daoguang) (1836-1850)*. (林則徐：〈致英國王照會底稿〉)
- Lin Z. X.** (1840, October 11). *A memorial on handling the foreign affairs. The Collection of Memorials*, 676. (林則徐：〈密陳夷務不能歇手片〉)
- Lin Z. X.** (1840, June 19). A memorial on assembling the crowd to kill the British colonizers. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Daoguang) (1836-1850)*, 432.
(林則徐：〈林則徐奏英船據定海擬用民眾殺敵片折〉)
- Liu, K. Y. & Sheng, X. H.** (1901). A memorial on establishing a hall in commemoration of He Sikun, the Principal of Nanyang College. *The Collection of Records on Sheng Xuanhuai*, 6, 3.
(劉坤一、盛宣懷：〈請將何嗣焜學行宣付史館立傳折〉)
- Minister of Education.** (1903, December 21). A memorial on selecting the students for overseas studies. *Education World*, 67.
(官學大臣：〈奏派學生前赴東西洋各國遊學折〉)
- Pei, Y. S.** (1885, July 17). A memorial on purchasing and repairing modern ships for practical navigation. *The Collection of Memorials to the Throne on Maritime Affairs*, 350-351. (裴蔭森：〈購修船夾板複設練船折〉)
- Shen, B. Z.** (1867, September 5). A memorial on checking the progress of Foochow Port and the development of shipbuilding Industry. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*.

(沈葆楨：〈察看福州海口及船塢大概情形折〉)

Shen, B. Z. (1873, September 15). A memorial on the progress report of shipbuilding and practical navigation at Fujian Naval College. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*.

(沈葆楨：〈續陳輪船工程並練船經歷南北洋各情形折〉)

Shen, B. Z. (1873, December 7). A memorial on sending some excellent graduates of Fujian Naval College to study abroad. 7/12/1873. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 298.

(沈葆楨：〈遣送優秀學生出洋，見‘船工將竣，謹籌善後事宜折’〉)

Shen, T. (1904, November 29). A memorial on inspecting and making changes on the education practices of Peiyang University. *Peiyang Official Newspaper*, 483.

(沈桐：〈整頓學規大概情形稟並批〉)

Sheng, X. H. (1895, September 19). A memorial on establishing an Anglo-Chinese University in Tianjin. *The Selections on the Records of History of Peiyang University and Tianjin University*, 1, 17.

(盛宣懷：〈擬設天津中西學堂章程〉)

Sheng, X. H. (1896, March 21). A memorial on the establishment of Nanyang College. *The Original Archives of Grand Council in Qing Dynasty (deposited in the State Archives Administration of the People's Republic of China)*. Archives No.: 5614-2. (The memorial was also recorded in *The Collection of Records on Sheng Xuanhuai*, 1, 11-13) (盛宣懷：〈請設學堂片〉)

Sheng, X. H. (1896, June 12). A memorial on establishing the School of Textbook Translation in Nanyang College. *The Collection of Records on Sheng Xuanhuai*, 2, 27-28.

(盛宣懷：〈籌集商娟開辦南洋公學情形折一附設譯書院片〉)

Sheng, X. H. (1901, August 25). A memorial on establishing the School of Japanese and enrolling students. *The Archives of Sheng Xuanhuai*. Archive No.: 045021-2.

(盛宣懷：〈設立東文學堂招考肄業諸生告白〉)

Sheng, X. H. (1905). A memorial on awarding the foreign teachers in Nanyang College. *The Collection of Records on Sheng Xuanhuai*, 11, 6.

(盛宣懷：〈請獎南洋公學洋教習片〉)

Song, S. (1909, October 4). A memorial on the establishment of Fujian Senior Police College. *The Official Reports of the Government*, 699 (the memorials), 9-10.

(松壽：〈奏閩省改設高等巡警學堂等辦理情形折〉)

Sun, J. N. (1896, September 27). A memorial on reconsidering and preparing to establish schools that comply with the imperial edict. *The Selection of Archives of Imperial Peking University*, 8-14.

(孫家鼐：〈奏陳遵籌京師建立學堂謹將大概情形恭折〉)

Sun, J. N. (1898, July 3). A memorial on the establishment of Imperial Peking University. *The Imperial Records during the Emperor Guangxu Governorship*, 4, 4155-4157.

(孫家鼐：〈遵籌開辦京師大學堂折〉)

Tan, J. X. (1898, July 5). A memorial on the confusion state of modern schools. *The Archives on the Hundred Days' Reform*, 231-232.

(譚繼洵：〈批各省學堂混亂折〉).

Tang, W. Z. (1907). A memorial on listing reasons for not closing the primary school and secondary school to Shanghai Senior Industrial College. *The Original Archives of Sheng Xuanhuai in Xi'an Library*, Archives No.: 1803.

(唐文治：〈縷析本校之中小學不應停辦〉)

Tenney, D. C. (1906). Suggestions for making changes in the curriculum of Peiyang University. *Journal of Zhili Education*, 4, 1-5.

(〈代理北洋大學堂監督丁條程改良北洋大學堂事宜稟並批〉)

Wang, M. Y. (1853). A memorial on producing talents for China. *The Imperial Records of Qing Dynasty*, 95 (2), 8549-8550.

(王茂蔭：〈振興人才以濟實用折〉)

Wang, W. S. (1895, September 30). Sheng Xuanhuai's suggestions for establishing a western-style university. *The Imperial Records in the Governorship of Emperor Guangxu*.

(王文韶：〈津海關道盛宣懷創辦西學學堂稟明立案由〉)

Wen, Y. (1871, January 17). A memorial on boarding "Jianwei" Ship for practical navigation. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*. (文煜：〈以建威輪船為練船折〉)

Wo, R. (1867, March 20). A memorial on prohibiting the Manchu and Han Jurens from studying modern mathematics and astronomy. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 47, 2009-2010.

(倭仁：〈請罷同文館用正途人員習天算折〉)

Wo, R. (1867, April 25). A memorial on having no personnel who were proficient at modern mathematics and astronomy. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 48, 2035-2036.

(倭仁：〈奏遵覆並無精於天文算學之人不敢妄保折〉)

Xiong, Y. Q. (1897). Proposals for establishing Imperial Peking University. In Zheng Zhenduo's *A Selection of Articles in Late Qing Periods*. Shanghai: Shanghai Life Bookstore. (熊亦奇：〈京師創立大學堂條議〉)

Yang, T. X. (1867, June 23). A memorial on closing Peking Translation College in order not to be against the heavenly principles. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 49, 2062-2070.

(楊廷熙：〈請撤銷同文館以弭天變折〉)

Yao, X. G. (1898, April 22). A memorial on the inspections of modern schools

in Japan. *The Historical Records of China's Understanding to the Foreign Powers*, 2, 34.
(姚錫光：〈查看日本學校大概情形折〉)

Yi, K. (1885, December 15). A memorial on awarding the foreign teachers the titles. *The Westernization Movement II*, 65. (奕劻：〈請賞給洋教習虛銜折〉)

Yi, K. (1886, January 29). A memorial on enrolling the Manchu and Han students at Peking Translation College. *The Westernization Movement II*, 65-66.
(奕匡：〈招考滿漢學生情形折〉)

Yi, K. (1888, July 30). A memorial on selecting top students from Peking Translation College to be the translators or interpreters in the Qing government. *Register of Peking Translation College*. (奕劻：〈遴選學生充當翻譯官片〉)

Yi, X. (1861, January 13). A memorial on handling the affairs after the Opium Wars. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Xianfeng) (1850-1861)*, 71, 318. (奕訢等：〈通籌善後章程折〉)

Yi, X. (1862, August 20). A memorial on the establishment of Peking Translation College. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 8, 342-343.
(奕訢等：〈又奏設同文館學習擬章程覽折〉)

Yi, X. (1863, May 6). A memorial on adding the Department of French and the Department of Russian at Peking Translation College. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 15, 656-658.
(奕訢等：〈奏同文館添開法俄文館折〉)

Yi, X. (1865, December 22). A memorial on making slight modifications on the *Statutes of Peking Translation College*. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 37, 1561.
(奕訢等：〈又奏重擬同文館章程呈覽片〉)

Yi, X. (1866, December 11). 'A memorial on adding the Department of Modern Mathematics and the Department of Astronomy at Peking Translation College'. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 46, 1945-1946.

(奕訢等：〈奏擬設館學習天文算學折〉)

Yi, X. (1867, January 28). 'A memorial on the request for establishing the Department of Modern Mathematics and the Department of Astronomy at Peking Translation College'. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 46, 1982-1984.

(奕訢等：〈奏酌擬學習天文算學章程呈覽折〉)

Yi, X. (1867, February 25). A memorial on inviting Xu Jiyu as the Chancellor of Peking Translation College. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 47, 1993.

(奕訢等：〈奏請派徐繼畲為總管同文館事務大臣折〉)

Yi, X. (1867, April 23). A memorial on discussing Wo Ren's memorial and stating my viewpoints. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 48, 2029-2031.

(奕訢等：〈遵議倭仁密陳折片並陳管見片〉)

Yi, X. (1867, July 3). A memorial on selecting students for the study on modern astronomy and mathematics. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 49, 30-31.

(奕訢等：〈請欽定招考天文算學各員折〉)

Yi, X. (1867, August 15). A memorial on sending Zou Boqi and Li Shanlan to Peking Translation College. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 50, 2104-2105.

(奕訢等：〈奏鄒伯奇等報病日久必已就痊飭廣浙督撫令其北上報效片〉)

Yi, X. (1867, October 12). A memorial on selecting the top students in Shanghai Foreign Language College and Guangdong Foreign Language College to take the entrance examination in the Peking Translation College. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 50, 2127-2128.

(奕訢等：〈又奏請飭江蘇廣東督撫將外國語文學館中有成效者送京考試片〉)

Yi, X. (1872, November 23). A memorial on requesting the French academies to send textbooks on western knowledge to Peking Translation College. *Westernization Movement II*, 57-69.

(奕訢：〈總理各國事務恭親王奕訢等片(附：法國熱福理來函等)〉)

Yuan, S. X. (1910, May 14). A memorial on the establishment of Guangdong University. *The Report of the Qing government*. 914, 14-16.

(袁樹勳：〈奏請設立廣東大學堂折〉)

Zhang, B. X. (1902, February 13). A memorial on preparing for the establishment of modern universities in China. *Authorized School Regulations — Related Memorials*.

(張百熙：〈奏籌辦大學堂情形預定辦法折〉)

Zhang, B. X. (1902, August 15). A memorial on the promulgation of modern schools. *The Imperial Records during the Emperor Guangxu Governorship*, 5, 4902-4903.

(張百熙：〈進呈學堂章程折〉)

Zhang, B. X. (1905). On the establishment of pre-university schools and the entrance requirements for the Normal School attached to Imperial Peking University. *Oriental Journal*, 4, 67-69.

(張百熙：〈奏開辦預科並招師範生折〉)

Zhang, B. X., Rong, Q. and Zhang, Z. D. (1904, January 13). Revisions to the Renyin Education System. *The Imperial Records during the Emperor Guangxu Governorship*, 5, 5125-5127.

(張百熙、榮慶、張之洞：〈重訂學堂章程折〉)

Zhang, M. Y. (1883, November 2). A memorial on increasing the salary of competent western teachers at Fujian Naval College. *The Collection of Memorials to the Throne on Maritime Affairs*.

(張夢元：〈展留洋員教習酌加薪水並陳學堂現辦情形折〉)

Zhang, M. Y. (1904, July 24). A memorial on submitting the list of graduates in 1904 and the award scheme. *The Original Archives of Xi'an Jiaotong University*. Archives No.: 2322.

(張美翊：〈呈送第四屆畢業生清冊並請諮明學務大臣明定出身〉)

Zuo, Z. T. (1866, June 25). A memorial on developing shipbuilding industry in China. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 279-281. (左宗棠：〈試造輪船先陳大概情形折〉)

Zuo, Z. T. (1866, December 11). A memorial on establishing Chinese Navy Yard and Fujian Naval College. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 285.

(左宗棠：〈詳議創設船政章程折〉)

Zuo, Z. T. (1872, May 2). A memorial on supporting the Fujian Naval College and the Chinese Navy Yard. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*.

(左宗棠：〈複陳福建輪船局務不可停止折〉)

Zuo, Z. T. (1883, May 20). A memorial on purchasing or building more ships for practical navigation (with attachment). *The Collection of Memorials to the Throne on Maritime Affairs*.

(左宗棠：〈添造兵輪預籌駕駛人才派員教習折〉)

Reports on Education Practices in Government Schools in the Late Qing Period

Archives of Tianjin University. (1925). The name list of foreign teachers (1895-1905).

The Autograph Book of the 30th Anniversary of Peiyang University, 9-12.

(〈丁家立聘任教習一覽表〉)

Archives of Tianjin University. (1925). The name list of teachers at Peiyang University (1906-1911). (〈北洋大學堂教習一覽表 (1906-1911)〉)

Authorized School Regulations — Pre-university Schools. (1902).

(〈欽定學堂章程 — 欽定高等學堂章程〉)

Authorized School Regulations — Primary Schools. (1902).

(〈欽定學堂章程 — 欽定小學堂章程〉)

Authorized School Regulations — Secondary Schools. (1902).

(〈欽定學堂章程 — 欽定中學堂章程〉)

Authorized School Regulations — Pre-university Schools. (1902).

(〈欽定學堂章程 — 欽定高等學堂章程〉)

Authorized School Regulations — Students' Enrollments and Entrance Examinations. (1902). (〈欽定考選入學章程〉)

Central Institute of Modern History. (1957). *Foochow Arsenal. Archives on China's Coast Defense (Volume 2)*. Taipei. (〈海防檔〉乙, 〈福州船廠〉 (二))

Dean's Office of Imperial Peking University. (1902, December 27). Notice prohibiting all students studying a foreign language from willfully discontinuing the subject. *The Selection of Archives on Imperial Peking University*, 221-222.

(大學堂總教務處: 〈為選定洋文不得中報及任意更改事告示〉)

He, S. K. (1898). A report on the establishment of the secondary school attached to Nanyang College. *Original Archives on Shanghai Jiaotong University*. Archives No.: ls3-001. (何嗣焜: 〈呈報中院開館〉)

Imperial Peking University. (1905). On establishing the Department of Translation at Imperial Peking University. *Education Journal*, 42.

(〈京師大學堂譯學館建置〉)

Jing, Y. S. (1896). A notice on handing the Jingzheng Academy to the public. *The Original Archives of Sheng Xuanhuai in Shanghai Library*. Archives No.: 044280-1. (經元善：〈上海經正書院歸公啟〉)

Lu, D. Y. A report on Sichuan Pre-university School. *The Archives on the Educational History of Sichuan*, 20, 156-157. (〈四川高等學堂紀略〉)

Ma, X. B. (1935). Cai Yuanpei and His Twenty-Four Students Learn Latin. *A Hundred-year History of Fudan University (Vol. I)*, Shanghai: Fudan University Press. (馬相伯：〈蔡子民先生與二十四個學生學拉丁文〉)

Presented School Regulations — Agricultural Schools, Industrial Schools and Commerce Schools. (1904). Wuhan: Hubei Provincial Education Board.
(〈奏定農工商實業學堂章程〉)

Presented School Regulations — Junior Primary Schools. (1904). Wuhan: Hubei Provincial Education Board. (〈奏定學堂章程 — 初等小學堂章程〉)

Presented School Regulations — Normal Schools. (1904). Wuhan: Hubei Provincial Education Board. (〈奏定師範學堂章程〉)

Presented School Regulations — Pre-university Schools. (1904). Wuhan: Hubei Provincial Education Board. (〈奏定學堂章程 — 高等學堂章程〉)

Presented School Regulations — Principles of Education. (1904). Wuhan: Hubei Provincial Education Board. (〈奏定學堂章程 — 學務綱要〉)

Presented School Regulations — Officialdom Colleges. (1904). Wuhan: Hubei Provincial Education Board. (〈奏定進士館章程〉)

Presented School Regulations — Senior Primary Schools. (1904). Wuhan: Hubei Provincial Education Board. (〈奏定學堂章程 — 高等小學堂章程〉)

Presented School Regulations — Secondary Schools. (1904). Wuhan: Hubei Provincial Education Board. (〈奏定學堂章程 — 中學堂章程〉)

Presented School Regulations — Translation Schools. (1904). Wuhan: Hubei Provincial Education Board. (〈奏定譯學館章程〉)

Presented School Regulations — Universities (including the Postgraduate Schools). Wuhan: Hubei Provincial Education Board.

(〈奏定學堂章程一大學堂章程(附通儒院章程)〉)

Prosper Giquel. (1874). *The Foochow Arsenal and Its Results*. Fuzhou.

Register of Peiyang University. (1897). Tianjin. (〈北洋大學題名錄〉)

Register of Peking Translation College. (1867). Beijing. (〈同文館題名錄〉)

Register of Peking Translation College. (1879). Beijing. (〈同文館題名錄〉)

Register of Peking Translation College. (1888). Beijing. (〈同文館題名錄〉)

Register of Peking Translation College. (1898). Beijing. (〈同文館題名錄〉)

Reports on Chinese Students' Performance in Theoretical and Practical Courses (1867-

1873). (1874). Fuzhou. (〈呈船政大臣關於學堂教育成果報告書〉)

Reports on the Teaching of Fujian Naval College. (1870). Fuzhou.

(〈船政學堂教學記〉)

Rules and Regulation of Peking Translation College. (1871). Beijing.

(〈同文館同治十年正月堂諭〉)

Rules and Regulation of Peking Translation College. (1895.5). Beijing.

(〈同文館光緒二十一年閏五月堂諭〉)

Rules and Regulation of Peking Translation College. (1897.2). Beijing.

(〈同文館光緒二十三年正月堂諭〉)

Rules and Regulations on the Western Teachers' Behaviors at Fujian Naval College. (1866).

Fuzhou. (〈洋師管理約章〉)

Rules and Regulations of Imperial Peking University. (1898). Beijing.

(〈京師大學堂規條〉)

Shanghai Senior Industrial College. (1909). The constitution of Society of English in

Shanghai Senior Industrial College. *The Collection of Records of the History of Jiaotong*

University, 1, 187. (〈郵傳部上海高等實業學堂英文會章〉)

Shanghai Senior Industrial College. (1909). The report on inviting foreign ministers to

examine the statutes of the Department of Navigation attached to Shanghai Senior

Industrial College and the student name list. *The Collection of Records of the History of Jiaotong University*.

(〈本部諮出使各國大臣請查商船學校辦法及船政學生姓名文〉)

Shanghai Senior Industrial College. (1909). The report on the internship outside the campus in the Department of Railway in Shanghai Senior Industrial College. *The Collection of Records of the History of Jiaotong University*, 1, 177.

(〈郵傳部高等實業學堂鐵路科第一次校外實習概況〉)

Shanghai Senior Industrial College. The statistics of teachers in Shanghai Senior Industrial College (1907-1909). Shanghai.

(〈郵傳部教員一覽表〉)

Shen, T. F. & Yuan, D. F. (1907). The Regulations on Jiangsu Liberal Arts Pre-university School. *The Official Documents of Jiangsu Educational Society in Late Qing Periods*, 125-130.

(〈江陰文科高等學校辦法草議〉，江蘇教育總會文牘)

Shen, X. L. (1964). A summary of education practices in Guangdong University in late Qing periods. *Historical Records of Guangdong Province*, 17, 132-135.

(沈祥龍：〈清末廣東大學堂概述〉)

Shore, N. H. (1881). *The Flight of the Lapwing: A Naval Officer's Jottings in China, Formosa and Japan*. London: Longmans, Green and co.

Statutes of Fujian Naval College. (1867). Fuzhou. (〈船政學堂章程〉)

Statutes of the Department of Translation attached to Imperial Peking University. (1904).

Beijing. (〈京師大學堂譯學館章程〉)

Statutes of Guangdong College of Western Knowledge. (1880). Guangzhou.

(〈廣東西學館章程〉)

Statutes of Imperial Peking University. (1898). Beijing. (〈京師大學堂章程〉)

Statutes of Imperial Peking University. (1904). Educational Affairs, the Ministry of Education in Late Imperial China, The First Historical Archives of China, 68.

(〈京師大學堂章程〉)

Statutes of Imperial Peking University. (1908). Beijing. (〈京師大學堂章程〉)

Statutes of Nanyang College. (1897). Original Archives on Xi'an Jiaotong University.

Archives No.: 2323. (<南洋公學章程>)

Statutes of Peiyang University. (1895). The Selections on the Records of History of Peiyang

University and Tianjin University, 1. (<北洋大學堂章程>)

Statutes of Peking Translation College. (1862). Beijing. (<京師同文館章程>)

Statutes of Peking Translation College. (1865). Beijing. (<京師同文館章程>)

Statutes of Peking Translation College and Their Amendments. (1898). Beijing.

(<同文館章程及續增條規>)

Statutes of Shanghai Senior Industrial College. (1908). Shanghai.

(<上海高等實業學堂章程>)

Statutes of School of Japanese in Nanyang College. (1901). Shanghai.

(<東文學堂擬定章程>)

Statutes of the Primary School attached to Nanyang College. (1901). The Original Archives on Xi'an Jiaotong University. Archives No.: 2324.

(<試辦附屬小學章程>)

Statutes of the Primary School attached to Shanghai Senior Industrial College. (1906). Shanghai. (<上海高等實業學堂附屬小學堂章程>)

Tenney, D. C. (1904). New Amendments to the Regulations of Peiyang University.

Archives of Tianjin University. (<天津大學堂新訂規則>)

The Curriculum Schedule of Students in the Department of Railway in Shanghai Senior Industrial College. (1908). Shanghai.

(<郵傳部上海高等實業學堂鐵路專科授課時間表 (1908) >)

The Curriculum Schedule of the Secondary School attached to Nanyang College. (1898).

The Original Archives of Shanghai Jiaotong University. Archives No.: ls3-001.

(南洋公學中院四班草定課目日程表 (1898))

The Curriculum Schedule of the Secondary School attached to Nanyang College. (1899).

In the “Minutes of the First Meeting of Board of Directors in Nanyang College”, *The Original Archives of Xi'an Jiaotong University*. Archives No.: 2323.

(南洋公學中院各班課程表，〈南洋公學掌教第一次聚議〉)

The Curriculum Schedule at Fujian Naval College. (1867). Fuzhou.

(〈船政學堂課程表〉)

The employment agreement for the western teachers. (1866). In Zuo Zongtang's memorial

“On establishing Chinese Navy Yard and Fujian Naval College”, *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 314.

(左宗棠：〈抄呈德克碑、日意格稟〉)

The entrance requirements on the applicants for the Department of Navigation in Shanghai Senior Industrial College. (1908).

(〈郵傳部上海高等實業學堂分設高等商船學堂招考簡章〉).

The Graph of the First Education Statistics. (1907).

(〈第一次教育統計圖表〉)

The Ministry of Education. (1907). A Report on Jiangxi Pre-university School. *The Ministry of Education Report*, 34, 283. (〈江西省城高等學堂調查總表〉)

The Ministry of Education. (1907). A Report on Shanxi Pre-university School. *The Ministry of Education Report*, 7, 57-59. (〈陝西省城高等學堂調查總表〉)

The Ministry of Education. (1907). A Report on Zhili Pre-university School. *Oriental Journal*, 11. (〈直隸高等學堂調查總表〉)

The Ministry of Education. (1907, April 5). An official document on allowing the pre-university students to learn only one foreign language. *The Ministry of Education Report*, 17, 256-257.

(學部：〈諮大學堂預備科學生生准其單習一國語文〉)

The Ministry of Education. (1908, December 26). An official report on asking Imperial Peking University to submit the students' curriculum lists and handouts at Pre-university School attached to Imperial Peking University and School of Teacher Training. *The Ministry of Education Report*, 78, 257.

(學部：〈諮複大學堂速將預備師範兩科學生所習科目及講義等諮部文〉)

The Ministry of Education. (1909). Sending the graduates in the senior industrial College to participate in the reexamination in Peking.

(學部：〈各省高等學堂畢業生一律調京復試〉)

The Ministry of Education. (1909, May 9). The standardization of foreign language choices in the curricula of pre-university schools in all provinces. *The Official Reports of the Government*, 90, 2-3.

(學部：〈諮大學堂通諮各省統一高等學堂課程對外國語的規定〉)

The Ministry of Education. (1909, September 14). Requesting the Ministers of Education in all provinces to straighten out educational affairs in specialized colleges. *The Imperial Decrees in Qing Dynasty (1908-1910)*, 7, 1-2.

(學部：〈劄各省提學使整頓各實業學堂文〉)

The Ministry of Education. (1910, March 19). Approving of establishing the Department of Navigation in Shanghai Industrial College. *Jiaotong Guanbao*, 10, 6.

(學部：〈學部諮本部上海實業學堂新設航海專科核准立案文〉)

The Ministry of Education. (1910, June 3). The Curricula of Foreign Language Education, Textbooks and Choice of Foreign Languages in Specialized Colleges. *The Imperial Decrees in Qing Dynasty (1908-1910)*. *The Imperial Decrees in Qing Dynasty (1908-1910)*, 7, 4-8.

(〈學部奏實業教育宜擇定外國語文並擬修改課程折〉)

The Ministry of Education. (1933). *The First Yearbook of China's Education*. Beijing: The Commercial Press. (〈第一次中國教育年鑒〉)

The Ministry of Education in Republic of China. (1912). The Education Act. *The Education Magazine*, 4, 7. (〈中華民國教育法令〉)

The name list of teachers at Imperial Peking University. (1903). *The Name List of Teachers and Students at Imperial Peking University*. Beijing.

(〈京師大學堂同學錄〉)

The name list of teachers in School of Teacher Training in Nanyang College. (1897). In He, S. K.'s *The Salaries of Administrators, Teachers and Supporting Staff in School of Teacher Training in Nanyang College*. (<南洋公學師範院師資情況表>)

The name list of teachers in Nanyang College. (1902). *The Original Archives of Sheng Xuanhuai*. Archives No.: 044551-1. (<南洋公學教習名單>)

The number of students at Imperial Peking University (1902-1911). *The Memorial Volume of 20th Anniversary of Imperial Peking University* (pp. 13-35).
(京師大學堂學生數 (1902-1911 速成預備及分科大學學生數))

The regulations on awarding students with high score for the Chinese examination. (1897). *Archives of Shanghai Jiaotong University*, p. 187.
(<扣獎加並中文佳者並諭>)

The transcripts of students' monthly examinations in western subjects in School of Teacher Training (1899-1901). Nanyang College. Shanghai.
(<1899-1901 年間師範班西課月考分數>)

Thibaudier, C. (1868). *Arsenal de Fou-tcheou*. BB 4 1555, p. 43, Service Historique de la Marine (SHM), Vincennes.

Veron, P. (1870). *Veron Report*. BB 4 1555, P. 13, SHM, Vincennes.

Ying, G. (1867, February 19). A report to the Ministry of Foreign Affairs in Qing Period concerning the preparation of Fujian Naval College.
(英桂：<陳辦理船政事>)

Imperial Decrees, Governors' Manuscripts, Memoirs, Private Diaries and Correspondences

Bai, Z. L. (1899). Opinions on translating the textbooks in Nanyang College. *The Selections on the Records of History of Jiaotong University*, 1, 62.

(白作霖：〈編譯教科書之意見〉)

Chen, X. (1894). A correspondence with Shen Enjia. In Kong Xiangji's article 'National crisis after the First Sino-Japanese War and the founding of Peiyang University'. *Journal of Macao Polytechnic University*, 1, 176-185.

Emperor Guangxu. (1895, October 2). An imperial edict on the establishment of a western-style university in Tianjin. *The Original Records of Emperor Guangxu*, 5.

(大清德宗景（光緒）皇帝實錄（五）)

Emperor Guangxu. (1896, December 6). An imperial edict on the establishment of Nanyang College. *The Imperial Edicts in the Governorship of Emperor Guangxu and Xuanton*, 22, 286. (<光緒宣統兩朝上諭檔>第 22 冊)

Emperor Guangxu. (1898, July 14). An imperial edict on the establishment of Imperial Peking University. *The Selection of Archives on Imperial Peking University*, 53.

(光緒帝：〈著即議覆開辦京師大學堂諭旨〉)

Emperor Guangxu. (1898, August 2). An imperial edict on requesting every province to elect and send students to the Office of Foreign Affairs for study in Japan. *The Selection of Archives on Imperial Peking University*, 84-85.

(光緒帝：〈著各省選送學生由總理衙門派赴日本遊學諭旨〉)

Emperor Guangxu. (1902, March 18). An imperial edict on commissioning the Chinese diplomats and ministers in the United States and Japan to send original textbooks to Imperial Peking University. Archives of Peking University, Archive No.: JS0000016-001.

(光緒帝：〈欽差出使美日秘國大臣伍〉)

Emperor Tongzhi. (1866, December 30). An imperial edict on Zuo Zongtang's proposal of establishing Chinese Navy Yard and Fujian Naval College. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 289.

(同治帝：〈著照左宗棠所議堅定辦理船政諭〉)

Emperor Tongzhi. (1867, March 5). An imperial edict on the memorial of Zhang Shengzao. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 47, 1831.

(同治帝：〈著毋庸議張盛藻奏摺諭〉)

Emperor Tongzhi. (1867, April 23). An imperial edict on requesting Wo Ren and others to establish another school. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 48, 2032.

(同治帝：〈著倭仁酌保數員另行擇地設館諭〉)

Emperor Tongzhi. (1867, April 25). An imperial edict on answering Wo Ren's memorial. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 48, 2036.

(同治帝：〈著倭仁奏遵覆並無精於天文算學之人不敢妄保折諭〉)

Emperor Tongzhi. (1867, June 30). An imperial edict on no need of discussing Yang Tingxi's memorial. *The Collection of Memorials to the Throne on Foreign Affairs (Reign of Tongzhi) (1862-1874)*, 49, 2070-2072.

(同治帝：〈著毋庸議楊廷熙奏摺諭〉)

Ferguson, C. J. (1931). The early history of Nanyang College. *The Selections on the Records of History of Jiaotong University*.

(福開森：〈南洋公學早期歷史〉)

Imperial Peking University. (1903, March 31). Report to the Ministry of Foreign Affairs asking to telegraph on behalf of Imperial Peking University to the Chinese Majesty's Minister in Britain and France for making a new contract continuing the employment of foreign teachers from Britain and France (enclose telegram draft). *The Selection of Archives on Imperial Peking University*, 227-228.

(大學堂為請代電駐英法大臣延聘洋教習另擬合同事致外務部片呈（附電底）)

Imperial Peking University. (1909, June 25). The discussion of the Board of Directors on employing teachers at Imperial Peking University. *The Education Magazine*, 1 (6), 40.
(〈分科監督會商開學辦法及聘請教員〉)

Koo, Wellington. (1976). *The Wellington Koo Memoir*. New York: Columbia University, East Asian Institute.

Li, Z. T. (1902). A Report on the Inspection of Japanese Schools.

(李宗棠：〈考察日本學校記〉)

Lin Z. X. (1842, September 3). A Letter to Yao Chunmu and Wang Dongshou. *The Collection of Private Correspondences*, 195-197.

(林則徐：〈遣戍伊犁行次蘭州致姚春木王冬壽書〉)

Ling, H. X. (1914). My memory of Nanyang College. In Huang, C. Y. & Chen, H. X. (Eds.). *The Story of Jiaotong University*, Nanjing: Jiangsu Arts Press.

(凌鴻勳：〈我進南洋的前前後後〉)

Miu, Q. S. (1903). An Introduction. *The Study Mission to Japan*.

(繆荃孫：〈日遊彙編〉序)

Morrison, E. (1839). *Memoirs of the Life and Labours Robert Morrison*. London: Longman, Orme, Brown and Longmans.

New statutes and decrees of the Qing dynasty in the Guangxu period (1875-1908). Shanghai.

(〈光緒朝大清會典〉)

New statutes and decrees of the Qing dynasty in the Xuantong period (1909-1911).

Shanghai. (〈宣統朝大清會典〉)

Sheng, X. H. (1896, August 11). A correspondence with Liu Kunyi. *The Original Archives of Sheng Xuanhuai in Shanghai Library*, Archives No.: 044964-1.

(盛宣懷：〈致劉坤一函〉)

Sheng, X. H. (1903). A private correspondence with Zhang Zhidong. *The Original Archives of Sheng Xuanhuai in Shanghai Library*, Archives No.: 044670.

(盛宣懷：〈致張之洞函〉)

Tan, S. T. A letter to my teacher Ouyang Banjiang. *Tan Sitong QuANJI*, 287-296.

(譚嗣同：上歐陽瓣蘊師書，見〈譚嗣同全集〉)

Tang, W. Z. (1912). A correspondence with the Ministry of Transport. *The Original Archives of Xi'an Jiaotong University*. Archives No.: 1837.

(唐文治：〈致交通部函〉)

The Imperial Edicts in the Governorship of Emperor Guangxu and Xuantong, 22, 286.

(〈光緒宣統兩朝上諭檔〉)

Taylor, C. (1860). *Five Years in China*. New York: J. B. McFerrin Publisher.

W. A. P. Martin. (1907). My memory of Peking Translation College, in *Education Journal*, 27 (4), 215-231.

Wang, C. Y. (1935). My life on Peiyang University. *Peiyang Weekly*, 65.

(〈肄業北洋大學時生活之狀況〉)

Wang, F. Z. (1902, March 18). A correspondence with Sheng Xuanhuai. The Original Archives of Sheng Xuanhuai in Shanghai Library. Archives No.: 044551-1.

(汪鳳藻：〈致盛宣懷函〉)

Weng, T. H. (1895, October 17). Weng Tonghe's diary. In Y. J. Chen's *Weng Tonghe's Diaries (Vol. 5)*. Beijing: Zhong Hua Book Company (printed in 1989).

(〈翁同龢日記〉)

Williams W. Frederick. (1889). *The Life and Letters of Samuel Wells Williams, LL.D., Missionary, Diplomatist, Sinologue*. New York: G. P. Putnam's sons.

Wu, C. L. (1989). The life of my second elder brother Wu Nanru. In Zuo S. (Ed.) *A Reminiscence of Life at Peiyang University* (p. 17). Tianjin: Tianjin University Press.

(吳崇蘭：〈吳南如二哥生平〉)

Wu, R.L. (1902). 'A letter to Zhang Baixi', *Wu Rulun's Correspondences*, 4, 14-16.

(〈吳汝綸致張百熙函〉，〈桐城吳先生汝綸尺牘〉)

Yan, F. (1902). A discussion on education with the editor of *Diplomacy News*. *The Collected Works of Yan Fu*, 4, 10-14, 217-224.

(嚴複：〈與外交報主人論教育書〉)

Yang, X. Q. The importance of learning western languages. In Zheng Z. D. (Ed.), *Selected Articles in the Late Qing Period* (p. 573). Shanghai: Shanghai Bookstore. (Printed in 1987) (楊選清：〈宜習英文說〉)

Yang, Y. W. (1936). The important changes in Nanyang College in the last 40 years. *The 40-year Anniversary Memorial Volume of Jiaotong University*. Shanghai.

- (楊耀文：〈本校四十年來之重要變遷〉)
- Yao, X. G.** (1898). Dongying Xuexiao Jugai. (An Introduction to Japanese Schools). (姚錫光：〈東瀛學校舉概〉)
- Ying, G.** (1867, March 27). A letter to Zongli Yamen to address the criticisms of Baron de Meritens of Foochow Customs on the shipbuilding industry in China.
- (英桂：〈為法國福州稅務司美理登開具折略事致總理衙門函〉)
- Yu, T. K.** (1948). The memoir of studying experiences at Imperial Peking University 46 Years Ago. *The Special Commemorative Edition of Peking University*, 11-16.
- (俞同奎：〈四十六年前我考進母校的經驗〉)
- Zhang, Y. J.** (1949). Tracing back to the predecessor of Shanghai Jiaotong University 49 years ago. *Weekly Journal of Shanghai Jiaotong University*, 60.
- (張元濟：〈追溯四十九年前今日之交通大學〉)
- Zhang, Z. D.** (1901). A correspondence to Luo Zhenyu. *Zhang wenxiang gong Quanji*, 174, 53. (張之洞：〈致上海羅叔芸(振玉)〉)
- Zhang, Z. D.** (1902). A correspondence to Zhang Baixi. *Zhang Wenxiang gong Quanji*, 178, 18-20. (張之洞：〈致京張冶秋尚書〉)
- Zhang Z. D.** (1963). *Complete works of Zhang Zhidong* (First printed in Beijing, 1928). Taipei: Wenhai Press. (〈張之洞全集〉)
- Zhou, H. Q.** (1979). 'A memoir of my 12-year study experience in Nanyang College', *The Selection of Original Archives on the History of Shanghai Jiaotong University*, 1, 294-295. (周浩泉：〈回憶南洋公學十二年〉)
- Zhu, S. P.** (1984). *The Imperial Edicts during the Emperor Guangxu Governorship*. Beijing: Beijing Zhonghua Book Company. (〈光緒朝東華錄〉)

Contemporary Essays, Articles, Periodicals & Newspapers

- A Visit to Tientsin University. (1895, December 7). *Peking and Tientsin Times*, p. 367.
- Chen, K. Q.** Why the Imperial Examination Focused on the Regular Script? *Yan Xia Xiang Sheng Lu*, vol. 11, 3-4. (陳康琪：〈殿廷考試專尚楷法之由〉)

- Chen, K. Q.** On the Cheating Behaviors in the Imperial Examination. *Lang Qian Ji Wen San Bi*, 6, 5. (陳康琪：〈名臣不諱言科場夾帶〉)
- Chinese Arsenal. (1875, December 18). *Shen Pao*, p. 698.
- Chinese Globe Magazine*. (1898-1907). Shanghai.
- E.C. Bridgman.** (1839). Crisis in the Opium Traffic. *Chinese Repository*.
- English-speaking Chinese. (1882, September 23). *The North China Herald and Supreme Court & Consular Gazette*, p. 315.
- Expected visit of a Chinese War Vessel. (1876, June 15). *The Maitland Mercury and Hunter River General Adviser*, p. 6.
- Feng, G. F.** (1861). On learning from the West. *The Political Essays of Feng Guifen*. Guang Rentang. (馮桂芬：〈采西學議〉)
- Feng, G. F.** (1861). On making modern arms. *The Political Essays of Feng Guifen*. Guang Rentang. (馮桂芬：〈制洋器議〉)
- Feng, G. F.** (1861). On establishing a translation college in Shanghai. *The Political Essays of Feng Guifen*. Guang Rentang. (馮桂芬：〈上海設立同文館議〉)
- Liang, Z. J.** Attaching the Particular Importance on the Candidates' Calligraphy in the Imperial Examination, *Tui An Sui Bi*, 6, 15-16. (梁章鉅：〈對策重書法〉)
- Luo Zhenyu.** (1902). A diary of the two-month trip in Japan. *Education World*. Shanghai. (羅振玉：〈扶桑兩月記〉)
- Luo Zhenyu.** (1902). On the education system. *Education World*, 24, 1. (羅振玉：〈學制私議〉)
- Marx, K.** (1853, June 14). Revolution in China and in Europe, *New York Daily Tribune (Articles on China, 1853-1860)*, p. 4.
- On celebrating the 51st anniversary of Peiyang University. (1946, October 2). *Takungpao*. Tianjin. (〈大公報〉)

- Parker, P. A.** (1890). The Place of the Chinese Classics in Christian Schools and Colleges. *Records of the Second General Conference of the Protestant Missionaries of China* (pp. 490-496). Shanghai: American Presbyterian Mission Press.
- Reviewing *Register of Peking Translation College*. (1878, February 21). *Shen Pao*. Shanghai. (<閱同文館題名錄書後>)
- Tao, X. Z.** (1922). A history of establishing the new modern education system in China. *New Education*, 4 (2), 248-249. (<中國建設新學制的歷史>)
- The Foochow Arsenal. (1870, April 21). *North-China Herald*, pp.278-280.
- The Foochow Arsenal. (1871, July 14). *North-China Herald*, pp.514-520.
- The fourth annual report of the Morrison Education Society. (1842). *Chinese Repository*, p. 553.
- The Government Schools in China. (1909). *Education Quarterly*, 6, 43.
- The notice of student enrollment in Nanyang College. (1897, March 2). *Shen Pao*, p. 1. (<南洋公學招生啟>)
- The rise of intellectuals. (1898, January 9). *Kuo Wen Pao*, pp. 7-10. (<人才蔚起>)
- Wang, T.** (1897). *Tao Yuan Wen Lu Wai Bian*. (<弢園文錄外編>)
- Wei, Y.** (1842). *An Illustrated Gazetteer of Maritime Nations (Hai-kuo t'u-chih)*. Reprinted in Changsha: Yuelu Book Company in 2011. (<海國圖志>).
- Wei, Y.** (1842). On Military Defense. In *The Collection of Wei Yuan's Essays*, Changsha: Yuelu Press (Reprinted in 2011). (<聖武記>)
- Wu, R. L.** (1902). An introduction to the education model of Japan. *Wu Rulun's Writings*, 55-58. (<日本學制大綱序>)
- Wu, X. Y.** (1933). A brief history of Peking Translation College. *Reading Monthly*, 2 (4), 1-15. (<京師同文館略史>)
- Xu, K.** The implicit communication between the candidates and the examiners. *Qing Bai Lei Chao (Examinations)*, 5, 6. (徐珂: <考試送詩片>)

- Xu, K.** The cheating behaviors in the Imperial Examination. *Lang Qian Ji Wen San Bi*, 5, 5. (徐珂：〈考試送關節〉)
- Yao, Y.** (1911). *Dong Mingwen Houji* (vol. 8). Deposited in the Ancient Archives Reading Room of National Library of China. (姚瑩：〈東溟文後集〉)
- Zhao, C. J.** (1941). A brief history of Protestant mission schools in China. *Education Quarterly*, 17 (2), 32-36.
- Zheng, G. Y.** (1884). On Examination. *Words of Warning to a Prosperous Age*, 38-42. (鄭觀應：〈考試〉)
- Zhang, Z. D.** (1898). Quanaxue Pian. *Complete works of Zhang Zhidong* (First printed in Beijing, 1928). Taipei: Wenhai Press. (張之洞：〈勸學篇〉)
- Zhou, Z. D.** (1897). Revitalizing schools. *Periodicals of Chinese and Western Mission Societies*, 3 (32), 3-5. (周之德：〈興教說〉)

Others

- Treaty of Tientsin.** (1858, June 26). Retrieved from the website of China's External Relations - A History: <http://www.chinaforeignrelations.net/node/144>
- Yates, T. M.** (1878). *Records of the First General Conference of the Protestant Missionaries of China*. Shanghai: Presbyterian Mission Press.

Secondary Sources

- Aceme, N.** (2015). Mother tongue as the medium of instruction at developing country universities in a global context: review article. *South African Journal of Science*, 111 (1), 33-37.

- Achellea, K.** (2015). *The history of ELT: a different perspective*. Retrieved from: <https://achilleaskostoulas.com/2015/02/04/the-history-of-elt-a-different-perspective>.
- Adamson, B.** (1998). *English in China: the junior secondary school curriculum 1949-94* (Unpublished doctoral dissertation). The University of Hong Kong, Hong Kong.
- Adamson, B.** (2001). English with Chinese characteristics: China's new curriculum. *Asia Pacific Journal of Education*, 21, 19-33.
- Afungmeyu, J. A.** (2014). The impact of a monolingual medium of instruction in a multilingual university in South Africa. *Mediterranean Journal of Social Sciences*, 5 (13), 62-71.
- Ager, D.** (2001). *Motivation in language planning and language policy*. Clevedon: Multilingual Matters Ltd.
- Akita, S.** (2002). *Gentlemanly Capitalism, Imperialism and Global History*. Hampshire and New York: Palgrave Macmillan.
- Albo, X. & Anaya, A.** (2003). *Happy, free, expressive children. The audacity of bilingual intercultural education in Bolivia*. La Paz: UNICEF.
- Alexandar, O.** (2016). Enhanced creativity in bilinguals? Evidence from meaning interpretations of novel compounds. *International Journal of Bilingualism*, 20 (3), 315-334.
- Ali Fuad, S.** (2014). The medium-of-instruction debate in Turkey: Oscillating between national ideas and bilingual ideals. *Current Issues in Language Planning*, 15 (2), 133-152.
- Alidou, H.** (2004). Medium of instruction in post-colonial Africa. In J. W. Tollefson and A. B. M. Tsui. (Eds.) *Medium of Instruction Policies: Which Agenda? Whose Agenda* (pp.195-216). Mahwah, New Jersey: Lawrence Erlbaum Associates Publishers.
- Anderson, B.** (2016). *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London: Verso.

- Atherton, M.** (2010). The Globe of Language: Thomas Predergast and Applied Linguistics in the 1870s. *Language & History*, 53(1), 15-26.
- Auroux, S.** (2000). *History of the Language Sciences. An International Hand on the Evolution of the Study of Language from the Beginnings to the Present (vol. 3)*. Berlin: Mouton de Gruyter.
- Ayers, W.** (1971). *Chang Chih-tung and Educational Reform in China*. Cambridge, Massachusetts: Harvard University Press.
- Bai, L. M.** (2001). Children and the survival of China: Liang Qichao on education before the 1898 reform. *Late Imperial China*, 22 (2), 124-155.
- Baker, C.** (1996). *Foundation of Bilingual Education and Bilingualism (2nd edition)*. Clevedon: Multilingual Matters.
- Baker, C.** (2006). *Foundations of Bilingual Education and Bilingualism (4th edition.)*. Philadelphia, PA: Multilingual Matters.
- Baldauf, R. & Nguyen, H.** (2012). Language policy in Asia and the Pacific. In B. Spolsky. (Ed.) *Cambridge handbook of language policy* (pp.617-638). Cambridge: Cambridge University Press.
- Bamgbose, A.** (2003). A recurring decimal: English in language policy and planning. *World Englishes*, 22 (4), 419-431.
- Bernard, R. & McLellan, J.** (2014). *Codeswitching in University English-medium Classes: Asian Perspectives*. Clevedon: Multilingual Matters.
- Bauman, R. & Briggs, L. C.** (2003). *Voices of Modernity: Language Ideologies and the Politics of Inequality*. Cambridge: Cambridge University Press.
- Beasley, G. W.** (1972). *The Meiji Restoration*. Redwood City, California: Stanford University Press.
- Bentz, V. M. & Shapiro, J. J.** (1998). *Mindful Inquiry in Social Research*. Thousand Oaks, California: Sage.

- Berg, B. L.** (2007). *Qualitative Research Methods for Social Sciences (6th edition)*. London: Allyn & Bacon.
- Bergenholtz, H.** (2006). Towards a definition of “communication policy”, “language policy”, and “language planning”. *Stellenbosch Papers in Linguistics PLUS*, 34, 1-34.
- Bialystok, E.** (2001). *Bilingualism in Development: Language, Literacy and Cognition*. Cambridge: Cambridge University Press.
- Bialystok, E.** (2011). Reshaping the mind: the benefits of bilingualism. *Canadian Journal of Experimental Psychology*, 65 (4), 229-235.
- Bialystok, E.** (2012). Emerging bilingualism: Dissociating advantages for metalinguistic awareness and executive control. *Cognition*, 122, 67-73.
- Bialystok, E., Craik, F. & Luk, G.** (2012). Bilingualism: consequences for mind and brain. *Trends in Cognitive Sciences*, 16 (4), 240-250.
- Bian, J.** (2014). Tenney Charles Daniel: the first American head teacher at Peiyang University. *International Talent*, 4, 57-59.
- Bickers, R.** (1999). *Britain in China*. Manchester: Manchester University Press.
- Biggerstaff, K.** (1935). An examination of Peking Translation College. *China's Education*, 23 (2), 13-26.
- Biggerstaff, K.** (1961). *The Earliest Modern Government School in China*. New York: Cornell University Press.
- Billig, M.** (1995). *Banal Nationalism*. London: Sage.
- Birkby, J. S.** (2012). *English-Language Introduction to Contemporary Taiwan: A Historicolinguistic Perspective* (Unpublished doctoral dissertation). The Ohio State University, Columbus, Ohio.
- Black, K.** (2013). The Empress Dowager's role in the reforms of 1898. *Emory Endeavors in History*, 184-204.
- Blommaert, J.** (1999). *State Ideology and Language in Tanzania*. Köln: Rüdiger Köppe Verlag.

- Blommaert, J.** (2006). Language ideology. In K. Brown. (Ed.) *Encyclopedia of Languages and Linguistics* (Vol. VI) (pp.510-522). Oxford: Elsevier.
- Blowers, G.** (2001). Learning from others: Japan's role in bringing psychology to China. *American Psychologist*, 55 (12), 1433-1436.
- Bodomo, A. B.** (1996). On language and development in Africa: the case of Ghana. *Nordic Journal of African Studies*, 5 (2), 31-51.
- Bogdan, R. & Taylor, S. J.** (1990). Looking at the bright side: A positive approach to qualitative policy and evaluation research. *Qualitative Sociology*, 13, 183-192.
- Bolton, K.** (2008). English in Asia, Asian Englishes, and the issue of proficiency, *English Today*, 94 (4), 2-12.
- Bolton, K.** (2012). Language policy and planning in Hong Kong: Colonial and post-colonial. *World Englishes*, 31 (1), 30-33.
- Borg, W. R.** (1963). *Educational Research*. New York: David McKay Company.
- Bourdieu, P.** (1991). *Language and Symbolic Power*. Cambridge: Polity Press.
- Bourgon, J.** (2008). Writing and law in late imperial China. Crime, conflict, and judgment. *T'oung Pao*, 94 (4-5), 405-414.
- Braine, G.** (2005). *Teaching English to the World: History, Curriculum and Practice*. Mahwah, New Jersey: Lawrence Erlbaum Associates Publishers.
- Breton, R.** (2003). Sub-Saharan Africa. In J. Maurais and M. Morris. (Eds.) *Languages in a Globalizing World* (pp. 203-216). Cambridge: Cambridge University Press.
- Bright, W.** (1992). Language Policy. *International Encyclopedia of Linguistics*, 4, 310-311.
- Bruthiaux, P.** (2002). Hold your courses: Language education, language choice, and economic development. *TESOL Quarterly*, 36 (3), 275-296.
- Brutt-Griffler, J.** (2002). *World Englishes: A case study of its development*. Clevedon: Multilingual Matters.

- Cai, J. G.** (2010). Thoughts on the reposition of college English in China. *Foreign Language Teaching and Research*, 42 (4), 306-308.
- Cai, J. G.** (2015, March 3). The rational of transforming foreign language education in universities in China (英語能力明顯弱於他國，我國高校外語教學必須轉型). *Guangming Daily* (<光明日報>), p.14.
- Cai, Y. L.** (2007). *Language Education and language policy in the United States*. Shanghai: Shanghai joint publishing company LTD.
- Cain, J. P. & Hopkins, G. A.** (2016). *British Imperialism: 1688-2015*. London and New York: Routledge.
- Cameron, D.** (2002). Globalization and the teaching of “communication” skills. In D. Block & D. Cameron. (Eds.) *Globalization and Language Teaching* (pp.67-82). London: Routledge.
- Cañado, M.** (2016). Are teachers ready for CLIL? Evidence from a European study. *European Journal of Teacher Education*, 39 (2), 202-221.
- Canagarajah, A. S.** (2005). Dilemmas in planning English/native relations in post-colonial communities. *Journal of Sociolinguistics*, 9 (3), 418-447.
- Cao, Y. D.** (2003). The Ink Bottle Event in Nanyang College. *Archives and History*, 67-69.
- Carnoy, M.** (1974). *Education as Cultural Imperialism*. New York: David McKay Company.
- Carroll, T.** (2001). *Language Planning and Language Policy*. London: Routledge.
- Cenoz, J. & Gorter, D.** (2008). Applied linguistics and the use of minority languages in education. *AILA Review*, 21, 5-12.
- Cenoz, J.** (2015). Content-based instruction and content and language integrated learning: the same or different? *Language, Culture and Curriculum*, 28 (1), 8-24.

- Chaturvedi, D.** (2014). *Development of Education System in India during British Period*. Retrieved from: www.importantindia.com/11643/development-of-education-system-in-india-during-british-period.
- Chen, G. Y. & Liu, F. Q.** (1998). From Central School in Yuan Dynasty to Tongwen Guan. *Educational History Research*, 4, 28-30.
- Chen, J. P.** (2007). *The History of Education in Modern China*. Beijing: People's Education Press.
- Chen, X. X.** (1986). *The Historical Records of Education in Modern China* (Vol. I). Beijing: People's Education Press.
- Cheng, L. Y.** (2008). The key to success: English language testing in China. *Language Testing*, 25 (1), 15-37.
- Cheng, L. Y.** (2012). The power of English and the power of Asia: English as lingua franca and in bilingual and multilingual education. *Journal of Multilingual and Multicultural Development*, 33 (4), 327-330.
- Cheng, Q.** (2016). The advantages and disadvantages of the reforms on English tests in college entrance examination in China. *Journal of Seeking Knowledge Guide*, 5, 113.
- Cheng, X. T.** (2014). Thoughts on the policy adjustment of English education in China. *Curriculum, Teaching Materials & Pedagogy*, 4, 58-64.
- Cheung, H., Chung, K., Wong, S., McBridechang, C., Penny, T. & Ho, C.** (2010). Speech perception, metalinguistic awareness, reading and vocabulary in Chinese-English bilingual children. *Journal of Educational Psychology*, 102 (2), 367-380.
- Choi, L. L. S.** (2016). A support program for English as an additional language nursing students. *Journal of Transcultural Nursing*, 27 (1), 81-85.
- Cleghorn, A. & Rollnick, M.** (2002). The role of English in individual and societal development: A view from African classrooms. Special issue on language and development. *TESOL Quarterly*, 36(3), 347-372.

- Clive, J.** (1987). *Macaulay: The Shaping of the Historian*. Cambridge, Massachusetts: Belknap Press.
- Cobb, R.** (1974). *Modern French History in Britain*. Oxford: Oxford University Press.
- Cohen, P.** (2016). Changes over time in Qing history: the importance of context. *Late Imperial China*, 37 (1), 10-13.
- Coleman, J.** (2006). English-medium teaching in European higher education. *Language Teaching*, 39 (1), 1-14.
- Connors, R.** (1992). Dreams and play: historical method and methodology. In G. Kirsch & P. Sullivan. (Eds.) *Methods and Methodology in Composition Research* (pp. 15-36). Carbondale, Illinois: Southern Illinois Press.
- Conrad, A. W.** (1996). The international role of English. In J.A. Fishman, A. W. Conrad & A. Rubal-Lopez. (Eds.) *Post-Imperial English: Status Change in Former British and American Colonies, 1940-1990* (pp. 13-36). Berlin and New York: Mouton de Gruyter.
- Cooper, L.** (1989). *Language Planning and Social Change*. Cambridge: Cambridge University Press.
- Corson, D.** (1992). Bilingual education policy and social justice. *Journal of Education Policy*, 7 (1), 45-69.
- Coupland, N.** (2010). *The Handbook of Language and Globalization*. New Jersey: Wiley-Blackwell.
- Cowie, A. P.** (1999). *English Dictionaries for Foreign Learners: A History*. Oxford: Clarendon Press.
- Coyle, D.** (2008). CLIL — a pedagogical approach from the European perspective. In N. Van Deusen-Sholl and N. H. Hornberger. (Eds.) *Encyclopedia of Language and Education. Second and Foreign Language Education* (2nd edition, Volume 4) (pp. 97-111). New York: Springer Science and Business Media LLC.

- Coyle, D., Hood, P. and Marsh, D.** (2010). *CLIL: Content and Language Integrated Learning*. Cambridge: Cambridge University Press.
- Cui, C. & Wang, L. F.** (2018). Promoting foreign language education reform towards language services for the “Belt and Road” Initiative. *Language Education*, 6 (1), 2-6.
- Cui, Z. H.** (2017). A review and reflection of the studies on the history of late Qing Dynasty. *Journal of Historical Science*, 8, 5-11.
- Cummins, J.** (2001). Bilingual children's mother tongue: Why is it important for education. *Sprogforum*, 19, 15–20
- Czyzewska, D.** (2014). Challenges of multilingualism in the EU. *Poznan University of Economics Review*, 14 (3), 85-95.
- Dafouz, E. & Hibler, A.** (2013). Zip your lips’ or ‘Keep quiet’: Main teachers’ and teaching assistants’ classroom discourse in CLIL settings. *Modern Language Journal*, 97, 655–669.
- Dai, D. M.** (2010). A study of foreign education policy in France and pedagogical systems. *Foreign Language Teaching and Research*, 42 (1), 24-30.
- Dai, W. D.** (2001). The time-consuming and low-efficient foreign language education in China — reflections and solutions. *Foreign Languages and Their Teaching*, 147 (7), 1-2.
- Dai, Y.** (2011). *The Collection of Historical Archives on Qing Dynasty*. Beijing: The Chinese History Archives Compilation Council (Qing Dynasty).
- Dallinger, S., Jonkmann, K., Hollm, J. & Fiege, C.** (2016). The effect of content and language integrated learning on students’ English and history competences - Killing two birds with one stone. *Learning and Instruction*, 41, 23-31.
- Dalton-Puffer, C.** (2008). Outcomes and processes in Content and Language Integrated Learning (CLIL): current research in Europe. In Delanoy, W. & Volkman, L. (Eds.) *Future Perspectives for English Language Teaching* (pp. 1-19). Heidelberg: Carl Winter.

- Dalton-Puffer, C., Nikula, T. & Smit, T.** (2010). *Language Use and Language Learning in CLIL Classrooms*. Philadelphia: Benjamins.
- David, S.** (2012). *The Boxer Rebellion and the Great Game in China*. New York: Hill and Wang.
- Davies, A.** (1996). Review article: Ironising the myth of linguisticism. *Journal of Multilingual and Multicultural Development*, 17 (6), 485-496.
- Dean, B.** (1976). British informal empire: The case of China. *The Journal of Commonwealth & Comparative Politics*, 14 (1), 64-81.
- Deng, K.** (2004). *State building and the original push for institutional change in China, 1840-1950*. Working Paper of the Global Economic History Network (GEHN), 01/04. Department of Economic History, London School of Economics and Political Science, London, UK.
- Deng, Z., Peng, Y. & Zhou, X. Q.** (2011). Teaching methods and quality control of private English training schools in China — An example of Global IELTS English training schools in Chengdu. *Journal of Southwest University of Nationalities*, S2, 121-124.
- Donald, A., Jacobs, L. C. & Razavieh, A.** (2002). *Introduction to research in education (6th edition)*. Belmont, California: Wadsworth.
- Dong, B. L.** (2007). *The History of Tertiary Education in Modern China*. Wuhan: Huazhong University of Science and Technology Press.
- Dong, B. L., Dan, Z. B. & Chen, Q.** (2007). *The Modern History of Higher Education in China*. Wuhan: Huangzhong University of Science & Technology Press.
- Dong, C. Y. & Du, C. H.** (2013). The relationship between the effects of bilingual education and students' English proficiency. *Education Forum*, 1, 128-130.
- Donnacha, J. M.** (2002). Power differentials in language planning. Presentation at the World Congress on Language Policies, Barcelona, 16-20 April. Retrieved from www.linguapax.org/congres/taller/taller4/MacDonnacha.html.

- Early, M. & Norton, B.** (2014). Revisiting English as medium of instruction in rural African classroom. *Journal of Multilingual and Multicultural Development*, 35 (7), 674-691.
- Edwards, V. & Corson, D.** (1997). *Encyclopedia of Language and Education* (Volume 2). Rotterdam: Springer Netherlands.
- Ehala, M.** (2015). Ethnolinguistic vitality. *The International Encyclopedia of Language and Social Interaction*, 3, 1-7.
- Eisner, E. W.** (1991). *The Enlightened Eye: Qualitative Inquiry and Enhancement of Educational Practice*. New York: Macmillan.
- Elman, A. B.** (2013). The civil examination system in late imperial China. *Frontier History China*, 8 (1), 32-50.
- Elman, B. A.** (2000). *A Cultural History of Civil Examinations in Late Imperial China*. Berkeley, California: University of California Press.
- Elton, G. R.** (1969). Second thoughts on history at the universities. *History*, LIV, 66-68.
- Eurydice, U.** (2001). *Foreign Language Teaching in Schools in Europe — Country Report in Ireland*. European Commission.
- Eurydice, U.** (2006). *Content and Language Integrated Learning (CLIL) at School in Europe*. Brussels: European Commission.
- Evans, S.** (1998). The Morrison Education Society School and the beginning of Anglo-Chinese education in Hong Kong. *Hong Kong Journal of Applied Linguistics*, 3 (1), 17-40.
- Evans, S.** (2002). Macaulay's minute revisited: Colonial language policy in nineteenth-century India. *Journal of Multilingual and Multicultural Development*, 23 (4), 260-282.
- Evans, S.** (2003). *The introduction and spread of English-language education in Hong Kong (1842-1913): A study of language policies and practices in British colonial education* (Unpublished doctoral dissertation). The University of Edinburgh, Edinburgh.

- Evans, S.** (2006). Language policy in British colonial education: evidence from nineteenth-century Hong Kong. *Journal of Educational Administration*, 38 (3), 293-312.
- Evans, S.** (2008 a). The introduction of English-language education in early colonial Hong Kong. *History of Education*, 37 (3), 383-408.
- Evans, S.** (2008 b). The making of a colonial school: a study of language policies and practices in nineteenth-century Hong Kong. *Language and Education*, 22 (6), 345-362.
- Evans, S.** (2008 c). Disputes and deliberations over language policy: the case of early colonial Hong Kong. *Language Policy*, 7, 47-65.
- Evans, S.** (2009). The medium of instruction in Hong Kong revisited: Policy and practice in the reformed Chinese and English streams. *Research Papers in Education*, 24 (3), 287-309.
- Evans, S.** (2010). Language in transitional Hong Kong: Perspectives from the public and private sectors. *Journal of Multilingual and Multicultural Development*, 31(4), 347-363.
- Evans, S.** (2011). Historical and comparative perspectives on the medium of instruction in Hong Kong. *Language Policy*, 10 (1), 19-36.
- Evans, S.** (2016). *The English Language in Hong Kong: Diachronic and Synchronic Examination System*. Cambridge, Massachusetts: Harvard University Press.
- Fairbank, J. K.** (2006 a). *The Cambridge History of China: Late Qing*. Beijing: China Social Sciences Press.
- Fairbank, J. K.** (2006 b). *China: A New History*. Cambridge, Massachusetts: Belknap Press.
- Fairbank, J. K. & Liu, G. J.** (1985). *The Cambridge History of China in the Late Qing Period*. Beijing: China Social Sciences Press.
- Fan, B. C.** (2009). *The Policy of Modernization in Qing Dynasty*. Shanghai: Shanghai Bookstore Publishing House.

- Feng, A. W.** (2005). Bilingualism for the minor or the major? An evaluative analysis of parallel conceptions in China. *The International Journal of Bilingual Education and Bilingualism*, 8 (6), 529-551.
- Feng, A. W.** (2007). *Bilingual Education in China*. Clevedon: Multilingual matters.
- Feng, A. W. & Adamson, B.** (2018). Language policies and sociolinguistic domains in the context of minority groups in China. *Journal of Multilingual and Multicultural Development*, 39 (2), 169-180.
- Feng, J. & Xu, H. H.** (2012). Decoder, or search engine? Examples about the Maintenance Bilingual Teaching of Foreign Architectural History in SCUT. *Proceedings of Chinese and Foreign Architectural History Education International Conference*, 85-91.
- Feng, L. S. & Niu, Y. H.** (2007). A study on the first group of dispatched overseas students from Imperial Peking University. *Historical Archives*, 3, 88-98.
- Ferguson, C.** (1977). Sociolinguistic setting of language planning. In J. Rubin. (Ed.) *Language Planning Process* (pp. 9-30). Hague; Mouton Publishers.
- Ferguson, G.** (2006). *Language Planning and Education*. Edinburgh: Edinburgh University Press.
- Fishel, W.** (1952). *The End of Extraterritoriality in China*. Berkeley, California: University of California Press.
- Fishman, A. J.** (1991). *Reversing Language Shift: Theoretical and Empirical Foundations of Assistance to Threatened Languages*. Clevedon: Multilingual Matters.
- Fishman, A. J.** (2001). *Can Threatened Languages be Saved? Reversing Language Shift, Revisited: A 21st Century Perspective*. Clevedon: Multilingual Matters.
- Fishman, A. J., Cooper, R. L. and Ma, R.** (1971). *Bilingualism in the Barrio*. Bloomington, Indiana: Indiana University Press.
- Flick, U.** (2007). *Managing Quality in Qualitative Research*. London: Sage.
- Flick, U.** (2009). *An Introduction to Qualitative Research*. London: Sage.

- Fong, M. T.** (2015 a). Fifty years of Qing studies — and late imperial China. *Late Imperial China*, 36 (1), 5-6.
- Fong, M. T.** (2015 b). Early modern China in the late imperial world. *Late Imperial China*, 36 (2), 126-129.
- Ford, D.** (1988). *The twain shall meet: The current study of English in China*. London: McFarland & Company Publishers.
- Foucault, M.** (1979). *Discipline and Punish*. Harmondsworth: Penguin.
- Foucault, M.** (1991). Governmentality. In G. Burchell, C. Gordon, & P. Miller. (Eds.) *The Foucault effect: Studies in governmentality* (pp. 87-104). Chicago: University of Chicago Press.
- Fraenkel, J. R. & Wallen, N. E.** (2000). *How to Design and Evaluate Research in Education*. Boston: McGraw-Hill Incorporation.
- Fu, K.** (1986). *The History of Foreign Language Education in China*. Shanghai: Shanghai Foreign Language Education Press.
- Furay, C. & Salevouris, J. M.** (2010). *The Methods and Skills of History: A Practical Guide*. Illinois: Harlan Davidson.
- Gao, F. & Park, J.** (2012). Korean-Chinese Parents' Language Attitudes and Additive Bilingual Education in China. *Journal of Multilingual & Multicultural Development*, 33 (6), 539-552.
- Gao, S. L.** (1992). *The Collections of the Historical Records of Education in the Modern China—Education in Self-Strengthening Period*. Shanghai: Shanghai Foreign Language Education Press.
- Gao, X. F.** (2007). *Studies on FLE in Westernization Schools in Late Qing Dynasty*. Beijing: The Commercial Press.
- Gao, X. F. & Li, K. T.** (2009). On the Gains and Losses of FLE Planning during the Westernization Movement. *Journal of Beihua University Social Sciences*, 10 (4), 52-57.

- García, O. & Beardsmore, B. H.** (2009). *Bilingual Education in the 21st Century: A Global Perspective*. Malden, Massachusetts: Wiley-Blackwell.
- Gay, R. L. & Airasian, P.** (2000). *Educational Research: Competencies for Analysis and Experience*. New Jersey: Prentice-Hall.
- Gazzola, M.** (2006). Managing multilingualism in the European Union: language policy evaluation for the European Parliament. *Language Policy*, 5 (4), 395-419.
- Ge, F. P.** (2015). France and the political situation in late Qing periods. *Historical Review*, 5, 97-110.
- Giddens, A.** (1971). *Capitalism and Modern Social Theory: An Analysis of the Writings of Marx, Durkheim, and Max Weber*. Cambridge: Cambridge University Press.
- Gill, S. K.** (2004). Medium of instruction policy in higher education in Malaysia: Nationalism versus internationalization. In J. W. Tollefson and A. B. M. Tsui. (Eds.) *Medium of instruction policies: Which agenda? Whose agenda?* (pp. 135-152). Mahwah. New Jersey: Lawrence Erlbaum.
- Glaser, B. & Strauss, A.** (1967). *The Discovery of Grounded Theory*. London: Weidenfield & Nicolson.
- Glasgow, P. G. & Paller, L. D.** (2016). English language education policy in Japan: At a crossroads. In R. Kirkpatrick. (Ed.) *English Language Education Policy in Asia* (pp. 153-180). Gewerbestrasse: Springer International Publishing.
- Glück, H.** (2013). *Die Fremdsprache Deutsch in Zeitalter von Aufklärung, Klassik und Romantik*. Wiesbaden: Harrassowitz.
- Goto-Shibata, H.** (2006). Internationalism and nationalism-Anti-western sentiments in Japanese foreign policy debates, 1918-1922. In S. Naoko. (Ed.) *Nationalisms in Japan* (pp. 66-84). London: Routledge.

- Gottlieb, N.** (2001). Language planning and policy in Japan. In N. Gottlieb & P. Chen. (Eds.) *Language Planning and Language Policy: East Asian Perspectives* (pp. 21-48). Richmond: Curzon Press.
- Gottlieb, N.** (2005). *Language and Society in Japan*. Cambridge: Cambridge University Press.
- Gottlieb, N.** (2011). Japan: Language planning and policy in transition. *Current Issues in Language Planning*, 9 (1), 1-68.
- Gottlieb, N. & Chen, P.** (2001). *Language Planning and Language Policy: East Asian Perspectives*. Surrey: Curzon Press.
- Gramsci, A.** (1971). *Selections from the Prison Notebooks*. London: Lawrence and Wishart.
- Grbich, C.** (2007). *Qualitative Data Analysis: An Introduction*. London: Sage.
- Greenfeld, L.** (1992). *Nationalism: Five Roads to Modernity*. Cambridge, Massachusetts: Harvard University Press.
- Grooms, M. A.** (2011). *Bilingual Education in the United States: An Analysis of the Convergence of Policy, Theory and Research*. (Unpublished doctoral dissertation). University of Pittsburgh, Pittsburgh.
- Grypma, S.** (2008). Critical issues in the use of biographic methods in nursing history. In S. B. Lewenson & E. K. Herrman. (Eds.) *Capturing Nursing History: Guide to Historical Methods in Research*. New York: Springer.
- Gu, M. Y.** (2009). College English learners' discursive motivation construction in China. *System*, 37 (2), 300-312.
- Gu, S. C.** (2004). My bilingual education. *Foreign Languages*, 1, 47-51.
- Gu, W. X.** (2002 a). Debate among Missionaries on English Teaching at Mission Schools in Late Qing Dynasty. *Journal of PLA University of Foreign Languages*, 25 (1), 18-22.

- Gu, W. X.** (2002 b). Analytical studies on the Grammar-Translation method in Late Qing Dynasty. *Academic Journal of Suzhou University (Philosophy and Social Sciences)*, 2, 87-90.
- Gu, W. X.** (2003). Studies on English teaching in Chinese schools prior to Tong Wen Guan. *Journal of PLA Universities of Foreign Languages*, 26 (3), 42-46.
- Gu, W. X.** (2004 a). A historical study of English education at Peking Translation College. *Foreign Languages and their Teaching*, 182 (5), 23-27.
- Gu, W. X.** (2004 b). *A Study on English Education in Late Imperial China*. Suzhou: Suzhou University Press.
- Gu, W. X.** (2005). From language education for survival to science education for development — On the development of English education in late imperial China. *Foreign Languages and Their Teaching*, 9, 31-35.
- Guo, S. S.** (2011). An exploration for the innovations in the cultural aspect of foreign language education: the restructure and export of Chinese culture. *Journal of Changchun University of Science and Technology*, 24 (8), 131-132.
- Guo, T. Y.** (1999). *The Modern History of China (vol. 1)*. Beijing: China Social Sciences Press.
- Guo, W. D.** (2000). On the changes in the policy of church-ban in Qing Dynasty. *Historical Research in Anhui*, 1, 38-44.
- Habermas, J.** (1973). *Theory and Practice*. Boston: Beacon Press.
- Habermas, J.** (1989). *The Structural Transformation of the Public Sphere*. Cambridge, Massachusetts: The MIT Press.
- Halls, W. D.** (1970). *Foreign Languages and Education in Western Europe*. London: George G. Harrap & Co. LTD.
- Hamers, J. F. & Blanc M.** (2000). *Bilinguality and Bilingualism*. Cambridge: Cambridge University Press.

- Hamid, O. M.** (2014). English-medium instruction at universities: global challenges. *Current Issues in Language Planning*, 15 (1), 108-110.
- Hamid, O. M., Jahan, I. & Islam, M. M.** (2013). Medium of instruction policies and language practices, ideologies and institutional divides: voices of teachers and students in a private university in Bangladesh. *Current Issues in Language Planning*, 14 (1), 144-163.
- Hamid, O. M., Nguyen, T. M. H. & Kamwangamalu, M. N.** (2014). Medium of Instruction in Africa: Commentary. *Current Issues in Language Planning*, 15 (1), 1-3.
- Han, K.** (2009). *A comparative study of English education in China and Germany* (Unpublished master dissertation). Jilin University, Changchun, China.
- Hao, C. M.** (2012). Enforcement problems and suggestions on educational policies of college English. *Journal of Changchun University*, 22 (9), 1159-1163.
- Hao, P.** (2013). *Peking University And the Origins of Higher Education in China*. Beijing: Peking University Press.
- Harries, J.** (2012). The great delusion: post-colonial language policy for mission and development in Africa reviewed. *Transformation: An International Journal of Holistic Mission Studies*, 29 (1), 44-61.
- Harvey, C. & Press, J.** (1996). *Databases in Historical Research: Theory, Methods and Applications*. Basingstoke: Palgrave Macmillan.
- Hashimoto, K.** (2007). Japan's language policy and "the lost decade". In A. B. M. Tsui & J. M. Tollefson. (Eds.). *Language Policy, Culture, and Identity in Asian Contexts* (pp. 25-36). New York and London: Routledge.
- Hatch, J. A.** (2002). *Doing Qualitative Research in Education Settings*. Albany: State University of New York Press.
- He, H. W. & Zhong, H. T.** (2004). The characteristics of the mission schools in late Qing periods. *Journal of Capital Normal University*, 3, 12-14.

- He, W., Xu, Y. & Zhu, J. H.** (2011). Bilingual teaching in nursing education in China: evolution, status and future directions. *Nursing & Health Sciences*, 13 (3), 371-377.
- Hemat, G. M. & Heng, S. C.** (2012). Interplay of language policy, ethnic identity and national identity in five different linguistic settings. *International Journal of Applied Linguistics & English Literature*, 1(7), 1-7.
- Herda, E.** (1999). *Research Conversations and Narrative: A Critical Hermeneutic Orientation in Participatory Inquiry*. Westport, Connecticut: Praeger Publishers.
- Heugh, K.** (2009). Literacy and bi/multilingual education in Africa: recovering collective memory and knowledge. In T. Skutnabb-Kangas, R. Phillipson, A. K. Mohanty & M. Panda. (Eds.). *Social Justice through Multilingual Education* (pp.103-124). Bristol: Multilingual Matters.
- Hevia, J.** (2012). *The Imperial Security State: British Colonial Knowledge and Empire-building in Asia*. Cambridge: Cambridge University Press.
- Hiroshi, A.** (1990). *Chinese Modern Education and Meiji Japan*. Tokyo: Fukumura Shuppan.
- Ho, W. K. & Wong, R. Y. L.** (2003). *English Language Teaching in East Asia Today; Changing Policies and Practices*. Singapore: Eastern Universities Press.
- Hoffenberg, PH.** (2011). Art and the British Empire. *Victorian Studies*, 53 (3), 584-586.
- Hogwood, B. W. & Gunn, L. A.** (1984). *Public Policy Analysis for the Real World*. Oxford: Oxford University Press.
- Hon, K. T.** (2002). Zhang Zhidong's proposal for reform: a new reading of the Quanyue pian. In R. E. Karl & P. Zarrow. (Eds.) *Rethinking the 1898 Reform Period: Political and Cultural Change in Late Qing China* (pp. 77-98). Cambridge (Massachusetts) and London: Harvard University Press.

- Hong, G.** (2007). What are the obstacles in FLT reform in China.— A review of ELT in China: problems and suggested solutions. *Shandong Foreign Languages Journal*, 2, 7-10.
- Hornberger, N. H.** (1996). *Indigenous Literacies in the Americas: Language Planning from the Bottom Up*. Berlin: Mouton de Gruyter.
- Hornberger, N. H.** (2003). *Continua of Biliteracy: An Ecological Framework for Educational Policy, Research, and Practice in Multilingual Settings*. Clevedon: Multilingual Matters.
- Hosoki, Y.** (2011). English language education in Japan: Transitions and challenges. *Paper collections of International relations*, 6 (1&2), 199-215.
- Hossein, A. & Tollefson, J.** (2007). Language policy in education in Bangladesh. In A. B. M. Tsui & J. Tollefson. (Eds.) *Language Policy, Culture and Identity in Asian Contexts* (pp. 241-258). Mahwah, New Jersey: Lawrence Erlbaum.
- Hou, J.** (2016). On China's culture and cultivation of English intellectuals. *Journal of Language and Literature Studies*, 4, 79-81.
- Howatt, A. P. R.** (1984). *A History of English Language Teaching*. Oxford: Oxford University Press.
- Howatt, A. P. R. & Smith, R.** (2000). *Foundations of Foreign Language Teaching: Nineteenth-century Innovators*. London: Routledge.
- Howatt, A. P. R. & Smith, R.** (2002). *Modern Language Teaching: The Reform Movement. Five vols with General Introduction and volume introductions*. London: Routledge.
- Howatt, A. P. R. & Smith, R.** (2014). The history of teaching English as a foreign language, from a British and European Perspective. *Language & History*, 57 (1), 75-95.
- Howatt, A. P. R. & Widdowson, H. G.** (2004). *A History of English Language Teaching* (2nd edition). Oxford: Oxford University Press.
- Howe, S.** (2002). *Empire: A Very Short Introduction*. Oxford: Oxford University Press.

- Howell, M. & Prevenier, W.** (2001). *From Reliable Sources: An Introduction to Historical Methods*. Ithaca, New York: Cornell University Press.
- Hsieh, H. F. & Shannon, E. S.** (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277-1288.
- Hsü, C. Y. I.** (2000). *The Rise of Modern China*. New York: Oxford University Press.
- Hu, G. W.** (2005). English language education in China: policies, progress, and problems. *Language Policy*, 4(1), 5-24.
- Hu, G. W.** (2007). The juggernaut of Chinese-English bilingual education. In A. W. Feng. *Bilingual education in China: Practice, policies and concepts* (pp. 94-126). Clevedon: Multilingual Matters Ltd.
- Hu, G. W.** (2008). The misleading academic discourse on Chinese-English bilingual education in China. *Review of Educational Research*, 78 (2), 195-231.
- Hu, G. W. & Lei, J.** (2014). English-medium instruction in Chinese high education: a case study. *Higher Education: The International Journal of Higher Education and Education Planning*, 67 (5), 551-567.
- Hu, G. W., Li, L. & Lei, J.** (2014). English-medium instruction at a Chinese university: rhetoric and reality. *Language Policy*, 13, 21-40.
- Hu, L. Y.** (2007). Language policy, practice and diglossia in colonial and post-colonial Hong Kong. *Annual of Language & Politics and Politics of Identity*, 1, 85-94.
- Hu, M. Y.** (2009). On bilingual education in Chinese universities. *Science*, 14, 105-106.
- Hu, W. Q.** (1996). The educational ideas and practices of the missionary Alvin Parker. *Modern Chinese History Studies*, 244-262.
- Hu, W. Z.** (2001). A matter of balance — reflections on China's foreign language policy in education. *Asian Englishes*, 4 (1), 66-79.
- Hu, W. Z.** (2011). Planning for foreign language education is imperative for China. *Foreign Language Teaching and Research*, 43 (1), 130-136.

- Hu, Z. L.** (2015). Reflections on the reform of foreign language education in China. *Foreign Language Education*, 36 (1), 52-55.
- Huang, L. H.** (2013). Lin Zexu's diplomatic activities and the early diplomatic translation in the modern era. *Lantai World*, 8, 81-82.
- Huang, S. J.** (2006). *The Development of Educational Policies in late Imperial China (1862-1911)*. Taipei: Psychology Press.
- Huang, Z. C. & Pan, J. P.** (2011). The factor analysis on the "dumb English" education program in China, Japan and Korea. *Studies in Foreign Education*, 8, 5-8.
- Hurt, J.** (1971). *Education in Evolution: Church, State, Society and Popular Education 1800-1870*. London: Hart-Davis.
- Husén, T. & Postlethwaite, N. T.** (1994). *The International Encyclopedia of Education*. Oxford: Pergamon.
- Ike, M.** (1995). A historical review of English in Japan (1600-1880). *World Englishes*, 14 (1), 3-11.
- Imura, M.** (2003). *200 years of English language education in Japan*. Tokyo: Nihonhyouronsha.
- Inoguchi, T.** (2002). *Japan's Asian Policy: Revival and Response*. Palgrave Macmillan.
- Jahr, E. H.** (1992). Sociolinguistics: Language planning. In W. Bright. (Ed.) *International Encyclopedia of Linguistics*. Vol. IV (pp.12-15). Oxford: Oxford University Press.
- Jensen, J.** (2007). National foreign language policy: a state language coordinator's perspective. *The Modern Language Journal*, 91 (2), 261-264.
- Ji, Y. X. & Chen, W. M.** (2007). *Linguistic Obstacles and Modernization in Late Imperial China*. Beijing: Xueyuan Press.
- Jia, G.** (2014). A study on legal education at Peiyang University. *Social Sciences Review*, 29 (8), 153-156.
- Jiang, M. L.** (2004). *The Autobiography of Jiang Menglin*. Beijing: Union Press.

- Jiang, W. J.** (2014). The importance and challenge of using CLT in China. *Overseas English*, 15, 279-282.
- Jiang, Y.** (2013). Evaluation on degree and result of bilingual education of business courses in GDUFS. *English Language Teaching*, 8 (6), 175-183.
- Jiao, X. J.** (2011). *How to be an Excellent English Teacher*. Shanghai: East China Normal University Press.
- Jin, A. Q.** (1954). A Biography of Lin Zexu 'in *A Collection of Historical Records on the Modern History of China*, Shanghai: Shanghai New Knowledge Press.
- Jin, L. & Cortazzi, M.** (2003). English language teaching in China, a bridge to the future. In W. K. Ho & R. Y. L. Wong. (Eds.) *English Language Teaching in East Asia Today* (pp. 134-147). Singapore: Eastern Universities Press.
- Jin, L. X., Jiang, C. S., Zhang, J., Yuan, Y., Liang, X. H. & Xie, Q.** (2014). Motivations and expectations of English language learning among primary school children and parents in China. *ELT Research Papers*, 14 (1), 1-33.
- Johnson, B. & Christensen, L.** (2004). *Educational Research: Quantitative, Qualitative and Mixed Approaches*. Boston: Pearson Education Inc.
- Johnson, C. D.** (2013). *Language Policy*. New York: Palgrave Macmillan.
- Johnson, C. D. & Johnson, J. E.** (2015). Power and agency in language policy appropriation. *Language Policy*, 14, 221-243.
- Johnstone, W. C.** (1937). International Relations: The Status of Foreign Concessions and Settlements in the Treaty Ports of China. *The American Political Science Review*, 31 (5), 942-8.
- Jongeneel, A. B. J., Ng, T. M. P., Paek, K. C. & Sunkuist, W. S.** (2009). *Christian Mission and Education in Modern China, Japan and Korea: Historical Studies*. Pieterlen and Bern: Peter Lang.

- Joseph, J. E.** (2011). The unilingual republic of the world: reactions to the 1872 proposal to make English the national language of Japan. *Paper presented to Presidential Forum of the North American Association for the History of the Language Science, Boston*. Retrieved from [http://www.research.ed.ac.uk/portal/en/publications/the-unilingual-republic-of-the-world\(c8b17910-3e81-428d-ae2b-0ce999c6ef48\).html](http://www.research.ed.ac.uk/portal/en/publications/the-unilingual-republic-of-the-world(c8b17910-3e81-428d-ae2b-0ce999c6ef48).html).
- Kachru, B. B.** (1992). Teaching World Englishes. In Kachru, B. B. (Ed.), *The Other Tongue: English across Cultures* (2nd.) (pp. 355-365). Illinois: University of Illinois Press.
- Kaiser, S.** (2003). Language and script in Japan and other East Asian countries: between insularity and technology. In J. Maurais and M. A. Morris. (Eds.) *Languages in a Globalising World* (pp.188-202). Cambridge: Cambridge University Press.
- Kamil, M. L., Mosenthal, P. B., Pearson, P. D., & Barr, R.** (2002). *Handbook of Reading Research*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Kaplan, R. B. & Baldauf, R. B., Jr.** (1997). *Language Planning: From Practice to Theory*. Clevedon: Multilingual Matters.
- Karl, E. R. & Zarrow, P.** (2002). *Rethinking the 1898 Reform Period: Political and Cultural Change in Late Qing China*. Massachusetts: Harvard University Press.
- Kawasumi, T.** (1999). Japanese people, English language, and the problems of whether to continue or abolish English language education. *The English Teachers' Magazine*, 47, 14-17.
- Keishū, S.** (1970). *History of Chinese students in Japan (enlarged ed.)*. Tokyo: Kuroshio Shuppan.
- Kelly, G. P. & Altbach, P. G.** (1978). *Education and Colonialism*. New York and London: Longman.
- Kim, E. G., Kweon, S. O. & Kim, J. E.** (2017). Korean engineering students' perceptions of English-medium instruction (EMI) and L1 use in EMI classes. *Journal of Multilingual and Multicultural Development*, 38 (2), 130-145.

- Kim, E. H.** (2014). *Doctors of Empire: Medical and Cultural Encounters between Imperial Germany and Meiji Japan*. Toronto: University of Toronto Press.
- Kirkgöz, Y.** (2005). English language teaching in Turkey: Challenges for the 21st century. In G. Braine. (Ed.) *Teaching English to the world: History, curriculum, and practice* (pp. 159-175). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Kirkgöz, Y.** (2009). Globalization and English language policy in Turkey. *Education Policy*, 23 (5), 663-684.
- Kirkpatrick, A.** (2012). *English as an International Language in Asia: Implications for Language Education*. Rotterdam: Springer Netherlands.
- Kitao, K. & Kitao, K. S.** (1995). *English teaching: Theory, research, practice*. Tokyo: Eichosha.
- Ko, H. K.** (2017). A brief history of Imperial Examination and its influences. *Society*, 54 (3), 272-278.
- Koch, E.** (2015). Testing in bilingual education projects: lessons learnt from the additive bilingual education project. *Per Linguam*, 31 (2), 79-93.
- Koike, I. & Tanaka, H.** (1995). English in FLE policy in Japan: Toward the twenty-first century. *World Englishes*, 14 (1), 13-25.
- Kondracki, N. L. & Wellman, N. S.** (2002). Content analysis: Review of methods and their applications in nutrition education. *Journal of Nutrition Education and Behavior*, 34, 224-230.
- Kong, S. H.** (2007). *A study of contemporary language policy in Malaysia* (Unpublished master dissertation). South China Normal University, Guangzhou, China.
- Krippendorff, K.** (2004). *Content analysis: an introduction to its methodology* (2nd edition). London: Sage Publications.

- Krzyzanowaki, M. & Wodak, R.** (2011). Political strategies and language policies: the European Union Lisbon strategy and its implications for the EU's language and multilingualism policy. *Language Policy*, 10 (2), 115-136.
- Kubota, R.** (1998). Ideologies of English in Japan. *World Englishes*, 17 (3), 295-306.
- Kumaravadivelu, B.** (2008). *Understanding language teaching: From method to postmethod*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Kung, W. F.** (2013). The more the merrier? Bilingualism in an academic perspective: exploring the implementation of English-medium instruction in Taiwanese Tertiary Education. *Asian EFL Journal*, 15 (4), 8-36.
- Kuteeva, M. & Airey, J.** (2014). Disciplinary differences in the use of English in higher education: reflections on recent language policy developments. *Higher Education*, 67 (5), 533-549.
- Kyung, Y. C. & Hwan, S. H.** (2011). Educating supranational citizens: the incorporation of English language education into curriculum policies. *American Journal of Education*, 117 (2), 183-209.
- Lackner, M. & Vittinghoff, N.** (2004). *Mapping Meanings: the Field of New Learning in Late Qing China*. Leiden, Boston: Brill Publishers.
- Lai Auyeung, Y. W.** (1994). *The Chinese language curriculum in the People's Republic of China from 1978 to 1986: curriculum change, diversity and complexity*. (Unpublished doctoral dissertation). The University of Hong Kong, Hong Kong.
- Larsen-Freeman, D.** (1986). *Techniques and Principles in Language Teaching*. Cambridge: Cambridge University Press.
- Lasagabaster, D. & J. M. Sierra.** (2009). Language attitudes in CLIL and traditional EFL classes. *International CLIL Research Journal*, 1(2), 4-17.
- Lasagabaster, D. & J. M. Sierra.** (2010). Immersion and CLIL in English: more differences than similarities. *ELT Journal*, 64(4), 367-75.

- Latham, S. A.** (1998). The advantages of bilingualism. *Educational Leadership*, 56 (3), 79-80.
- Le Mottee, S.** (2008). Language in education. In Open Society Initiative for Southern Africa (OSISA). Opening Societies Through Advocacy. *OPENSOURCE*, 2(3).
- Lei, J. & Hu, G. W.** (2014). Is English-medium instruction effective in improving Chinese undergraduate students' English competence? *International Review of Applied Linguistics in Language Teaching*, 52 (2), 99-126.
- Leibo, S. A.** (1985). *Transferring technology to China: Prosper Giquel and the Self-Strengthening Movement*. Berkeley, California: Center for Chinese Studies, Institute of East Asian Studies, University of California.
- Leibowitz, H.** (1974). *Language as a means of social control*. Paper presented at the eighth World Congress of Sociology. Toronto, Ontario, Canada. Retrieved from: <http://files.eric.ed.gov/fulltext/ED093168.pdf>.
- Li, C. B.** (2001). *The Christian medical services and the modern society in China (1835-1937)* (Unpublished doctoral dissertation). Suzhou University, Suzhou, China.
- Li, C. C.** (1987). *The Historical Records of Imperialism Education in China*. Beijing: Education Sciences Press.
- Li, C. S. & Xu, B. F.** (2006). *A History of Modern Foreign Language Education in China*. Shanghai: Shanghai Foreign Language Education Press.
- Li, D. & Dai, X. J.** (1978). The development of China's modern science and its achievements. *Journal of Inner Mongolia University*, 8, 40-53.
- Li, D. F.** (2013). On Zhang Zhidong and education reform in New Deal in late Qing Dynasty, *Journal of Luoyang Institute of Science and Technology*, 28 (5), 64-67.
- Li, G. C.** (2007). China foreign-educated students and foreign language education during the period between the Late Qing Dynasty and the Early Republic China. *Journal of Foshan University* (Social Science edition), 25 (5), 67-71.

- Li, J. & Yao, K. M.** (2014). Research on Bilingual Teaching in Colleges and Universities in China. *Theory and Practice in Language Studies*, 4(4), 800-805.
- Li, J. Q.** (1999). Empress Dowager Cixi in the Hundred Days' Reform and "New Policies" Reform. *Literature, History & Philosophy*, 1, 43-48.
- Li, J. Y.** (2010). *A Study of Foreign Language Education in Late Imperial China from a Perspective of Military Needs*. Changsha: Hunan University Press.
- Li, K. C.** (1997). *The history of teacher training education in late Ching China (1897-1911)* (Unpublished doctoral dissertation). The Chinese University of Hong Kong, Hong Kong.
- Li, K. R.** (2017). A study on the problems of bilingual education practices in China's universities. *Industry & Science Tribune*, 16 (20), 157-158.
- Li, M.** (2010). *A study on the development of industry for saving China in the late Qing Dynasty and early Republic of China* (Unpublished doctoral dissertation). Shanxi Normal University, Linfen, China.
- Li, S. K.** (1979). *The Modern History of China*. Taipei: San Min Book Company.
- Li, S. T.** (1935). China's engineering education in 40 years. *Quarterly Journal of Science and Engineering at Peiyang University*, 4 (2), 1-8.
- Li, S. T.** (1989). *A 53-year History of Peiyang University*. Tianjin: Tianjin University Press.
- Li, X. Z.** (2012). *Local Governors and New Policy Reforms: Further Study on the Power Structure in Late Qing*. Beijing: Social Sciences Academic Press.
- Li, Y. M.** (2015). Sino-Japanese Naval War and the *Treaty of Shimonoseki* and the changes in the relations between China and the foreign countries. *Studies on Sino-Japanese War*, 2, 127-147.
- Li, Y. N., Ai, F. & Shi, J.** (2013). *Comments on China*. Beijing: China's Working Press.
- Li, Z.** (1987). An analysis of the causes for the progression and development in the modern history of higher education in China. In Z. Li. (Ed.) *Collection of Papers on Higher Education* (pp.31-36). Xiamen: Xiamen University Press.

- Lin, A. M. Y. & Martin, P. W.** (2005). *Decolonization, Globalization and Language-in-education Policy and Practice*. Clevedon: Multilingual Matters.
- Lin, L. & Morrison, B.** (2010). The impact of the medium of instruction in Hong Kong secondary schools on tertiary students' vocabulary. *Journal of English for Academic Purposes*, 9 (4), 255-266.
- Lin, Q. Y.** (1986). *The History of Chinese Navy Yard*. Fuzhou: Fujian People's Press.
- Lin, Q. Y.** (2000). *A Critical Biography of Lin Zexu*. Nanjing: Nanjing University Press.
- Lin, Y. B.** (1985). On the 'Translation Project' led by Lin Zexu. In Research Center of Fujian Social Sciences Academy. (Ed.) *The Collection of Research Articles on Lin Zexu and the Opium Wars* (pp. 118-137). Fuzhou: Fujian People's Press.
- Lincoln, Y. S. & Guba, E. G.** (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln. (Eds.) *Handbook of Qualitative Research* (pp.163-188). Thousand Oaks, California: Sage.
- Little, D.** (2007). The Common European Framework of reference for languages: perspectives on making of supranational language education policy. *The Modern Language Journal*, 91 (4), 645-655.
- Liu, L. & Shi, X. Z.** (2003). *Well-known Naval Families in Fuzhou in History*. Fuzhou: Haifeng Press.
- Liu, L. D.** (2017). On the problems and solutions of bilingual education in China's universities — an empirical study on the bilingual education in South China Agricultural University. *Journal of Hubei University for Nationalities*, 35 (4), 171-179.
- Liu, M. H.** (2007). Chinese students' motivation to learn English at the tertiary level. *Asian EFL Journal*, 9 (1), 126-146.
- Liu, S. L.** (2001). *Sanctuary of Excellence: the History of Ying Wa College*. Hong Kong: Ying Wa College Old Boys' Association.

- Liu, Y. D.** (2014). An inaugural speech at the opening ceremony of world language conference. *Journal of Foreign Languages*, 39 (3), 2-4.
- Liu, Y. J. & Fan, X. H.** (2015). Teacher cooperation between discipline-specific teachers and English teachers: A new mode of bilingual teaching team construction at universities. *Northwest Medical Education*, 23 (1), 148-150.
- Liu, Y. L.** (2016). The solutions and strategies of the reform on college English education. *Research in Educational Development*, 1, 4.
- Liu, Z. & Cui, X. Q.** (2008). *The ELT situation in China*. Extremely large telescopes: Which wavelengths: Retirement symposium for Arne Ardeberg. Retrieved from: <http://dx.doi.org/10.1117/12.801257>.
- Llinares, A. & Dalton-Puffer, C.** (2015). The role of different tasks in CLIL students' use of evaluative language. *System*, 54, 69-79.
- Llinares, A., Morton, T., & Whittaker, R.** (2013). *The Roles of Language in CLIL*. Cambridge: Cambridge University Press.
- Lo, Y. & Macaro, E.** (2012). The medium of instruction and classroom interaction: evidence from Hong Kong secondary schools. *International Journal of Bilingual Education and Bilingualism*, 15 (1), 29-52.
- Løfsgaard, A. K.** (2015). *The history of English education Japan — motivations, attitudes and methods* (Unpublished master dissertation). University of Oslo, Oslo.
- Lorenzo, F., Casal, M. and Moore, P.** (2007). Models and practice in CLIL. *Monograph on CLIL*, 1, 11–16.
- Lovell, J.** (2012). *The Opium War: Drugs, Dreams and the Making of China*. London: Picador.
- Luo, Y. H.** (2017). An analysis of the problems of bilingual education in China's tertiary education and its solutions. *Contemporary Education Research and Teaching Practice*, 11, 104-105.

- Lutz, G. J.** (1971). *China and the Christian Colleges 1850-1950*. Ithaca: Cornell University Press.
- Ma, Y. W. & Liao, Y.** (2017). The reform and practice of English education in China's universities from the perspective of ESP. *Journal of the Chinese Society of Education*, 7, 110-112.
- Majhanovitch, S.** (2014). Neo-liberalism, globalization, language policy and practice issues in the Asia-Pacific region. *Asia Pacific Journal of Education*, 34 (2), 168-183.
- Mariotti, C.** (2006). Negotiated interactions and repair patterns in CLIL settings. *Views*, 15 (3), 33-40.
- Marsh, D.** (2002). *CLIL/EMILE - The European dimension: Actions, trends and foresight potential*. European Commission, DG EAC.
- Martin, W.** (1966). *A Cycle of Cathay with Personal Reminiscences*. Taipei: Ch'eng-Wen Publishing Company.
- Matsuda, A.** (2003). The ownership of English in Japanese secondary schools. *World Englishes*, 22(4), 483-496.
- Matteo, B.** (2013). Politics without the native: liberal culturalism and the language policy of the European Union. *Politics*, 33 (3), 196-206.
- Maurizio, G.** (2015). Code-switching and plurilingualism in English-medium education for academic and professional purposes. *Language Learning in Higher Education*, 5(1), 83-103.
- May, S.** (2001). *Language and minority rights: Ethnicity, Nationalism and the Politics of Language*. London: Longman.
- Maykut, P. & Morehouse, R.** (1994). *Beginning Qualitative Research: A Philosophic and Practical Guide*. Washington: Falmar.

- Mazrui, A. M.** (2002). The English language in African education: Dependency and decolonization. In J.W. Tollefson. (Ed.) *Language Policies in Education: Critical Issues* (pp.267-281). Mahwah, New Jersey: Lawrence Erlbaum.
- McBurney, D. & White, T.** (2007). *Research Methods*. Belmont, California: Wadsworth.
- McCarty, T. L.** (2011). Introducing ethnography and language policy. In T. L. McCarty. (Ed.) *Ethnography and Language Policy* (pp. 1-28). London: Routledge.
- McCulloch, G. & Richardson, W.** (2000). *Historical Research in Educational Settings*. Buckingham: Open University Press.
- McDowell, W. H.** (2002). *Historical Research: a Guide*. London: Longman.
- McGlynn, C.** (2013). *Language in education policy and practice in post-colonial Africa: an ethnographic case study of the Gambia*. (Unpublished doctoral dissertation). University of East London, London.
- Mckenzie, M. R.** (2008). The complex and rapidly changing sociolinguistic position of the English language in Japan: a summary of English language contact and use. *Japan Forum*, 20 (2), 267-286.
- McLelland, N. & Smith, R.** (2014). Introduction: Building the history of language learning and teaching (HoLLT). *Language & History*, 57 (1), 1-9.
- Menken, K. & Garcia, O.** (2010). *Negotiating language policies in schools: Educators as policymakers*. New York: Routledge.
- Merino, A. J. & Lasagabaster, D.** (2018). CLIL as a way to multilingualism. *International Journal of Bilingual Education and Bilingualism*, 21 (1), 79-92.
- Merriam, S. B.** (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass.
- Mi, L. & Li, W. L.** (2014). The reasons for the Guimao System's replacement with *Journal of Tangshan Teachers College*, 36 (1), 99-102.

- Mieko, T.** (1983). Women's magazines of Meiji Japan: their relationship to English studies and English language education. *History of English Studies*, 16, 197-211.
- Miles, M. B. & Huberman, A. M.** (1994). *Qualitative Data Analysis (2nd edition)*. Thousands Oaks, California: Sage.
- The Ministry of Education in People's Republic of China.** (2000). *Law of the People's Republic of China on the Standard Spoken and Written Chinese Language* (Publication No.37). Beijing: China's Government Printing Office.
- The Ministry of Education in People's Republic of China.** (2001). *Strengthening Undergraduate Teaching and Improving Teaching Quality at Universities and Colleges*. Retrieved from Resource document: The Ministry of Education of the People's Republic of China:
http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_18/200108/241.html.
- Moghadam, H. S., Samad, A. A. & Shahraki, R. E.** (2012). Code switching as a medium of instruction in an EFL classroom. *Theory and Practice in Language Studies*, 2 (11), 2219-2225.
- Mohanty, A. K.** (1990). Psychological consequences of mother tongue maintenance and multilingualism in India. In D. Pattanayak. (Ed.) *Multilingualism in India* (pp. 262-283). Clevedon: Multilingual Matters.
- Morgan, D. L.** (1993). Qualitative content analysis: A guide to paths not taken. *Qualitative Health Research*, 3, 112-121.
- Morse, B. H.** (1918). *The International Relations of the Chinese Empire. (Vol. III)*. Longmans, Green and Company.
- Morse, J. M. & Field, P. A.** (1995). *Qualitative Research Methods for Health Professionals (2nd edition)*. Thousand Oaks, California: Sage.
- Moseley, C. & Nicolas, A.** (2009). *UNESCO Atlas of the World's Languages in Danger*. Paris: Unesco Pub.

- Mufwene, S.** (2008). *Language Evolution: Contact Competition and Change*. London: Continuum.
- Murphy, J. & Stoller, F. L.** (2001). Sustained-content language teaching: An emerging definition. *TESOL Journal*, 10 (3), 3-5.
- Nagata, K. & Wang, Z. Y.** (2014). *Yan Fu: An Enlightened Thinker for China's Self-strengthening and Modernization*. Suzhou: Suzhou University Press.
- Nekvapil, J. & Sherman, T.** (2009). *Language Management in Contact Situations: Perspectives from Three Continents*. Frankfurt: Peter Lang.
- Nettle, D. & Romaine, S.** (2000). *Vanishing Voices: The Extinction of the World's Languages*. Oxford: Oxford University Press.
- Nexon, D.** (2008). What's this then? 'Romanes eunt domus'? *International Studies Perspectives*, 9(3), 300–308.
- Nikula, T.** (2015). Hands-on tasks in CLIL science classrooms as sites for subject-specific language use and learning. *System*, 54, 14-27.
- Nivison, S. D. & Wright, F. A.** (1959). *Confucianism in Action*. Stanford, California: Stanford University Press.
- Norrby, C. & Hajek, J.** (2011). *Uniformity and Diversity in Language Policy: Global Perspectives*. Bristol: Multilingual Matters.
- Oleary, R.** (2006). Robert Hart in China: the significance of his Irish roots. *Modern Asian Studies*, 40 (3), 583-604.
- Ostler, N.** (2005). *Empires of the Word: A Language History of the World*. New York: HarperCollins.
- Ou, Q. J.** (2012). *Sheng Xuanhuai and the early educational modernization in China* (Unpublished doctoral dissertation). East China Normal University, Shanghai.
- Owu-Ewie.** (2006). The language policy of education in Ghana: A critical look at the English-only language policy of education. In Mugane, J. *Selected proceedings of the*

- 35th annual conference on African linguistics (pp.76-85). Somerville, MA: Cascadilla Proceedings Project.
- Pan, J.** (2007). Facts and considerations about bilingual education in Chinese universities. In A. Feng. (Ed.) *Bilingual education in China: Practice, policies and concepts* (pp. 201-215). Clevedon, UK: Multilingual Matters.
- Pan, Q.** (2013). Review and prospect on the research on the university in modern China—a case study of Imperial University of Peking. *Central China Normal University Journal of Postgraduates*, 20 (2), 144-147.
- Pan, Z. X.** (2010). Multicultural identity in British foreign language education in post-colonial era. *Comparative Education Review*, 3, 41-45.
- Peal, E. & Lambert, W.** (1962). The relation of bilingualism to intelligence. *Psychological Monographs*, 76, 1-23.
- Pennycook, A.** (1994). *The Cultural Politics of English as an International Language*. London: Longman.
- Pennycook, A.** (1995). English in the world/The world in English. In J. Tollefson. (Ed.) *Power and Inequality in Language Education* (pp. 34-58). Cambridge: Cambridge University Press.
- Pennycook, A.** (1998). *English and the Discourses of Colonialism*. London and New York: Routledge.
- Pennycook, A.** (2000). English, politics, ideology: From colonial celebration to postcolonial performativity. In T. Ricento. (Ed.) *Ideology, Politics and Language Policies* (pp107-119). Amsterdam and Philadelphia: John Benjamins.
- Perez-Vidal, C. & Roquet, H.** (2015). The linguistic impact of a CLIL Science program: An analysis measuring relative gains. *System*, 54, 80-90.
- Phillipson, R.** (1992). *Linguistic Imperialism*. Oxford: Oxford University Press.

- Phillipson, R.** (1994). English language spread policy. *International Journal of the Sociology of Language*, 107, 7-24.
- Phillipson, R.** (1996). Linguistic Imperialism: African Perspectives. *ELT Journal*, 50 (2), 160-167.
- Phillipson, R.** (1997). Realities and myths of linguistic imperialism. *Journal of Multilingual and Multicultural Development*, 18 (3), 238-247.
- Phillipson, R.** (2000). English in the New World Order: Variations on a theme of linguistic imperialism and 'World' English. In T. Ricento (Ed.). *Ideology, Politics and Language Policies* (pp.87-106). Amsterdam and Philadelphia: John Benjamins.
- Phillipson, R.** (2003). *English-only Europe? Challenging Language Policy*. London and New York: Routledge.
- Phillipson, R.** (2006). Pragmatics: Linguistic Imperialism. *Encyclopedia of Language & Linguistics*, 1 (3-4), 44-47.
- Phillipson, R.** (2009). *Linguistic Imperialism Continued*. New York and London: Routledge.
- Piao, Y. & Zou, L. D.** (2013). New development of internationalization of higher education and their implications on foreign language education. *Foreign Language Learning Theory and Practice*, 2, 66-71.
- Plummer, K.** (2001). *Document of Life 2: An Invitation to a Critical Humanism*. London: Sage.
- Pong, D.** (1994). *Shen Pao-chen and China's Modernization in the Nineteenth Century*. Cambridge: Cambridge University Press.
- Poon, A. Y. K.** (2013). Will the new fine-tuning medium-of-instruction policy alleviate the threats of dominance of English-medium instruction in Hong Kong? *Current Issues in Language Planning*, 14(1), 34-51.

- Postlethwaite, T. N. & Torsten, H.** (1994). *International Encyclopedia of Education* (2nd edition). Oxford: Pergamon.
- Price, G.** (2014). English for all? Neoliberalism, globalization, and language policy in Taiwan. *Language in Society*, 43 (5), 567-589.
- Qi, R. S.** (1989). *The Memoir of Qi Rushan*. Beijing: The Baowentang Bookstore.
- Qiu, Y. C.** (1998). *The Complete Works of Li Hongzhang*. Changchun: The Time Literature and Art Press.
- Rahim, S. A.** (1986). Language as power apparatus: Observations on English and cultural policy in nineteenth-century India. *World Englishes*, 5(2-3), 231-239.
- Rajagopalan, K.** (1999). Of EFL teachers, conscience, and cowardice. *EFL Journal*, 53 (3), 200-206.
- Rassool, N.** (2014). Considering heteroglossia in language and development in Sub-Saharan Africa. *International Journal of the Sociology of Language*, 225, 51-73.
- Reesor, M.** (2002). The bear and the honeycomb: A history of Japanese English language policy. *NUCB JLCC*, 4 (1), 41-52.
- Reilly, H. T.** (2004). *The Taiping Heavenly Kingdom: Rebellion and the Blasphemy of Empire*. Seattle: University of Washington Press.
- Reynolds, R. D.** (1993). *China, 1898-1912: The Xincheng Revolution and Japan*. Cambridge, Massachusetts: Harvard University Press.
- Ricento, T.** (2006). *An Introduction to Language Policy: Theory and Method*. Malden, MA: Blackwell.
- Richards, C. J., Schmidt, W. R. & Kendricks, H.** (2002). *Longman Dictionary of Language Teaching and Applied Linguistics*. London: Longman.
- Ristikivi, M.** (2005). Latin: the common legal language of Europe. *Juridica International*, X, 199-202.

- Rouco, V. M.** (2002). The teaching of foreign languages in Europe: a historical perspective on foreign language teaching in Spain. *CAUCE, Revista de Filología y su Didáctica*, 25, 255-280.
- Ru, Z. W.** (2012). *Studies on Foreign Language Policy*. Beijing: Peking University Press.
- Rudolf, J.** (2005). Creating a personal base: Zongli Yamen efforts to penetrate the Qing hierarchy. *The Chinese Historical Review*, 12 (2), 202-229.
- Rury, J. L.** (1993). Historical inquiry. In F. D. Lancy. (Ed.) *Qualitative research in education: an introduction to the major traditions* (pp. 247-269). London: Longman.
- Sang, B.** (2007). *The Schools in Late Imperial China and the Social Change*. Guilin: Guangxi Normal University Press.
- Sang, B.** (2015). The mission schools and Xi Ti Zhong Yong. *Journal of Sun Yat-sen University*, 55 (2), 63-73.
- Saraceni, M.** (2010). *The Relocation of English*. Basingstoke: Palgrave Macmillan.
- Saricoban, G. & Saricoban, A.** (2012). Ataturk and the history of foreign language education in Turkey. *The Journal of English and Linguistics Study*, 8 (1), 24-29.
- Sasaki, M.** (2008). The 150-year history of English language assessment in Japanese education. *Language Testing*, 25 (1), 63-83.
- Savage, D. J.** (2010). The stability and breakdown of empire: European informal empire in China, the Ottoman Empire and Egypt. *European Journal of International Relations*, 17 (2), 161-185.
- Schiffman, H. F.** (1996). *Linguistic Culture and Language Policy*. London: Routledge.
- Schjerve, R. & Vetter, E.** (2003). Historical Socio-linguistics and Multilingualism: Theoretical and Methodological Issues in the Development of a Multifunctional Framework. In R. R. Schjerve. (Ed.) *Language Policies and Practice in the 19th Century Habsburg Empire* (pp.35-68). Berlin: Walter de Gruyter GmbH & Co. KG.

- Schwandt, T. A.** (1997). *Qualitative Inquiry: A Dictionary of Terms*. Thousand Oaks, California: Sage.
- Scott, W. D.** (2016). *Mission as Globalization: Methodists in Southeast Asia at the Turn of the Twentieth Century*. Lanham: Lexington Books.
- Semmei, R.** (2004). *The Rise of Free Trade Imperialism: Classical Political Economy the Empire of Free Trade and Imperialism (1750-1850)*. Cambridge: Cambridge University Press.
- Shao, Y.** (2009). *A Comparative Study on St. Johns University and Yenching University after Anti-Christianity Movement in 1922* (Unpublished master dissertation). Hebei Normal University, Shijiazhuang, China.
- Shen, Q.** (2012). *On the Development of Foreign Language Education Policies in Contemporary East Asia*. Beijing: Peking University.
- Shen, Y.** (2007). *Fuzhou Shipbuilding and Administration College*. Beijing: Science Press.
- Shen, Y.** (2012). *Fuzhou Naval College*. Taipei: Bookman Company.
- Shi, X. Z.** (2014). The Creative Framework and Practical Insights of Foreign Language Education in Fuzhou Shipbuilding and Administration College. *Journal of Minjiang University*, 35 (1), 94-102.
- Shimizu, M.** (2010). Japanese English education and learning: A history of adapting foreign cultures. *Educational Perspective*, 43 (1 & 2), 5-11.
- Shohamy, E.** (2006). *Language Policy: Hidden Agendas and New Approaches*. London and New York: Routledge.
- Shu, D. F.** (2004). *Foreign Languages Teaching Reform: Problems and Suggestions*. Shanghai: Shanghai Foreign Languages Press.
- Shu, X. C.** (2012). *The History of Education in Modern China*. Beijing: Renmin University Press.

- Silverstein, M.** (1998). The uses and utility of ideology: A commentary. In B. B. Schieffelin, K. A. Woolard and P. V. Kroskrity. (Eds.) *Language Ideologies: Practice and Theory* (PP. 123-145). Oxford: Oxford University Press.
- Sinfreeb, M., Busi, D. & Pedzisai, M.** (2006). Zimbabwe colonial and post-colonial language policy and planning practices. *Current Issues in Language Planning*, 7 (4), 377-414.
- Singleton, D. & Ryan, L.** (2004). *Language Acquisition: The Age Factor*. Clevedon: Multilingual Matters.
- Skutnabb-Kangas, T.** (2000). *Linguistic Genocide in Education - or Worldwide Diversity and Human Rights?* Mahwah, NJ: Lawrence Erlbaum.
- Slobodanka, D., Kristina, A. H. & Christian, J.** (2015). *English-medium Instruction in European Higher Education: English in Europe*. Boston: De Gruyter Mouton.
- Smith, B.** (1991). German philosophy: language and style. *Topoi*, 10, 155-161.
- Smith, C. R.** (1999). *The Writings of Harold E. Palmer: An Overview*. Tokyo: Hon-no-Tomosha.
- Smith, C. R.** (2003). *Teaching English as a Foreign Language, 1912-1936: Pioneers of ELT*. Abingdon: Routledge.
- Smith, C. R.** (2004). *An Investigation into the Roots of ELT, with a Particular Focus on the Career and Legacy of Harold E. Palmer (1877-1949)* (Unpublished doctoral dissertation). The University of Edinburgh. Edinburgh.
- Smith, C. R.** (2005). *Teaching English as a Foreign Language, 1936-1961: Foundations of ELT*. Abingdon: Routledge.
- Smith, C. R. & McLelland, N.** (2014). An interview with John Trim (1924-2013) on the history of modern language learning and teaching. *Language & History*, 57 (1), 10-25.
- Smith, F. B. & Gurney, B.** (2016). Actors and agency in academic language policy and planning. *Current Issues in Language Planning*, 17 (1), 72-87.

- Snyder, J., Bolin, F. & Zumwalt, K.** (1992). Curriculum implementation. In P. W. Jackson. (Ed.) *Handbook of Research on Curriculum* (pp. 402-435). New York: Macmillan.
- Song, C. L.** (2011). Bilingual education in colleges and universities of China. *International Education Studies*, 4(1), 144-146.
- Song, J.** (2008). Awakening: evolution of China's science and technology policies. *Technology in Society*, 30 (3-4), 235-241.
- Song, J. J.** (2012). South Korea: language policy and planning in the making. *Current Issues in Language Planning*, 13 (1), 1-68.
- Song, M. Y.** (2007). *The bilingual education practices in the primary and secondary schools in Shanghai*. (Unpublished doctoral dissertation). Shanghai Normal University, Shanghai.
- Spolsky, B.** (2004). *Language Policy*. Cambridge: Cambridge University Press.
- Spolsky, B.** (2009). *Language Management*. Cambridge: Cambridge University Press.
- Spolsky, B.** (2012). *The Cambridge Handbook of Language Policy*. Cambridge: Cambridge University Press.
- Stern, H. H.** (1983). *Fundamental Concepts of Language Teaching*. Oxford: Oxford University Press.
- Stewart, M.** (2016). Should one nation mean one language? *History Today*, 66 (3), 3.
- Su, Y.** (2015). Lin Zexu's collection of knowledge on 'Barbarians' through patronizing translation. *Foreign Language and Literature Research*, 1 (3), 68-74.
- Su, Y. F.** (1976). *Chang Chih-tung and Educational Reform in Hupeh*. Taipei: Zhongyang Yanjiu Yuan, Jindai Shi Yanjiu Suo.
- Su, Y. F.** (2007). *The Origin and Development of Modern Education in China (1860-1928)*. Beijing: Peking University Press.

- Sullivan, D. M., Poarch, J. G. & Bialystok, E.** (2018). Why is lexical retrieval slower for bilinguals? Evidence from picture naming. *Bilingual: Language and Cognition*, 21 (3), 479-488.
- Sun, B. H.** (2012). *Learning from the West and the Dynamic Change of Modern Education in China*. Beijing: China Social Sciences Press.
- Sun, P. Q.** (2009). *The History of China's Education*. Shanghai: East China Normal University Press.
- Suo, K. F.** (2012). A review of China's overseas education in France in late Qing periods. *Educational Research and Experiment*, 1, 68-72.
- Surmont, J., Struys, E., Noort, V. M. & Craen, P.** (2016). The effects of CLIL on mathematical content learning: A longitudinal study. *Studies in Second Language Learning and Teaching*, 6 (2), 319-337.
- Sweeting, A.** (1997). Education policy and the 1997 factor: The art of the possible interacting with the dismal science. In M. Bray & W. O. Lee. (Eds.) *Education and political transition: Implications of Hong Kong's Change of Sovereignty* (pp. 25-39). Hong Kong: Comparative Education Research Center, University of Hong Kong.
- Sweeting, A. & Vickers, E.** (2005). On colonizing 'colonialism': the discourses of the history of English in Hong Kong. *World Englishes*, 24 (2), 113-130.
- Sweeting, A. & Vickers, E.** (2007). Language and the history of colonial education: the case of Hong Kong. *Modern Asian Studies*, 41 (1), 1-40.
- Tamtam, A. G., Gallagher, F., Olabi, A. G. & Naher, S.** (2012). A comparative study of the implementation of EMI in Europe, Asia and Africa. *Procedia – Social and Behavioral Science*, 47, 1417-1425.
- Tan, Y. S.** (2015). The problems and solutions of foreign language education in China. *Journal of Foreign Languages*, 38 (1), 107-112

- Tanaka, M.** (1998). *Assessment of English Proficiency in Japan: Past and Future*. Tokyo: Kyouikushuppan.
- Tang, Z. J. & Elman, B.** (1998). The 1898 Reforms revisited: a review of Luke S. K. Kwong's *A Mosaic of the Hundred Days: Personalities, Politics, and Ideas of 1898*. *Late Imperial China*, 8(1), 205-213.
- Teng, S. Y. & Fairbank, J. K.** (1979). *China's Response to the West: A Documentary Survey, 1839-1923*. Cambridge, Massachusetts: Harvard University Press.
- Ter Kuile, H., Veldhuis, M., Van Veen, S. C., Wicherts, J. M.** (2011). Bilingual education, metalinguistic awareness, and the understanding of an unknown language. *Bilingualism. Language and Cognition*, 14, 233–242.
- The Association of Annals Compilation of Fujian Navy College.** (1996). *The School Records of Fujian Navy College*. Xiamen: Lu Jiang Press.
- The Association of China's Modern History.** (1954). *The Opium Wars*. Shanghai: Shen Zhou Guo Guang Press.
- The Association of Chinese Historians.** (1961). *The Westernization Movement*. Shanghai: Shanghai People's Press.
- The University History Archives of Tianjin University.** (1985). *A Brief History of Tianjin University*. Tianjin: Tianjin University Press.
- The University History Archives of Tianjin University.** (1990). *The History of Tianjin — Peiyang University*. Tianjin: Tianjin University Press.
- Thorne, S.** (2008). *Interpretive Description*. California: Left Coast Press.
- Tian, J. C. & Huo, Y. P.** (1988). *The surge of Chinese studying in Japan and Late-Qing education*. Unpublished paper for a seminar on Sino-Japanese Relations, Beijing, China.
- Tian, Z. P.** (2009). *A Historical Study of Education in China*. Shanghai: East Normal University Press.

- Tibategeza, E. & Plessis, D. T.** (2012). Language-in-education policy development in Tanzania: An overview. *Language Matters*, 43 (2), 184-201.
- Tollefson, J. W.** (1991). *Planning Language, Planning Inequality*. London: Longman.
- Tollefson, J. W.** (2002). *Language Politics in Education*. Mahwah, New Jersey: Lawrence Erlbaum.
- Tollefson, J. W.** (2013). *Language policies in education: Critical issues (2nd ed.)*. New York: Routledge/Taylor & Francis.
- Tollefson, J. W. & Tsui, M.** (2004). *Medium of instruction policies: Which agenda? Whose agenda?* Mahwah, New Jersey: Lawrence Erlbaum.
- Tong, F. H. & Shi, Q.** (2012). Chinese-English bilingual education in China: a case study of college science majors. *International Journal of Bilingual Education and Bilingualism*, 15 (2), 165-182.
- Tosh, J. & Lang, S.** (2006). *The Pursuit of History*. Edinburgh: Pearson Education.
- Trent, J.** (2012). The internationalization of tertiary education in Asia: language, identity and conflict. *Journal of Research in International Education*, 11 (1), 50-69.
- Tsou, B. K.** (1996). Aspects of the two language systems and three language problems in the changing society of Hong Kong. *Current Issues in Language and Society*, 3(2), 128-139.
- Tuafuti, P.** (2010). Additive bilingual education: unlocking the culture of silence. *MAI Review*, 1, 1-14.
- Urmeneta, E. C.** (2013). Learning to become a CLIL teacher: teaching, reflection and professional development. *International Journal of Bilingual Education and Bilingualism*, 16 (3), 334-353.
- Van de Craen, P., E. Ceuleers, K. Lochtman, L. Allain, and K. Mondt.** (2007). An interdisciplinary research approach to CLIL learning in primary schools in Brussels. In

- C. Dalton-Puffer and U. Smit. (Eds.) *Empirical Perspectives on CLIL Classroom Discourse* (pp. 253-274). Frankfurt am Mein: Peter Lang.
- Van Essen, A.** (1997). English in mainland Europe - a Dutch perspective. *World Englishes*, 16 (1), 95-104.
- Varcasia, C.** (2011). *Becoming multilingual: language learning and language policy between attitudes and identities*. Bern: Peter Lang.
- Ventresca, J. M. & Mohr, W. J.** (2001). Archival research methods. In J. A. C. Baum. (Ed.) *Companion to Organizations*. London: Blackwell Publications.
- Vidal, P. C. & Roquet, H.** (2015). The linguistic impact of a CLIL science programme: an analysis measuring relative gains. *System*, 54, 80-90.
- Vijayalakshimi, M. & Babu, S. M.** (2014). A brief history of English language teaching in India. *International Journal of Scientific and Research Publications*, 4 (5), 1-4.
- Vogt, W. P.** (1999). *Dictionary of Statistics and Methodology: A Nontechnical Guide for the Social Sciences*. London: Sage.
- Vollmer, H. J.** (2007). Language across the curriculum — a way towards plurilingualism. In W. Martinyuk. (Ed.) *Towards a Common European Framework of Reference for Languages of School Education* (pp. 177-192). Krakow: Universitas.
- Walker, E.** (2010). Evaluation of a support intervention for senior secondary school English immersion. *System*, 38 (1), 50-62.
- Walter, S. & Benson, C.** (2012). Language policy and medium of instruction in formal education. In B. Spolsky. (Ed.) *The Cambridge Handbook of Language Policy* (pp. 278-300). Cambridge: Cambridge University Press.
- Wang, B. H.** (2003). *Bilingualism and Bilingual Education*. Shanghai: Shanghai Education Press.
- Wang, C. L.** (2016). The exploration of ELT under the reform of college entrance examination. *Teaching of Forestry Region*, 231 (6), 42-43.

- Wang, F.** (2014). Research on bilingual education in China. *Overseas English*, 22, 295-298.
- Wang, H.** (2016). A reflection of default of native culture and English-Chinese bilingual teaching. *Journal of Hebei Normal University*, 18 (1), 80-85.
- Wang, H. X.** (2006). *John Fryer's textbook translation project in China* (Unpublished doctoral dissertation). Fudan University, Shanghai.
- Wang, J.** (2007). Sheng Xuanhuai and the high education in China. *Educational History Studies*, 2, 48-51.
- Wang, J. & Zhu, H. C.** (2008). Engineering education and scientific research of Peiyang University. *Research in Higher Education of Engineering*, 3, 120-125.
- Wang, L. Q. & Yu, P. W.** (2017). Reflections on China's language education policies from the perspective of the Belt and Road Initiative. *Hebei Academic Journal*, 37 (1), 185-189.
- Wang, L. Y.** (2008). *The Theory and Practice of Bilingual Education — A Comparative Study on Bilingual Education in China and Other Countries*. Shanghai: Shanghai Educational Press.
- Wang, S. R.** (2016). Transformations of ELT in China. *Journal of Foreign Languages*, 39 (3), 2-4.
- Wang, W.** (2011). Reflections on foreign education in vocational colleges in late imperial China. *Journal of Jiaozuo Teachers College*, 27 (4), 65-68.
- Wang, X. M.** (2000). *Modern Education in China*. Beijing: Commercial Press.
- Wang, Y.** (2017). Research on the construction of socialist ideology in college foreign language education. *Journal of Jiangnan University (Social Science Edition)*, 34 (6), 99-104.
- Wang, Y. G.** (2003). Charles Daniel Tenney and Peiyang University. *Journal of Tianjin University*, 5 (1), 71-76.
- Wang, Y. H. & Chen, Z. H.** (2017). A study on the curriculum design and management of bilingual education in universities of finance and economics in China— take Guangdong

- University of Finance and Economics as an example. *Engineering Education*, 10, 228-229.
- Wang, Z. G.** (2016). *A History of Shanghai Jiaotong University (Vol. I 1896-1905)*. Shanghai: Shanghai Jiaotong University Press.
- Wang, Z. G.** (2016). *A History of Shanghai Jiaotong University (Vol. II 1905-1921)*. Shanghai: Shanghai Jiaotong University Press.
- Webb, E. J., Campbell, T. D., Schwartz, D. R., Sechrest, L. & Grove, B. J.** (1981). *Nonreactive Measures in the Social Sciences*. Dalla, TX: Hughton Mifflin.
- Wei, R. N.** (2013). Chinese-English Bilingual Education in China: Model, momentum, and driving forces. *Asian EFL Journal*, 15 (4), 183-199.
- Weir, C. J., Vidakovic, I. and Galaczi, E. D.** (2013). *Measured Constructs: A History of Cambridge English Examinations, 1913–2012*. Cambridge: Cambridge University Press.
- Weng, T. H.** (1989). *Weng Tonghe's Diaries (vol. I)*. Beijing: Zhonghua Book Company.
- Weston, B. T.** (2002). The founding of the Imperial University and the emergence of Chinese Modernity. In R. Karl & P. Zarrow. (Eds.) *Rethinking the 1898 Reform Period: Political and Cultural Change in Late Qing China* (pp.99-123). Cambridge (Massachusetts) and London: Harvard University Press.
- Wheeler, G.** (2013). *Language Teaching Through the Ages*. London: Routledge.
- Whitehead, C.** (1989). The impact of the Second World War on British colonial education policy. *History of Education*, 18 (3), 267-293.
- Whitehead, C.** (1995). The medium of instruction in British colonial education: A case of cultural imperialism or enlightened paternalism? *History of Education*, 24 (1), 1–15.
- Whitehead, C.** (1999). The contribution of the Christian missions to British colonial education. *Paedagogica Historica (Supplementary Series)*, 5, 321-327.
- Whittaker, R. & Llinares, A.** (2009). CLIL in social science classrooms:

- analysis of spoken and written productions. In Y. Ruiz de Zarobe & R. Jimenez Catalan. (Eds.) *Content and Language Integrated Learning. Evidence from Research in Europe* (pp. 215-234). Clevedon: Multilingual Matters.
- Wiley, G. T.** (2004). Language planning, language policy, and the English-only movement. In E. Finegan and J. R. Rickford. (Eds.) *Language in the USA: Themes for the Twenty-first Century* (pp. 319-338). Cambridge: Cambridge University Press.
- Wiley, G. T.** (2006). The lessons of historical investigation: Implications for the study of language policy and planning. In T. Ricento. (Ed.) *An Introduction to Language Policy: Theory and Method* (pp.135-152.). Malden, MA: Blackwell.
- Wiley, G. T. & Garcia, O.** (2016). Language policy and planning in language education: legacies, consequences, and possibilities. *The Modern Language Journal*, 100, 48-63.
- Wilkinson, E.** (1973). *The History of Imperial China: a Research Guide*. Cambridge, Massachusetts: Harvard University Press.
- Williams, C. R.** (2007). *The Historian's Tool Box: A Student's Guide to the Theory and Craft of History*. London: Routledge.
- Williams, G.** (1992). *Sociolinguistics: A Sociological Critique*. London: Routledge.
- Winks, W. R.** (1998). *The Oxford History of the British Empire*. Oxford: Oxford University Press.
- Wong, Y. J.** (1976). The building of an informal British Empire in China in the middle of the 19th century. *A revision of a paper read to the Oriental Society of Australia and then delivered at the 30th International Congress of Human Sciences in Asia and North Africa, held in Mexico in August, 1976*. Retrieved from:
<https://www.escholar.manchester.ac.uk/api/datastream?publicationPid=uk-ac-man-scw:1m2992&datastreamId=POST-PEER-REVIEW-PUBLISHERS-DOCUMENT.PDF>

- Woods, F. N. & Catanzaro, M.** (1988). *Nursing Research: Theory and Practice*. St. Louis: C. V. Mosby.
- Wright, S.** (2004). *Language Policy and Language Planning: From Nationalism to Globalization*. Basingstoke: Palgrave Macmillan.
- Wu, H. C. & Tian, M.** (2012). *A Historical Study of Teachers in Late Qing Period*. Shijiazhuang: Hebei University Press.
- Wu, W. W. & Lu, W. W.** (2015). An analysis of reforms on educational policy of English education in China in the 21st Century. *Wenjiao Ziliao*, 5, 181-182.
- Wu, X. O.** (2011). On the approval of primary school textbooks in the Late Qing Dynasty. *Journal of Hebei University (Educational Science Edition)*, 13 (3), 21-27.
- Wu, X. Y.** (1933). A brief history of the Peking Translation College. *A Monthly Journal of Reading*, 2(4), 1-15.
- Wu, M. X.** (2004). *On the problems of education during the period of Qing Dynasty and Early Republic* (Unpublished master dissertation). Fujian Normal University, Fuzhou, China.
- Xanthou, M.** (2011). The impact of CLIL on L2 vocabulary development and content knowledge. *English Teaching: Practice and Critique*, 10 (4), 116-126.
- Xia, L., Zhang, Y. N., Zheng, Z. J., Li, X., Che, P. & Wang, S. J.** (2017). Using formative evaluation in the bilingual teaching of pathology. *China Higher Medical Education*, 4, 58-59.
- Xia, W. H.** (2007). An interpretation of Tongwenguan from the perspective of intercultural communication. *Journal of Peking University*, 44 (6), 135-142.
- Xia, Y.** (2013). Learning Text by Heart and Language Education: The Chinese Experience. *Theory and Practice in Language Studies*, 3(1), 41-50.
- Xiao, J. F.** (2016). Integrated English in China - An effective CLIL model of foreign languages and cultures learning. *International Journal of Innovation and Research in*

Educational Sciences, 3(4), 234-242.

- Xie, F. & Zhang, S.** (2017). Review and reflections on the abolishment of Imperial Examination System in late Qing Dynasty. *Journal of Hefei University of Technology*, 31 (1), 38-43.
- Xie, Q.** (2011). *A comparative study on foreign language education policy on an international scale* (Unpublished doctoral dissertation). East Normal University, Shanghai.
- Xiong, Y. Z.** (1994). *Learning from the West the Society in the Late Qing Period*. Shanghai: Shanghai People's Press.
- Xiong, Y. Z.** (2011). *Learning from the West and the society of late Qing period*. Beijing: China Renmin University Press.
- Xu, G. Z.** (2015). *Collections of Articles — Foreign Languages*. Beijing: Foreign language teaching and research press.
- Xu, H. Z. & Ma, R. Y.** (2015). Analysis of the division of arts and science subjects in ordinary high school in late Qing dynasty. *Cross-cultural Communication*, 11 (5), 71-75.
- Xu, J. S. & Fan, Z. H.** (2001). A case study on foreign language education of St. Johns University. *Journal of Shangrao Teachers College*, 21(5), 90-91.
- Xu, J. Y., Zhang, X. H. & Hu, J. X.** (2017). Teaching cooperation of college English teachers & specialized teachers for ESP transformation: a case of Journalistic English. *Foreign Language Learning Theory and Practice*, 1, 67-71.
- Xu, Y.** (2012). The modern schools in Yangwu Movement and the beginning of vocational education in modern China. *Journal of Huanghe Science and Technology University*, 14 (3), 118-120.
- Xue, Y. M.** (2011). *A Biography of Zhong Tianwei*. Shanghai: Shanghai Academy of Social Sciences Press.

- Yan, G. F. & Wang, H. Y.** (2015). Societal demands and political manipulation: disciplinary division of Peiyang University in early modern China. *Modern University Education*, 1, 62-69.
- Yan, L. & Zhu, M. H.** (2015). An exploration in the characteristics of education in Shanghai Translation College. *Lantai World*, 3, 153-154.
- Yan, M.** (2008). *Bilingual Education in Universities: Theories and Practices*. Harbin: Heilongjiang University Press.
- Yan, Y.** (2016). An analysis of controversy on English education in elementary schools in mainland China and its reflections. *Journal of Jilin Education*, 21, 121.
- Yang, S. G.** (2004). What kind of bilingual education is most effective? *Shanghai Jiaoyu Keyan*, 4, 15.
- Yang, Y.** (2011). *A comparison in educational reform between the Meiji Restoration in Japan and the Self-Strengthening Movement in China* (Unpublished doctoral dissertation). Hebei University, Shijiazhuang, China.
- Yano, Y.** (2009). The future of English: Beyond the Kachruvian Three Circle Model? In K. Murata and J. Jenkins. (Eds.) *Global Englishes in Asian Contexts* (pp.208-225). Basingstoke: Palgrave Macmillan.
- Yao, Z. H.** (2017). Teaching competence of teachers in Chinese universities: reflections on the status quo and the strategies of improvement. *Journal of Agricultural University of Hebei (Agriculture & Forestry Education)*, 19 (3), 108-113.
- Yazejian, N., Bryant, D., Freel, K. & Burchinal, M.** (2015). High-quality early education: age of entry and time in care differences in student outcomes for English-only and dual language learners. *Early Childhood Research Quarterly*, 32, 23-39.
- Ye, X. G.** (2015). English education: needs and mission. *Contemporary Foreign Language Studies*, 12, 1-4.

- Yu, L. & Yeoman, E.** (2007). *Canadian Immersion Language Education and Bilingual Teaching in Chinese Universities*. Beijing: Foreign Language Teaching and Research Press.
- Yu, L. M.** (2008). English-Chinese bilingual education in China. In J. Cummins & N. H. Hornberger. (Eds.). *Encyclopedia of Language and Education* (2nd ed.), Volume 5: *Bilingual Education* (pp.175-189). Boston, Massachusetts: Springer US.
- Yu, L. M. & Han, J. X.** (2012): Content-driven or language-driven: thoughts on college English education in China. *Foreign Languages and Their Teaching*, 264 (3), 1-4.
- Yu, L. M. & Yuan, D. P.** (2005). Bilingual education and the reform on college English education. *Journal of Higher Education*, 3, 74-78.
- Yu, X. & Xiao, Y. S.** (2013). A course design guideline for legal English teaching in Chinese tertiary education: from the perspective of content-based instruction. *Theory and Practice in Language Studies*, 3 (7), 1123-1126.
- Yuchtman, N.** (2017). Teaching to the tests: an economic analysis of educational institutions in late imperial China and Republican China. *Explorations in Economic History*, 63, 70-90.
- Yujiro, M.** (2016). The late Qing ‘national language’ issue and monolingual systems: focusing on political diplomacy. *Chinese Studies in History*, 49 (3), 108-125.
- Zarrow, P.** (2005). *China in War and Revolution, 1895-1949*. New York: Routledge.
- Zeng, Y. B.** (1982). A chronicle of Zeng Mengpu’s life. In Wei S. C. (Ed.) *References of Niehai Hua (the Supplementation Edition)*. Shanghai: Shanghai Guji Press.
- Zhang, B. Y. & Jia, X. H.** (2005). On Peiyang University and its students abroad. *Journal of Higher Education*, 26 (2), 93-98.
- Zhang, B. Y.** (2009). Comments on the British’s “civilized mission” in India from the late 18th to middle 19th century. *Historical Studies in Anhui*, 2, 72-79.

- Zhang, D. L.** (2016). The development and future of English education in China. *Contemporary Foreign Languages Study*, 1, 14-22.
- Zhang, H. R.** (2014). The memory of the first-degree scholar Qiu Shuyuan to Gongche Shangshu Movement. *Historical Archives*, 1, 113-117.
- Zhang, L. C.** (2006). *A Study on Teachers in Modern Schools during the Self-Strengthening Movement* (Unpublished doctoral dissertation). Renmin University, Beijing.
- Zhang, M. P.** (2011). *Studies on Foreign Language Education in the Late Qing Period*. Beijing: China Social Sciences Press.
- Zhang, M. P.** (2012). *A Study on Foreign Language Education in Republic of China*. Hangzhou: Zhejiang University Press.
- Zhang, M. P.** (2016). W.A.P. Martin and the T'ung Wen-kuan's translation teaching. *Journal of Zhejiang Shuren University*, 16(2), 100-106.
- Zhang, M. R.** (2007). The compilation and use of textbooks for bilingual education in universities. *Journal of Peking University*, 5, 273-274.
- Zhang, P. H.** (2006). *Education in China from the Perspective of Modernization*. Kunming: Yunan University Press.
- Zhang, W. L.** (2015). The status quo and proposals of foreign language education policies in mainland China. *Foreign Language Education*, 36 (1), 56-60.
- Zhang, W. W.** (2012). Sheng Xuanhuai and the establishment of Nanyang College. *Journal of Chifeng University*, 33 (2), 207-209.
- Zhang, X. W.** (2006). A 110-year history of Peiyang University. *Reading*, 6.
- Zhang, Y. J.** (2003). The Jingshi Daxuetang and the Introduction of Modern Western Textbooks. *Journal of Peking University (Philosophy and Social Sciences)*, 40 (3), 137-145.
- Zhang, Y. Y.** (2008). A socio-political view of English language teaching in the Chinese context. *English Language Teaching*, 1(2), 59-66.

- Zhao, X. Y., Xia, Y. & Chang, J. Y.** (2014). A study on content-based instruction in curriculums and its implementation at an elementary stage of English education. *Foreign Languages and Their Teaching*, 294 (1), 47-53.
- Zheng, B.** (2014). Positive Effects of Bilingualism: Divergent Thinking and Its Implications for Language Education - Positive Effects of Bilingualism: Divergent Thinking and Its Implications for Language Education. *Overseas English*, 22, 284-287.
- Zheng, Z. D.** (1987). *Selected Essays in Late Imperial China*. Shanghai: Shanghai Book Company.
- Zhu, T. T.** (2012). Zhang Zhidong's Quanaxue Pian and the "New Policies" Reform in late imperial China. *Journal of Northeast Normal University*, 4, 262-263.
- Zhu, Y. & Yu, L. M.** (2010). The status quo of bilingual education (English and Chinese) studies in China. *Foreign Language and Their Teaching*, 6, 31-36.
- Zhu, Y. X.** (1983). *The Historical Records of the Modern Education System in China* (Vol. I, Issue. 1). Shanghai: East China Normal University Press.
- Zhu, Y. X.** (1989). *The Historical Records of the Modern Education System in China* (Vol. II, Issue. 1). Shanghai: East China Normal University Press.
- Zong, W. J. & Zhang, B. Y.** (2005). Pioneering work in Chinese modern education history — the foundation of Peiyang University and the significance of its foundation. *Journal of Tianjin University*, 7(5), 345-349.