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Negotiating for Modern Education: The Politics behind the Curriculum and Admissions Reforms at the Tongwen Guan

Fei CHEN
University of Tokyo

ABSTRACT

In 1862 the Qing government established the Tongwen Guan 同文館 (School of Combined Learning), a foreign language school in Beijing. This well-financed school adopted a series of admissions reforms to recruit intellectually promising students. It also developed a comprehensive curriculum, which included language study and modern science. Despite these efforts, it failed to supply specialists in either foreign affairs or science and engineering for China's modernization. Scholarship has attributed the failure of the school to the hostility of Chinese literati toward the West and their contempt for science and technology, but an in-depth discussion of the structure and actual operation of the school is lacking, meaning that other possible causes for its failure have not been adequately investigated. This article therefore takes an institutionalist view to uncover the internal factors leading to the school's failure and argues that the promising effect of the educational reforms was largely constrained by the school's institutional weakness.

Keywords: Tongwen Guan, Self-Strengthening Movement, curriculum and admissions reforms, institutional weakness, politics of the First Sino-Japanese War

Introduction

In 1861 Qing China established a government school for training interpreters, named the *Tongwen Guan* 同文館 (School of Combined Learning). The school managed to secure stable funding from the Qing government throughout its forty years of existence, with an annual average between 1863 and 1898 of 18,680 taels of silver. This peaked in 1898 at 34,894 taels, which was nearly equivalent to the budget received by the *shenji ying* 神機營 (the Peking Field Force), a military responsible for protecting Beijing (Su 1985, 29–30). The school, which initially offered only courses on foreign languages and the Confucian classics, later expanded its curriculum to include modern sciences. Despite its secure endowment and innovative curriculum, the school failed to fulfill its goal of supplying specialists in foreign affairs. According to Su Jing's calculation (1985, 74), only sixteen Tongwen Guan students worked in the six Chinese embassies in 1879; this number increased slightly to nineteen in 1898, when the number of Chinese embassies had nearly doubled. Meanwhile, the science education offered at the Tongwen Guan also nurtured fewer science and technology professionals than other government schools established in the 1860s, such as the Fuzhou Naval College.

Many scholars have attempted to explain the Tongwen Guan's failure to nurture talent for China's modernization by blaming the Chinese literati's negative attitude toward the West, particularly its science, and technology. Li Xinran (2015), Ding Zhiwei, and Chen Song (1995, 82–90) believed that the Confucian tradition, which prioritized textual studies, prevented the Chinese literati from embracing the scientific and technological education provided by the Tongwen Guan. Jia Yongtang (2001) also traced the Tongwen Guan's failure to an emerging xenophobia among the literati in the late Qing period. Knight Biggerstaff (1961, 140–52) plausibly argued that this intellectual atmosphere created a fatal admission crisis for the school, which was not able to find enough prospective students. Indeed, the xenophobic sentiment and the contempt for science and technology were real, and did impact the development of the Tongwen Guan. Nevertheless, underlying this approach is an assumption that is now being re-examined, the presupposition that the ideological difference between an inert China and the progressive West was the major obstacle that prevented the former from adopting the latter's science and technology. Recent research has shown that the dichotomy between China and the West, and between Confucian and scientific education, is losing its creditability as a framework for discussing the trajectory of modern China. The assumption of the Chinese literati's disinterest in science and technology has been challenged by Benjamin A. Elman's (1990, 37–85) study of the revival of the literati's interest in astronomical and mathematical studies during the early and high Qing period as a result of the intellectual turn toward evidential scholarship. The Jesuits' significant contribution to the revision of the Ming calendar also serves to demonstrate the successful integration of Western science as an important part of Chinese tradition (Elman 2005, 61–221). The dichotomy of China versus the West fails to explain why the ideological divergence, which had not prevented the revision of the Ming calendar, became an unresolvable obstacle for the Tongwen Guan's development.

Employing the China-West dichotomy to explain the Tongwen Guan's limited achievements has resulted in an unintended consequence: too much emphasis on the influence of external factors on the school and insufficient attention to its structure and actual operation. Some scholars have recognized this blind spot in the previous scholarship and have started to take an institutionalist approach to examining the school. Chen Xiangyang's (2004) groundbreaking work offered a very positive evaluation of a series of organizational reforms of the school over its forty years in operation and concluded that the school was gradually modernized. This approach avoided a possible exaggeration of the effect of the ideological disparity between China and the West and offered a new perspective for studying the Tongwen Guan. Chen's narrative of the commendable endeavors of the Tongwen Guan, however, raised an intriguing question: why did all the institutional innovations undertaken eventually fail to generate the desired results?

A better understanding of the puzzle requires an in-depth discussion of the interaction between the Tongwen Guan and the *Zongli Yamen* 總理衙門 (Qing Office in Charge of Affairs of All Nations, the body in charge of foreign policy), a government department that supervised the development of the school, which

this study will undertake. However, rather than accepting the old assumption (Lü and Zhang 1988) that the school was a puppet of the Zongli Yamen, this study will identify a form of bottom-up institutional dynamic that emerged within the school after the setback it encountered in 1867, which enabled it to initiate reforms and create opportunities for producing the personnel needed for China's modernization. This paper will go on to argue that the promising results of the reforms were unfortunately constrained by the institutional weakness of the Tongwen Guan and the political situation following on China's defeat in the First Sino-Japanese War (1894–1895).

The Establishment of the Tongwen Guan

China's bitter defeat in the First and Second Opium Wars (1839–1842 and 1856–1860) and the tremendous power of Western weaponry displayed in the suppression of the Taiping Rebellion (1851–1872) convinced some far-sighted literati of the superiority of Western military technology. They therefore advocated adopting Western science and technology to strengthen China. In so doing, however, they did not intend to change China's political or sociocultural structures. As a result, their efforts translated into a series of institutional reforms in the latter half of the nineteenth century, termed the Self-Strengthening Movement, the characteristic doctrine of which, as Feng Guifen 馮桂芬 (2002 [1861], 57) argues, was to adopt Western knowledge to supplement Chinese learning. The need to import Western knowledge, coupled with the surge in the Qing government's communication with foreign states in treaty ports opened after the Opium Wars, generated the need to establish a government institution to deal with foreign affairs, which had previously been handled by the Ministry of Rites and the Board for the Administration of Outlying Regions. Yixin 奕訢 (1833–1898), who was also known as Prince Gong, proposed establishing the Zongli Yamen, Qing China's equivalent of the ministry of foreign affairs in Western states, on January 13, 1861 and oversaw its establishment in March 1861.

In his memorial proposing the establishment of the Zongli Yamen, Yixin described the idea of establishing a foreign language school to solve the communication problems incurred by the lack of interpreters and translators in China. He suggested recruiting four Chinese instructors from Shanghai and Guangdong who had expertise in English and French to teach at the new school (Jia 1970 [1867], 71: 17). The school described in his proposal later became reality when the Tongwen Guan was established in 1862. Yixin modeled it on the Qing's Russian Language School, a government institute established in 1708. He referenced the Russian Language School's policies when formulating the six principles of the Tongwen Guan, which were to 1) admit Manchu students below the age of 15; 2) operate under the direct supervision of the government; 3) carry out monthly, quarterly, and annual examinations; 4) award the outstanding students official ranks and allow them to fill available government vacancies; 5) recruit Han Chinese and foreign instructors to teach Confucian classics and foreign languages respectively; and 6) provide students with a monthly allowance of three taels of silver (Bao 1971 [1880], 8: 29–35).

The Tongwen Guan constitution differed from that of the Russian Language School in some details. The former school was managed and financed by the Zongli Yamen and the latter by the Board for the Administration of Outlying Regions. As the main source of income for the Zongli Yamen came from customs revenue, Robert Hart (1835–1911), who headed the China Imperial Maritime Customs between 1861 and 1911, could exert a great deal of influence on the Tongwen Guan, particularly as he also served as inspector of the school.

Despite these differences, the Tongwen Guan's constitution did not alter the fundamental structure it inherited from the Russian Language School: it was tightly controlled by the government and had almost no institutional independence. More importantly, its curriculum was nothing more than a replica of that of the Russian Language School, as only foreign language courses and the Confucian classics were taught. At the beginning, therefore, the Tongwen Guan, which was the earliest government school established by the Self-Strengtheners, was merely a reproduction of the vocational foreign language schools that already existed in China. Not until 1869 did the school's organizational dynamic shift in such a way that it was able to transform into a modern school that differed significantly from its prototype.

The Controversy over the Departments of Astronomy and Mathematics at the Tongwen Guan

During the first years of the Self-Strengthening Movement, China established a series of state-owned weapon manufacturers, such as the Jiangnan Arsenal and Foochow Navy Yard, where a great amount of purchased Western machinery was installed. The Self-Strengtheners soon realized that the possession of Western weaponry alone was not sufficient to strengthen China, and desired to master the key to producing its own machinery and ordnance: Western science and technology (Bao 1971 [1880], 46: 3–4). They established new schools, such as the Foochow Naval College, where foreigners were hired as instructors. The Self-Strengtheners' reformed agenda also affected their vision of the Tongwen Guan. Viewing the school as a means of introducing Western science and technology to China, Yixin proposed adding a Department of Astronomy and Department of Mathematics to it in 1866.

Yixin designed a set of admissions policies for the two new departments that differed from that of the Departments of English, French, and Russian. Eligibility to be admitted to the new departments was not limited to only young Manchu students, but also included Manchu or Han Chinese aged above 20 who either passed the provincial civil examination or were enrolled in the Imperial Academy, or low-ranking officials who worked either in the Hanlin Academy or outside Beijing (Bao 1971 [1880], 46: 44–48). Yixin also outlined a new curriculum for these students. Unlike students at other departments, who were required to study foreign languages, they would concentrate on astronomy and mathematics (Bao 1971 [1880], 46: 44–48). The new policies were aimed at recruiting more capable students. By 1866, Yixin had recognized the difficulty of enrolling young Manchu students who were not yet fluent in Classical Chinese to study both foreign

languages and scientific subjects (Bao 1971 [1880], 46: 44–48). He therefore placed his expectations on the literati who had already mastered it.

Yixin's proposal stirred protest from Zhang Shengzao 張盛藻 (1819–1896), a Shandong Provincial Censor, and Woren 倭仁 (1804–1871), a Mongolian Grand Academician and leading Neo-Confucian scholar, which soon escalated into a national boycott of the Tongwen Guan. The two literati attacked the school on three issues. They first argued that science and technology were not in fact crucial for strengthening China. Yixin viewed astronomy and mathematics as key to the West's military superiority over China, while Zhang and Woren believed that the secret for a strong state could only be found in the Confucian classics (Bao 1971 [1880], 47: 15–16). Zhang and Woren's views were often interpreted as representing an existing contempt for science and technology among the Chinese literati. While they did indeed prioritize the study of Confucian classics over scientific and technological subjects, this did not necessarily mean that they either lacked interest in the latter or rejected their incorporation into the school curriculum. The emergence of evidential scholarship in the early Qing contributed to the revival of the literati's interest in the studies of astronomy and mathematics, which later permeated into the curriculum of many academies established after 1750 (Elman 1990, 120–21). For example, both Gujing Jingshe 詁經精舍 (Academy of the Exegesis of the Classics) and Xuehai Tang 學海堂 (Sea of Learning Hall), two schools established by Ruan Yuan (1764–1849), a prominent Chinese scholar, listed astronomy, mathematics, and geography in their curriculum. Moreover, by the mid-nineteenth century, British missionaries had also built the London Missionary Society Press where Western scientific and technological knowledge was translated into Chinese. Chinese literati, including Li Shanlan 李善蘭 (1810–1882) and Wang Tao 王韜 (1828–1897), worked as translators for the press. This indicates that, even though the Qing literati did prioritize the study of Confucian classics over science and technology, they did not have a strong incentive to oppose adding scientific and technological subjects to the curriculum of the Tongwen Guan. Their hostility toward the school was therefore likely provoked by factors other than the Chinese literati's lack of interest in science and technology.

The second objection of the conservative literati was the idea that Chinese should learn from Westerners. Yixin pointed out that it was expedient to hire Western instructors, as finding enough Chinese instructors to teach mathematics and astronomy was impossible. He promised that the Tongwen Guan would recruit no more Western instructors after the students had acquired enough Western knowledge to be able to teach it (Bao 1971 [1880], 48: 14–15). Even before Zhang Shengzao voiced his opposition, Yixin had already attempted to recruit Zou Boqi 鄒伯奇 (1819–1869) and Li Shanlan to teach mathematics. The conservative literati, in contrast, saw the Westerners as enemies and believed that they would convert Chinese students to Christianity (Bao 1971 [1880], 47: 24–25). The literati's rejection of Western instructors was intriguing. There was, indeed, a prevalent antipathy toward missionary activities among the Qing literati, but xenophobic sentiment alone cannot explain the sudden surge of opposition to hiring Western instructors in 1867, as the Russian Language School had already established a

precedent for doing so. Similarly, no literati protested against the recruitment of Western instructors to teach Western languages at the Tongwen Guan before 1867. Xenophobia was, therefore, probably stirred up by other factors and was not the direct cause of the literati's hostility towards the Tongwen Guan.

The central reason underlying the conservative literati's attack on the Tongwen Guan can be seen in the third issue: the admission of literati students to the Departments of Astronomy and Mathematics. Zhang Shengzao claimed that the stipends and career prospects promised by the Zongli Yamen corrupted the literati's moral integrity and jeopardized their future (Bao 1971 [1880], 47: 15–16). Zhang's criticism revealed his concern over the new method of selecting officials born out of the proposed admissions policy. According to Yixin's plan, the literati students who obtained high scores in the triennial examination at the Tongwen Guan would be allowed to fill vacancies in the government (Bao 1971 [1880], 46: 44–48). Allowing students to fill government vacancies was not a new policy, as it had been included in the 1862 constitution of the Tongwen Guan. The real problem was the category of the students who were eligible for such an award. The 1862 policy applied only to Manchu students whose main path to the bureaucracy was not through the civil examination, so it had almost no influence on those who relied on it for obtaining government posts. In contrast, Yixin's proposal of admitting Han Chinese to the Departments of Astronomy and Mathematics meant that the Tongwen Guan would pose a threat to those who entered or planned to enter the bureaucracy through the civil examinations. The rankings of the civil examination to a large extent determined one's initial appointment and even the highest post one could obtain in one's lifetime. The Tongwen Guan's new admissions policy, however, created an alternative channel that would allow Han Chinese to bypass the constraints of the ranking system on their career prospects. The school also provided lower ranking officials with a shortcut to promotion. Consequently, the new admissions policy of the school were perceived as threatening the traditional system and thus incurred opposition.

The Empress Dowager Cixi and Empress Dowager Ci'an sided with Yixin and put an end to the dispute over the new policies of the Tongwen Guan (Bao 1971 [1880], 47: 16–17). Their endorsement ensured the establishment of the Departments of Astronomy and Mathematics. Despite this, the school, which was conceived as a threat to the literati's orthodox career path, inevitably encountered national rejection. Only ninety-eight applicants came forward in 1867, and only seventy-six actually took the examination (Bao 1971 [1880], 49: 30–31). The Zongli Yamen admitted thirty students from this small pool of applicants, but twenty of them were soon dismissed due to their unsatisfactory performance in the annual examination (Bao 1971 [1880], 59: 35–36). Faced with this admissions failure, the Zongli Yamen had to abandon its plan to train literati students as specialists in science and technology.

The 1867 setback had a significant impact on the development of the Tongwen Guan in the following years. On the one hand, the literati's hostility toward the Tongwen Guan not only deprived the school of the best students it could admit, but also affected its recruitment of young Manchu students. The

admissions problem continued to afflict the school until the late 1880s, when the school adopted a new admissions policy. On the other hand, the “failure” also opened a door for the future development of the Tongwen Guan. The Zongli Yamen preserved the Departments of Astronomy and Mathematics and their faculties, which formed the basis for the later expansion of the school curriculum. More importantly, the admissions failure curtailed the Zongli Yamen’s interest in the school, which created space for the emergence of the bottom-up institutional dynamics that became the major force for initiating subsequent reforms.

Restoring the Tongwen Guan

In the first years of the Tongwen Guan, the school was under the strict control of the Zongli Yamen. All of its managerial personnel, not only the Ministers of the Zongli Yamen, but also the Tongwen Guan commissioner, the proctor and deputy proctor, were Zongli Yamen officials who held only secondary positions at the school. The Zongli Yamen also dictated student admissions, routine examinations, student stipends, and faculty recruitment, over which the faculty at the school had no influence. This situation changed after the 1867 admission, which increased the number of enrolled students from ten in 1862 to more than forty in 1867, creating more work than the managerial personnel could handle. Nevertheless, the Zongli Yamen, which had lost interest in the school, did not immediately add new personnel. For example, after Xu Jiyu 徐繼畬 (1795–1873), the first Tongwen Guan Commissioner, retired in 1869 the Zongli Yamen did not appoint a new commissioner until 1889 (Zhongguo shixuehui 1961, 2: 67–68). This lack of managerial personnel impaired the routine operation of the school. Michael John O’Brien (1870), one of the foreign instructors at the Tongwen Guan, lamented that “the college exists, now, but in name.”

The power vacuum at the Tongwen Guan that emerged after 1867 enhanced Robert Hart’s influence there. In his diary, Hart wrote that he had the same authority at the school as he did at the China Imperial Maritime Customs (Wang 1987, 367–68). Although the constitution of the school did not specify the jurisdiction of the inspector, Hart’s personal letters suggested that he had control over its expenses (Su 1985, 24). Hart also directed the recruitment of foreign instructors at the school. According to Qi Rushan 齊如山 (1875–1962), one of the Tongwen Guan students, the foreign instructors could not recommend their successors and the new instructors had to be selected by Hart (Qi 1998, 32). In one of Yixin’s memorials in 1866 he also mentioned that he relied on Hart to recruit foreign instructors (Bao 1971 [1880], 46: 3–4).

Hart’s influence at the Tongwen Guan has been criticized by scholars, such as Hu Daicong (1997), as a form of imperialist intervention. However, this is to a large extent an unfair accusation, as it was Hart who kept the school in operation when the Zongli Yamen withdrew from its affairs. His efforts helped the school retain ten instructors by 1877, which enabled the expansion of its curriculum (Zhu 1983, 1: 37–41). In addition, Hart also established the precedent of sending Tongwen Guan students abroad as part of the entourage of Chinese officials visiting foreign states (Bao 1971 [1880], 39: 1–2). This form of internship later became

conventional practice at the school and played an important role in securing jobs for Tongwen Guan students.

Hart's greatest contribution to the Tongwen Guan was his proposal to establish the position of the *zong jiaoxi* 總教習, literally the "general instructor." As all the managerial personnel of the school held principal positions in other institutions, they could not play an active role in the school's routine operation. Even though the two deputy proctors took turns residing at the school, they did not have knowledge of either foreign languages or Western learning. The school's expansion thus necessitated the creation of this new managerial position, the *zong jiaoxi*.

Although the constitution of the Tongwen Guan did not specify the responsibility or the bureaucratic rank of the *zong jiaoxi*, *Daqing Huidian* 大清會典 [*The Collected Statutes of the Great Qing*] and the directives of the Zongli Yamen offer some hints. According to the records of the former, the *zong jiaoxi* had to submit any proposal related to the management of the school to the deputy proctors who would seek approval from the head proctor (Zhu 1983, 1: 31). This regulation implied that the *zong jiaoxi* was subordinate both to the deputy proctors and the proctor. As the proctor lacked policy initiatives due to his absence from the routine management of the school, the *zong jiaoxi* and deputy proctors held actual control. Meanwhile, although the *zong jiaoxi* was nominally subordinate to the deputy proctor, the two posts were not hierarchical in practice. A directive of the Zongli Yamen specified that the *zong jiaoxi* oversaw both academic affairs and the management of the foreign faculty (Zhu 1983, 1: 149). *Daqing Huidian* specified that the deputy proctors were in charge of affairs relating to Chinese instructors and the Chinese curriculum (Zhu 1983, 1: 31). As the responsibilities of the *zong jiaoxi* and the deputy proctors did not overlap, it was difficult for the latter to control the former. In addition, as Hart was in charge of the appointment of the *zong jiaoxi*, the deputy proctors could not restrain the *zong jiaoxi*'s authority by removing him. The *zong jiaoxi* therefore resembled the dean in a modern university.¹

The establishment of the position of *zong jiaoxi* had an important influence on the future development of the Tongwen Guan. First, the position enabled the faculty, who had more knowledge of the school's problems, to participate in the management of the school. More importantly, the responsibility of the *zong jiaoxi* enabled the creation of a bottom-up channel that could influence the decisions of the Zongli Yamen. Many new school policies originated in the *zong jiaoxi*'s proposals between 1869 and 1900. The enhancement of the staff's influence on school affairs facilitated a series of reforms that eventually transformed the Tongwen Guan into a modern school.

¹ William Alexander Parsons Martin (1896, 293), the *zong jiaoxi* of the Tongwen Guan between 1869 and 1894, called himself the president of the school in his memoirs. However, as he had no authority over the school finances and needed to coordinate with the deputy proctors to manage the school, he was by no means the equivalent of the president of a modern Chinese college.

The Zong Jiaoxi and the Development of a Liberal Arts Curriculum at the Tongwen Guan

William Alexander Parsons Martin was appointed the first *zong jiaoxi* of the Tongwen Guan in 1869. He had started teaching at the school in 1867, but quit within two months because he considered “the care of only ten boys who learn nothing but English is...too small a business” that only wasted his time (Martin 1896, 298). His ambition lay in establishing a missionary school in China to introduce Western modernity to Chinese students through a multidisciplinary curriculum. Only after Hart promised to offer him the position of *zong jiaoxi* did Martin see the Tongwen Guan as an opportunity to achieve his goal, and he agreed to come back to China to take up the position. During Martin’s twenty-six-year tenure beginning in 1869, the science subjects taught at the Tongwen Guan nearly doubled, and German, chemistry, physics and medicine were added to the school curriculum. In 1876, Martin designed two sets of curricula that were soon approved by the Zongli Yamen.²

Eight-Year Curriculum

Academic Year	Subjects
1	(Foreign ³) Vocabulary, (Foreign) Phrases, (Foreign) Sentences, Introductory Reading (in Foreign Languages)
2	(Foreign) Vocabulary, (Foreign) Grammar, Introductory Translation
3	Global Maps, Introduction to Global History, Translation
4	Introductory Mathematics, Algebra, Translation of Official Documents
5	<i>Gewu</i> 格物 (Investigation of Things), Geometry, <i>Ping Sanjiao</i> and <i>Hu Sanjiao</i> 平三角和弧三角 (Plane Trigonometry and Spherical Trigonometry), Book Translation
6	Engineering, Calculus, Nautical Science, Book Translation
7	Chemistry, Astronomy, International Law, Book Translation
8	Astronomy, Geology, Political Economy, Book Translation

Five-Year Curriculum

Academic Year	Subjects
1	Introductory Mathematics, <i>Jiuzhang Suanfa</i> 九章算法 (Nine Chapters on the Mathematical Arts), Algebra
2	<i>Siyuan Jie</i> 四元解 (Algebra), Geometry, <i>Ping Sanjiao</i> and <i>Hu Sanjiao</i> 平三角和弧三角 (Plane Trigonometry and Spherical Trigonometry)
3	Introduction to Physics, Chemistry, Mechanics
4	Calculus, Nautical Science, Astronomy, Engineering
5	International Law, Political Economy, Astronomy, Geology

The eight-year curriculum was intended for students who studied foreign languages and the five-year curriculum was for those who studied only non-language subjects. As the latter group of students remained small, the five-year curriculum

² Both curricula are from the Tongwen Guan archive compiled by Zhu Youhuan (1983, 71–73).

³ It was not further specified which languages this referred to.

was merely complementary to the eight-year curriculum. Both curricula devoted a large proportion to scientific subjects that included mathematics, astronomy, physics, chemistry, and geography. Hard science and mathematics accounted for thirteen out of twenty-nine subjects in the eight-year curriculum and fifteen out of seventeen subjects in the five-year curriculum. They also included three and two social science subjects respectively. The two curricula were used alongside the Confucian curriculum designed by Chinese instructors. Tongwen Guan students, except the literati students, were required to study the Confucian classics in the morning and foreign languages and other subjects in the afternoon during their first years at school (Zhu 1983, 1: 73).

The new curricula, which combined Western subjects and Confucian classics, resembled the expanded liberal arts curricula in nineteenth-century America. They not only introduced foreign languages but also Western civilization and modernity to Chinese students, and thus created the possibility of nurturing talent that could be tasked with building a modern China. Martin's emphasis on science was a response to the challenge posed by advanced professional training to the traditional liberal arts education he had witnessed in late nineteenth-century America. Liberal arts education in America had its roots in the medieval European tradition of cultivating politically and morally well-rounded persons who were prepared to fulfill their civic responsibilities (Lang 2000). Its curriculum centered on the humanities and formal sciences that grew out of the *trivium* (grammar, rhetoric, and dialectic) and the *quadrivium* (arithmetic, astronomy, mathematics, and music). The emergence of research-focused universities in the nineteenth century, however, stimulated colleges to include more science in their curriculum. As a result, when Martin attended Indiana College in the 1840s, he received a liberal arts education with a heavy emphasis on subjects like mathematics, chemistry, physics, and mechanics (Spence 1969, 130).

Martin decided to introduce the form of liberal arts education he had received in America to China. The classics curriculum at the Tongwen Guan would function as the humanistic part of the liberal arts education in America to cultivate "the whole person" and enable graduates to serve state and society, while the science curriculum would train professionals for China's modernization. Martin, who was proud of his reforms, believed that the reformed school had been transformed from a "mere" vocational school into a Chinese equivalent of the American-style liberal arts college. He therefore stopped referring to the post-1869 institution as a school for interpreters, but called it a college. Hart also developed high expectations for the Tongwen Guan after Martin took over the position of *zong jiaoxi*, and wanted its students to lead the China Imperial Maritime Customs Service in the future (Chang 2016, 184–85).

After Hart and Martin restored the developmental momentum of the Tongwen Guan, the Zongli Yamen resumed its interest in the school, as clearly revealed by the increase in its directives to it. Between 1869 and 1875, it issued only one directive. After 1876, it issued more than two directives every year. Ironically, the Zongli Yamen's renewed interest in the school obstructed the effects of the new curriculum. Although the Zongli Yamen had retreated from the everyday

operation of the Tongwen Guan, its ministers continued to preside over the routine examination of enrolled students. As most ministers had no prior knowledge of foreign languages and Western learning, they were unable to identify prominent students through the examination. As early as 1870, Michael John O'Brien (1870) contended that it was ridiculous for officials of the Zongli Yamen to direct the examinations.

Although the Zongli Yamen rediscovered its interest in the Tongwen Guan, it was no longer interested in developing the school into a base for studying Western science and technology. Rather, it reverted to the original plan of training translators and interpreters there and assigned the task of studying Western science to government schools established in the provinces, where the Self-Strengtheners' presence outweighed the conservative literati. In other words, the Zongli Yamen was not interested in turning the school into the Chinese equivalent of a Western university that could serve as a force for modernization. It stated that as the school was established to enable smooth communication between China and foreign states, students should focus on the study of foreign languages, with other subjects intended chiefly to help them further develop their language skills (Zhu 1983, 1: 139).

The new agenda of the Zongli Yamen, which built a hierarchy between language education and science education, made it impossible for scientific subjects to become compulsory courses prior to 1895. The divergence between the Zongli Yamen's and the *zong jiaoxi*'s visions of the school undermined students' dedication to studying non-language subjects. As the record of triennial examinations shows, no more than half of the Tongwen Guan students took examinations in subjects other than foreign languages in 1878, 1886, and 1892 (Su 1985, 66–67). Not until 1895 did the Zongli Yamen agree to raise the status of scientific subjects in the school curriculum.

The Zong Jiaoxi and the Admissions Reform of the Tongwen Guan

Despite the decline of the Zongli Yamen's intervention in the routine affairs of the Tongwen Guan after the 1867 setback, it still controlled school admissions. Students were recruited by four methods. The first and most important of which was to admit students recommended from the Eight Banners into which all Manchu households were organized. As Manchu students could choose between multiple paths to join the bureaucracy, many of them despised the Tongwen Guan and were not willing to enroll in it. The school, as Qi Rushan (1998, 28) pointed out, thus continued to fail in recruiting promising Manchu students until 1895. The second method was to admit students recommended by either of the two foreign language schools in Shanghai and Guangdong (Bao 1971 [1880], 50: 35–36). As the two schools were largely modeled on the Tongwen Guan, the quality of their students was not higher than that of students already there. The third method was the written entrance examination, which was used in 1870 for admitting literati, but due to their hostility toward the school's new admissions policy, few capable students took it. To make matters worse, as the Zongli Yamen tested applicants with policy questions in the civil examination, it could not evaluate the students' potential for studying foreign languages, science, and technology. The fourth

method was by recommendation from the officials in the Zongli Yamen. As the recommenders often had little knowledge of those whom they were recommending, this admission method was also not able to insure the quality of the admitted students.

The poor quality of admitted students was revealed soon after they started studying at the Tongwen Guan. In 1884, the Grand Council organized a Russian language examination for the Tongwen Guan students. Among the seven examinees, only one could recognize the entire Russian alphabet (Qi 1998, 35). To improve the quality of the students, in October 1885 Martin proposed reforming the admissions policy by expanding student eligibility from Manchus below the age of 15 to both Manchus and Han Chinese between the ages of 15 and 25. He also proposed returning to the plan of recruiting students from the Imperial Academy and the literati who had passed the provincial examination (Zhongguo shixuehui 1961, 2: 63–64). The rationale underlying Martin's reform was the same as that of the 1866 reform. Martin believed that it was difficult to study foreign languages, science, and social science subjects simultaneously for those who were not yet fluent in Classical Chinese. Yikuang 奕勳 (1838–1917), who succeeded Yixin to head the Zongli Yamen in 1884, adopted Martin's proposal and started to recruit students under the new admissions policy in November 1885.

It is noteworthy that the admissions reform in 1885, which was nearly identical to that of 1866, did not encounter any opposition from the conservative literati. It was partially due to Qing's defeat in the Sino-French War in 1885, which again demonstrated the superiority of Western weaponry. A more important factor, however, lay in the literati's changed perception of the Tongwen Guan threat. Only sixteen and nineteen Tongwen Guan students were working in China's embassies in 1867 and 1887 respectively (Su 1985, 74). Those who worked in other departments of the Qing government earned their positions through the civil examinations (Zhu 1983, 1: 63). The gloomy career prospects of the Tongwen Guan students mainly resulted from the structural defects of the Zongli Yamen in the Qing bureaucracy. The Zongli Yamen resembled a temporary institution as most of its senior managerial officials only held secondary positions there. It also failed to establish necessary permanent positions, such as interpreting officers, in its early years. The Tongwen Guan students worked in the Zongli Yamen only as school personnel, rather than as officials. Moreover, in terms of the bureaucratic hierarchy, the Zongli Yamen was under the Grand Council and at the same level as the Southern and Northern Superintendents of Trade, and the governor-generals in the provinces, so it did not hold the highest authority over foreign affairs under the emperor (Rudolph 2008, 105–06). It largely relied on personnel overlap to exert its influence on other government institutions. The deficient authority of the Zongli Yamen made it difficult to successfully place the Tongwen Guan students in government posts. This problem was not eased until 1888 when Yikuang obtained approval to establish the position of interpreting officer at the Zongli Yamen (Zhu 1983, 1: 49). The placement record of the Tongwen Guan students convinced the literati that the school did not pose a threat to their careers, so they were uninterested in the school's admissions reform in 1885.

The decline in the literati's hostility towards the Tongwen Guan contributed to its success in recruiting students in 1886. The number of test-takers increased by more than four times (from 76 in 1876 to 394) and 108 students were admitted (Zhongguo shixuehui 1961, 2: 65–66). This admissions reform helped to increase the quality of students. When Qi Rushan (1998, 40) enrolled into the Tongwen Guan in 1894, there were more diligent students at the school than there had been ten years previously.

Unfortunately, the positive effect of the admissions reform was, nevertheless, curtailed by the deficient management of the Tongwen Guan. One salient issue was cheating in the routine examination. The Zongli Yamen found out that some students hired others to take their tests or cheated by using prepared notes. They thus issued a directive in December 1876 to tighten the examination rules (Zhu 1983, 1: 126). A more serious problem was low attendance. Many students did not attend school regularly for various reasons, including illness, marriage, mourning, and working in government institutions. One of the lowest attendance rates appeared in early 1894 when only one or two out of ten students attended class on average (Zhu 1983, 1: 137). The Zongli Yamen issued eleven directives in nine years to require the school to increase its attendance rate (Zhu 1983, 1: 127–38).

The issue of student discipline at the Tongwen Guan was partly due to the unsatisfactory quality of students admitted prior to 1886. However, a more significant cause was the lack of administrative personnel. Both Chinese and foreign instructors were merely in charge of teaching and played no role in administration. Some outstanding students worked as associate instructors, but their role resembled that of teaching assistants rather than that of administrative assistants. This meant that all the academic and administrative affairs fell upon the *zong jiaoxi* and deputy proctors. They were responsible, with no administrative assistance at all, for affairs related to more than ten instructors and more than one hundred students. The lack of administrative personnel, which exacerbated the issue of student discipline, largely frustrated the possible achievements of the admissions reform.

The First Sino-Japanese War and the Crisis of the Tongwen Guan

China's defeat in the First Sino-Japanese War in 1895 fundamentally shaped the destiny of the Tongwen Guan. Recent research has found that the result of the war was not dictated by the technological gap between China and Japan. For example, Allen Fung (1996) argues that Japanese troops were not better equipped than their Chinese counterparts in battle and that it was rather the Chinese soldiers' lack of military training and discipline that was a major cause of China's downfall. Meanwhile, Benjamin A. Elman (2004, 330) has pointed out that there was serious corruption in the Chinese army, as many of their shells were filled with cement. Although victory in battle was determined by multiple factors, public opinion in the late Qing tended to blame military defeats on China's backward technology.

The narrative of Qing military failure led to harsh criticism directed at the Self-Strengtheners. From the vantage point of Japan's success, many literati perceived the Self-Strengthening Movement as a failed attempt to impose Western

technology on an outdated framework. Their repudiation of the doctrine of the movement produced the narrative that new institutions, such as arsenals, navy, factories, and academies, were not Western-style enterprises but rather backward Chinese institutions. These literati desired to reform the “old” structures and establish new institutions to strengthen China. Meanwhile, some literati also revisited the assumption that science and technology were the major origin of Western strength. They saw Japan’s rise as a result of its westernized sociopolitical structure, built after the Meiji Restoration, rather than simply its adoption of Western science. They started to advocate for a top-down reform in the political, economic, educational, and military spheres to strengthen the Qing dynasty. Within this atmosphere, the Tongwen Guan inevitably encountered harsh criticism.

The reformist literati criticized the Tongwen Guan for being unable to train personnel to strengthen China. They viewed its curriculum as a major factor hampering its educational achievement. Chen Qizhang (Zhu 1983, 590–91), a censor, denounced the school for prioritizing foreign language over science education and belittled it as a mere Chinese equivalent to elementary and junior high schools in the West. Li Duanfen 李端棻 (1833–1907) (Zhu 1958 [1909], 4: 3791–792) and Liang Qichao 梁啟超 (1873–1929) (1989 [1932], 1: 19–20) advocated adding more political science and economics courses to the curriculum, as they considered those two subjects as crucial aspects of Western learning. The three reformists were also concerned about how Western learning was taught at the school. They argued that students could not master one subject if they dabbled in too many fields, and thus criticized the liberal arts curriculum for lacking specialization and professionalization (Zhu 1958 [1909], 4: 3791–792; Zhu 1983, 590–91; Liang 1989 [1932], 1: 19–20). The reformists’ attack on the liberal arts education at the Tongwen Guan was part of the global trend towards professionalization and specialization in higher education, since nineteenth-century modernization had led to the increased sophistication of careers. These critics believed the traditional ideal of a well-rounded generalist could not accomplish the task of modernizing China, as generalists were unable to develop expertise in the fields of Western learning. They thus rejected Martin’s vision of a liberal arts curriculum combining a humanistic Confucian education with a Western science education, and demanded the education of specialists instead.

Faced with harsh criticism of the school curriculum, the Zongli Yamen discovered an urgent need for curriculum reform. It restored the agenda of turning the Tongwen Guan into a base for studying Western science and technology. Its revised vision of the school was in line with that of Charles Henry Oliver (1857–1937), who succeeded Martin as the *zong jiaoxi* in 1895. The consensus of the Zongli Yamen and Oliver on the development of the school led to a series of reforms after 1895. These reforms started with measures to boost students’ interest in scientific subjects. In August 1895, Oliver advocated making the study of science a prerequisite for increasing the students’ monthly stipends (Zhu 1983, 1: 139). His proposal was approved in the same month by the Zongli Yamen, which went even further by granting extra awards to students studying scientific subjects.

Oliver later drafted a more ambitious reform plan, which was put into practice by the Zongli Yamen in 1897. He proposed to restart recruiting lower rank officials to bring in more capable students (Zhu 1983, 1: 147–48). He also tried to improve science education in the school in several ways. First, he advocated making such subjects compulsory for students who did not need to study Classical Chinese to “generate” a larger group of recipients of science education and second, he proposed establishing a Department of Engineering and Cartography to expand the science curriculum (Zhu 1983, 1: 147–48).

Although the reform addressed the reformists’ criticism of science education at the Tongwen Guan, it did not add more political science or economics to the curriculum, as the reformists demanded. This is largely due to the Self-Strengtheners’ perception of what could strengthen China. Unlike reformists who “discovered” the secret of state prosperity in political science and economics, the Self-Strengtheners considered Western science and technology as the key factor. They had little motivation to establish courses on Western humanities and social sciences. The reform did not introduce professionalization and specialization to the school either. As the Self-Strengtheners held the doctrine of Chinese learning for fundamental principles and Western learning for practical application, they insisted on preserving the social, political, and cultural structure of China, which was founded upon the Confucian classics. They thus rejected a specialist training scheme that would undermine the role of Chinese learning in the curriculum. For them, the ideal remained well-rounded students who had a knowledge of a wide range of subjects. Consequently, they were reluctant to change the liberal arts curriculum.

Despite the Zongli Yamen’s hesitance to expand the social science curriculum and introduce professionalism and specialization to the Tongwen Guan, the reform still presented a new opportunity for the school’s development. Following the literati’s increasing desire to study Western science and technology, the reform managed to attract a larger number of students. After 1895, the Tongwen Guan encountered an unprecedented increase in the number of applicants and the number of enrolled students subsequently reached 119 in 1896. Oliver even proposed to temporarily stop admitting students, as the maximum number of students allowed at the school was 120 (Zhu 1983, 1: 145). The rise in the number of applications also intensified the competition for admission. The school started to use the entrance examination as the main method of evaluating students, which helped select promising candidates (Qi 1998, 37).

Before the reform could generate any significant achievement, however, the school was closed for two years after 1900 due to the Boxer Rebellion (1899–1901). Not seeing any immediate and qualitative improvement in the school, the literati lost trust in it and ignored the potential it possessed. In the witch hunt for the causes of this educational “failure,” some of them blamed the structure of the school. Sun Jianai (1827–1909), who was the first *guanxue dachen* 管學大臣 (educational commissioner), categorized the Tongwen Guan, along with all the military academies established during the Self-Strengthening Movement, as old-style institutions (Zhu 1983, 2: 623). In Sun’s eyes, the Tongwen Guan, which was criticized for its bold curriculum and admissions policies in its early years,

had become a conservative school. He and others who longed for political reform sketched the blueprint of a modern university, which came into being in the form of the Imperial University of Peking in 1898 (Zhu 1983, 2: 485). The Imperial University of Peking, whose curriculum integrated both Chinese and Western languages and learning, overshadowed the Tongwen Guan, which increasingly looked like an expensive but dysfunctional institution. As early as in 1898, some literati suggested abolishing the Tongwen Guan altogether or merging it with other schools (Su 1985, 87). Eventually, the Qing government decided to incorporate it into the Imperial University of Peking in 1902.

Conclusion

Although the Tongwen Guan existed for only forty years, studies of it serve to facilitate a better understanding of China's path toward modernity. The 1867 setback the school encountered helps us re-examine the conventional view in the study of modern Chinese history which remains influential, that of John King Fairbank and Ssu-yu Teng (1954), Albert Feuerwerker (1958), and Mary Clabaugh Wright (1962), which held that the ideological divergence between China and the West led to China's reluctance to adopt Western science and technology before 1895. Admittedly, a xenophobic sentiment did exist in late nineteenth-century China. Not only the conservative literati, but also the Self-Strengtheners, had little trust in Westerners, as seen in the fact that they wanted to replace foreign instructors with Tongwen Guan students after the latter acquired a knowledge of Western science and technology. At the same time, the Qing literati's contempt for Western science and technology was also salient. Their sense of China's cultural superiority can be found in the conservatives' denial of the importance of Western learning and the Self-Strengtheners' idea that Western learning was complementary to Chinese learning. Despite this, the history of the Tongwen Guan reveals that xenophobia and contempt for science were not the most important factors that hindered the development of the school. The literati were not hostile to the school either before the 1866 reform or after they realized that the school did not threaten their careers. Only when they became concerned about the hazards involved in the school's plan to recruit the literati to study astronomy and mathematics did they protest against it. Xenophobia and the discourse of China's cultural superiority were employed to a large extent as a means of protecting the conservative literati's vested interest against that of the emerging forces. The reform of the Tongwen Guan thus suggests that "new" and "old" seem to be more useful categories than "China versus the West" in understanding the setbacks in China's march toward modernity.

Moreover, the organizational changes of the Tongwen Guan also help us reconsider the assumption that the Self-Strengthening Movement failed due to its attempt to rely on adopting Western science and technology into the old culture (Hatano 1960; Itō 1967). This approach ignores the institutional dynamics and underrates the new institutions built as part of the Self-Strengthening Movement by portraying them as old wine in new bottles. The history of the Tongwen Guan shows that it started as an old-style foreign language school that, by the endeavors of the school's managerial personnel, was later transformed into an institution equivalent to a liberal arts college in America. This kind of organizational

innovation was not uncommon in the Self-Strengthening Movement. Many new institutions, including the Foochow Navy Yard and the Jiangnan Arsenal, manifested characteristics of modern enterprises. It is, therefore, the “narrative of failure” that emerged from the First Sino-Japanese War that turned these institutional innovations into burdens from China’s “backward” past.

Finally, investigating the Tongwen Guan with an institutionalist perspective facilitates a better understanding of the so-called “failed” Self-Strengthening Movement. A closer look at the interaction between the Zongli Yamen and the *zong jiaoxi* reveals the institutional constraints and managerial deficiencies at the school. As the two parties did not share the same vision of the school until 1895, they failed to coordinate their activities. The school was caught between offering vocational training and providing a liberal arts education. The Zongli Yamen’s control over student recruitment and examinations limited the effects of the school’s curriculum and admissions reforms. When the two parties finally reached consensus on the development of the school in 1895, the rapidly changing domestic and international environments did not allow them sufficient time to fulfill the literati’s expectations. This kind of institutional weakness was not exclusive to the Tongwen Guan, but was prevalent in many institutions established by the Self-Strengtheners. For example, the achievements of the Foochow Navy Yard were largely undermined by the limitations of its traditional budgeting and accounting methods, as well as by the lack of technological knowledge among the managerial personnel, all of which eventually led to cost overruns (Pong 1987). As the case of the reform of the Jiangnan Arsenal reveals, such problems in state-owned enterprises persisted after the First Sino-Japanese War. The Qing government’s agenda to check the influence of Zhang Zhidong, the Viceroy of Liangjiang, in Jiangnan impeded the reform of the organization of the arsenal between 1895 and 1911 (Kennedy 1972). In other words, the lack of institutional autonomy rendered state-owned enterprises vulnerable to political struggles in the government. Seen in this light, compared with the China/West and Science/Classics dichotomies, institutional constraints were the Achilles heel of the Self-Strengtheners’ various endeavors and sometimes dealt them the fatal blow.

GLOSSARY

<i>Daqing Huidian</i>	大清會典	<i>shenji ying</i>	神機營
<i>Gewu</i>	格物	<i>siyuan jie</i>	四元解
<i>guanxue dachen</i>	管學大臣	<i>tangyu</i>	堂諭
<i>Gujing Jingshe</i>	詰經精舍	Tongwen Guan	同文館
<i>jiuzhang suanfa</i>	九章算法	Xuehai Tang	學海堂
<i>Ping Sanjiao and Hu Sanjiao</i>	平三角和弧三角	<i>zong jiaoxi</i>	總教習
		Zongli Yamen	總理衙門

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