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From *Gewu zhizhi* to Building a New Moral Universe?

The Development of the Imperial Peking University Curriculum (1898–1911)

Modern Chinese education developed out of contact with Western learning. The decision to learn from the West stemmed first from Chinese defeats in battles with Western countries and Japan in the latter part of the nineteenth century. From that very practical decision to make weapons and ships comparable to those in the West, the Chinese gradually came to accept many other Western concepts. Western practices and subjects of learning expanded Chinese views of the universe, leading to, among other things, more accurate mapmaking, knowledge of foreign customs and practices, and scientific explanations of the universe. As Benjamin Schwartz described it:

> What truly struck figures such as Yan Fu, Liang Qichao, and Kang Youwei as new was not so much the bare abstract idea of progress as what was perceived as the fact that the West had actually attained the realization of entirely new human possibilities in such realms as technology, science, and even social and political organization. It is thus no wonder that Western ideologies which promise a total historical redemption in an ideal order—whether these ideologies take the form of Marxism-Leninism, "modernization theory," or even the technological redemptionism of a Toffler—should continue to exercise such an extraordinary hold on the minds of so many modern Chinese.[1]

Western learning as introduced by missionaries from the Society of Jesus (Jesuits) started to challenge Confucian cosmology as early as the seventeenth century.[2] Western influence, however, was limited to the imperial calendar and the writings of a few scholars. In twentieth century China, many Chinese,

recognizing the unbridgeable gap between their ideals and the Chinese sociopolitical reality as a result of Western intrusion, embarked on the search for a new reality. After the Second Opium War (1858–60), numerous Chinese scholars talked about "unprecedented changes" conveyed through an array of Chinese terms, including *bianju* (changed scene), *qibian* (dramatic change), *qiju* (dramatic changed scene), *chuangju* (unprecedented change), *shibian* (world change), and *dabian* (tremendous change). An estimate is that no fewer than eighty-one Chinese government officials used these terms in writing between 1840–1902, especially from 1884 to 1902. In the latter period alone China saw three wars with Europe, Japan, and the U.S. This pervasive mood of change was also fed by the writings of Western residents in China such as Sir Thomas Wade, the British envoy to China in the 1860s. These ideas often contained a tinge of Darwinism as they sought to develop a new worldview based on proactive change for the purpose of helping China to help itself, a process that came to be known as self-strengthening.[3]

The borrowing of Western ideologies that "promise a total historical redemption," was not immediate. Initially, many Chinese reformers wanted to fit their new discoveries of the outside world neatly into the rubric of the Confucian moral universe. A pattern of reasoning was developed by the neo-Confucians of the Cheng-Zhu school of the Song dynasty (960–1279) that combined elements of Buddhism and Daoism in its interpretation of Confucian studies and envisioned a more metaphysical level of heavenly rules than previous Confucian scholars from preceding dynasties. They emphasized that understanding of the metaphysical rules would be achieved only after studying the minute rules in the specific relationships of things, which could be achieved through reading Confucian classics. As one major leader of that school, Zhu Xi put it, "investigation of things" through study (*gewu*) was needed to link the minute rules governing specific phenomena with the unifying Confucian rules (*zhizhi*). The Chinese reformers sought to treat the new discoveries as myriad things governed by rules that ultimately would be linked to the metaphysical rules of Confucian learning. The earliest schools offering Western education were meant to explore these specific rules. They included those that trained interpreters, such as the Jiangnan Arsenal where "engineering and technical subjects were taught in addition to languages, and considerable work in the translation of Western texts of science and technology was undertaken." An official institution in the south, the Fuzhou Navy Yard School, which focused on naval technology, had both English and French divisions. Private individuals, including provincial gentry and scholars, also established schools, such as Beiyang gongxue (North Sea Public School) in Tianjin in 1895 and Nanyang gongxue (South Sea Public School) in Shanghai in 1896.[4]

The Chinese state initiated its own institutions of higher education in the Western style in the 1890s, primarily to consolidate a traditional linkage between education and politics.[5] In contrast to the Christian missionaries, who opened numerous modern schools, Chinese individuals established few modern schools at the middle-school level or above in the nineteenth century, for the moment ceding the task to the state. The initial state development of Western schools, however, was very unbalanced with its focus on higher education which ignored primary and secondary education, suggesting the government lacked a unified vision of how Western learning could benefit China.[6] Far from being a centrally driven phenomenon, the schools were largely the work of reformist governors in their own provinces. Even the Imperial Peking University lacked primary and secondary schools as feeder institutions; in its first twelve years of operation, it had to focus on preparatory schools to prepare students for a university education, and after the university proper was opened in 1910, its preparatory school continued into the late 1920s because of the absence of a sufficiently established modern primary and secondary school system. This tendency to place a priority on higher education, at the expense of the lower levels, seemed a carryover of the imperial examination system, where scholars were expected to have studied the classical texts largely through private tutelage. One possible explanation for this is that the state did not have the resources and was not prepared to build a nationwide educational system in 1898, but went ahead in this piecemeal fashion because it needed to produce candidates who were qualified for government service. In the past, the system that produced those candidates was the imperial examination system; by the early twentieth century, it increasingly was the modern university.

The early modern schools' founders often had firsthand experience dealing with foreign countries or found foreign weapons and technology useful. As their contact with Western learning deepened, they also felt the need to go beyond Western technology to study the more abstract principles behind the applied sciences. This marked a transition on the part of Chinese reformers from a literal adherence to Confucian principles to a broader range of truths. Initially, the more abstract principles, usually from the natural sciences, continued to be viewed in terms of Confucian principles, such as in the case of Prince Gong and his School of Languages (*Tongwenguan*), established in 1861. As Western learning gained greater importance and had an impact of daily life in China in the 1890s, it became subject to the neo-Confucian question: is this knowledge equivalent to moral knowledge? In Zhu Xi's *gewu zhizhi* (investigation of things to achieve understanding of Confucian rules through study), a true understanding of the principles of the world would lead one to a total and sincere acceptance of the Confucian principles and a complete identification of

one's sentiments with the Confucian rules—that is, the knowledge of Confucian learning that defined the reality was also the moral knowledge that guided one's behavior. The question was, would Western knowledge be able to define China's moral world? Zhang Zhidong, the chief drafter of the curriculum for Imperial Peking University, tried to address the question in his curriculum.

Prince Gong (1833–1898) was one of the first in the Qing imperial bureaucracy to confront the introduction of Western learning into China, and among all the Qing officials he pursued the policy of learning from the West for the longest period of time. In 1853, when he was twenty, he became the grand councillor (*junji dachen*) for his brother, the Xianfeng emperor. Prince Gong was charged with dealing with the domestic enemies of the Taiping army and the Small Sword Society (Xiaodaohui) rebel forces against the Qing government in the nineteenth century and with negotiations with the United States, Britain, France, and other European countries regarding their demand to revise the treaties they had signed with China after its defeat at British hands in the First Opium War (1839–42). In 1860, British and French troops pressed on to Beijing. The emperor fled the capital, leaving Prince Gong in charge. Eventually, the British and French occupied Beijing and succeeded in having the treaty revised on terms more favorable to them, including an increase of six million taels of silver in Chinese reparations in addition to the twenty-one million taels in the first treaty.[7]

The peace treaty to settle those conflicts, which Prince Gong was negotiating with Lord Elgin, the chief of staff of the English and French allied troops, was delayed because no one on the Chinese side knew English. In the wake of a second treaty with Britain in 1860, Prince Gong proposed opening a language school in Beijing to train interpreters of future treaties with foreign countries, because the English and the French required all treaties to be written in their languages beginning in 1863. However, Prince Gong's decision to build the new school did not envision the permanent incorporation of Western learning into China. His earliest plan was to enroll twenty-four students in his School of Languages so that interpreters would be available when the need arose. Because the Qing dynasty was governed by the Manchus, who were a minority that had conquered the Han Chinese in 1644, for fear of Han disloyalty to the Qing, he also requested that the enrollees be of Manchu origin. In 1862, only ten students enrolled.

From the start, although the school was officially under the supervision of the *zongli yamen* (ministry of general affairs), it was managed by Sir Thomas Wade. The school's main source of income was the proceeds of the maritime customs governed by the Briton Sir Robert Hart. W.A.P. Martin, an American Presbyterian missionary, served as chief supervisor (*zongjiaoxi*) of the School of Languages for twenty-six years.[8]

After the school was established, Prince Gong concluded that a much wider curriculum needed to be offered; in his 1866 memorial to the throne on adding new science courses to the curriculum, he linked scientific knowledge and national power. He suggested a change of student recruitment from teenage Manchus to mature young men over twenty years old of both Manchu and Han origin because they were older, who had good command of the Chinese (Han) written language, so that they could spend their time acquiring a thorough knowledge of the theories of astronomy and mathematics.[9] After that decision was made, Martin added to the curriculum such subjects as algebra, geometry, trigonometry, calculus, physics, chemistry, and calculations in astronomy, geography, and minerals.[10]

Prince Gong was not alone in pointing out a connection between abstract knowledge and practical outcome. So did many of his literary contemporaries, both in and out of government, such as Li Hongzhang, viceroy of Tianjin and founder of several modern military and machinery plants in China.[11] Feng Guifen, Wang Zhichun, Xue Fucheng, and Zheng Guanying, and many other reform-minded scholars linked Western material prosperity and strength with their educational systems and science curriculum.[12] While they aimed to use Western technology and science to transform the Chinese social and economic reality, they were also inadvertently raising the question of whether Western knowledge was also moral knowledge, as the neo-Confucians treated Confucian learning. In his introduction of social Darwinism into China, Yan Fu interpreted nature's survival of the fittest as a willful act, guided by fathomable moral laws.[13]

This treatment of Western learning certainly brought up the question of how Western learning related to the Confucian principles. As in Japan, the Chinese introduced a distinction between Chinese and Western learning as essence versus application, best articulated by Zhang Zhidong in his slogan *zhongxue wei ti, xixue wei yong* (Chinese learning as principle, and Western learning as application). Recent scholarship, however, contends that for many Chinese reformers, including Zhang Zhidong, the distinction indicates not antagonism between Chinese and Western learning but priority.[14] The discussion below uses the example of Zhang Zhidong's 1903 curriculum for Imperial Peking University to explore how he vacillated between Chinese and Western learning.

Zhang Zhidong and Imperial Peking University

Zhang Zhidong (1837–1909) synthesized the Chinese and the Western in his school curriculum for Peking University in 1903. Although he was by no means the first one to use these approaches in China, his curriculum for Peking

University was the first to impact Chinese studies with these approaches. And his curriculum had a long-lasting impact on the university, even well after the republican revolution. Thus it is important to examine Zhang's curriculum closely. First, it is useful to look at his life experience, which heavily influenced his attitude toward Western learning and the idea of change.

Zhang Zhidong, whose official responsibilities ranged from provincial director of education, Hanlin academician, to governor, also had firsthand experience dealing with instability caused by domestic rebels and foreign powers. He had a turbulent early youth: his father, the prefect of Xingyi in Guizhou province, fought the Taiping army and other rebels, including dissident Miao tribes of Guizhou. In 1855, when he was eighteen, Zhang Zhidong fought alongside his father. He traveled frequently between his native Zhili province, which is adjacent to Tianjin, and his father in Guizhou. Four years later, Zhang Zhidong took charge of a militia force that guarded twenty villages in Zhili. The British and French occupation of Beijing led Zhang to the Zhili militia experience In 1863, his palace examination—the highest of the imperial examinations, presided over and graded by the emperor was a critique of current policies and an attack on the imperial examination system. The examiners were divided in their opinion, but Cixi, the empress dowager, perhaps out of her own personal experience of having fled Beijing with the emperor in 1859, approved of his essay and awarded him the title of *jinshi* (highest level of success in the imperial examination).[15] He served as provincial director of education in Sichuan and Hubei, and later as governor of Zhili, Guangdong, and Hubei.

During his tenure as governor of Hubei and Guangdong, Zhang Zhidong made his name as a modern educational reformer by opening up many new-style schools patterned after the Chinese *shuyuan* (private Chinese institute) system, emphasizing understanding of Confucian learning and current affairs, not preparation for the imperial examinations. After China's defeat in the Sino-Japanese War in 1895, he turned all such *shuyuan* schools to modern, Western-style schools. He also sent students from Hubei to study abroad. Hubei thus became a forerunner in modern Chinese educational reform. Zhang's instrumental role in the 1903 school programs led to the development of Chinese schools at all levels, from primary to tertiary and research institutes, and from normal schools to higher vocational schools.[16]

Zhang's curriculum for Imperial Peking University reflected his awareness of competing classifications of knowledge: the Confucian integration of knowledge, and the Western specialization of learning. Zhang tried to integrate an expanded definition of Chinese learning from the past—history, literature, philosophy, and philology—with Western learning and practical knowledge. Chinese learning was compartmentalized into different disciplines. Even Confucian learning was able to occupy no more than one of the eight academic divisions:

(Confucian) classics, politics and law, arts, medicine, science, agriculture, engineering, and commerce. This classification was closely modeled after that in the Japanese state universities: the Imperial Tokyo University and Imperial Kyoto University, except that, in the Japanese universities, Confucian classics were a subfield in Chinese studies, and commerce was a part of the law and politics division.[17]

In these branches of Chinese learning, scattered in different academic disciplines, Zhang Zhidong tried to create a new integration between the concrete universe and the moral universe, but his approach differed drastically from previous Chinese approaches to education. The official development of Confucian orthodoxy emphasized a literal reading of the Confucian moral exhortations and equation of them to reality. At the Imperial College, instead of a specialized curriculum, students learned through gradual immersion in the classics. The readings over the years varied very little to guide the student gradually into a greater identification with the principles stipulated in the classics. The first level was initiation, including achieving the correct interpretation (*zheng yi*), elevating ambitions (*cong zhi*), and broadening the course of study (*guang ye*). It was offered to those who had a good grounding in the four great books (The Analects, the Mencius, Doctrine of the Mean, and the Great Learning) but were not very familiar with the five classics (Book of Poetry, Book of Documents, Spring and Autumn Annals According to Zuo, Book of Zhou Rites, and Book of Changes). After a year and a half, those who could write fluently would ascend to the level of cultivating the Way (*xiu dao*) and making the heart sincere (*cheng xin*) to give them a deeper immersion in history and the classics. After a year and a half at this level, students would go to the highest level, free exercise of one's temperament (*shuai xing tang*), which would take a year. The third level was based on the assumption that the student had already cultivated the Confucian Way and could now practice administration of government. After passing several examinations, the students would be awarded an office. By emphasizing sincerity of acceptance and the actual practice of the sages' teachings, the Imperial College tried to achieve a combination of one's feelings, motivation, and action, to cultivate a world outlook based on an ethical view of reality imparted by the classics,[18] a neo-Confucian ideal championed by the Cheng-Zhu school.

An implicit assumption in this educational system was the harmony between the individual and society, which was not unlike the assumption behind Enlightenment historical writings, although the reasons for this assumption were quite different in pre-twentieth-century China and eighteenth-century France. The Enlightenment belief in the harmony between the individual and society proceeded from the natural-law philosophies, influenced by science. In neo-Confucian learning, this harmony was also based on a law binding the

individuals and society, although such law (*dao)* was based in morality. The results of this belief, however, were somewhat similar: both the Enlightenment philosophes and Chinese Confucians believed that history carried some unchanging essence and historical change only involved contingent elements, so that lessons from history were timeless.[19]

Zhang Zhidong was torn between recognizing the new reality he wanted to achieve as originating from principles that were fundamentally different from Confucian learning and seeing it as simply a manifestation of specific connections between society and the Confucian moral principles. That he continued to uphold the Confucian principles is evident from the division he created for Confucian learning, although this was already different from the past, when Confucian learning occupied the whole curriculum. Despite the special status accorded to Confucian learning, the content was drastically reduced. Specialization, a characteristic of the modern university, was also applied to Confucian learning. Students could specialize in one or two of the eleven subfields/classics in the division: *Book of Changes* (Zhouyi), *Book of History* (Shangshu), *Book of Poetry* (annotated by Mao) (Mao shi), *Spring and Autumn Annals* (annotated by Zuo) (Chunqiu zuozuan), the Zuo, Gongyang, and Guliang annotations of the *Spring and Autumn Annals* (Chunqiu sanzhuan), *Book of Zhou Rites* (Zhouli), *Book of Rituals* (Yili), *Book of Rites* (Liji), *Analects* (Lunyu), *Mencius* (Mengzi), and *Song Dynasty Confucian Learning* (Li-xue). Like the neo-Confucians, Zhang asked for an inferential rather than literal reading of the classics. It meant a greater emphasis on interpretation and the extraction of the most important messages from the classics. He believed that each classic had dozens or even hundreds of common messages, and it was the responsibility of the students to extract them from the classic in which they specialized.[20] The inferences, of course, had to be based on a correct understanding of the classics, including a correct understanding of the words. What Zhang suggested was a combination of the Qing textual exegesis that focused on the understanding of the literal meaning of ancient words and the Song neo-Confucian learning that stressed interpretation for practical use.

The study of these Confucian principles alone was obviously not enough for Zhang to work toward a new social reality for China. Thus he included as supplementary courses comparative studies in ancient and modern Chinese legal systems, history of Chinese and foreign education, Chinese and foreign geography, and world history, which helped relate the classics to Chinese and foreign law, politics, and education. He also assigned elective courses (*xuanxiuke*) for this division, including Chinese literature, Western history, Western legal history, psychology, logic, and sociology.[21] Zhang tried to link the study of Confucian classics with that of Western politics, such as the parliamentary system that Zhang decided China eventually would introduce. He believed that

the essence of the Western political system included modern schools, the study of geography, the modernization of methods of finance and taxation, weapons, the legal system, public works, commerce, and trade, all of which were preconditions for parliamentary government.[22] If Confucian learning provided the principles, it had to work alongside these other Chinese and Western subjects in order to bring about the new social reality.

Zhang did not stop at the integration of Confucian learning with other subjects of learning. He tried also to include in the curriculum specific rules governing various aspects of Chinese life and combine them with Western subjects of science and social sciences. Chinese subjects of history, philosophy, literature, and philology, historically subordinate to Confucian learning but closely linked to the classics and perceived as conduits to a better acceptance of the classics, were now studied extensively to focus on the manifestations of Confucian principles on a more concrete level as reflected in these branches of learning. Chinese history and literature—together with foreign history, Chinese and foreign geography, English literature, French literature, Russian literature, German literature, and Japanese literature—formed the Division of the Arts. In the fields of Chinese history, literature, and geography, Zhang emphasized causal analysis and an evolutionary approach to surmise patterns of change that he said had contemporary reference. Unlike the Confucian Learning division, which emphasized interpretation over content, Zhang sought a detailed study of the vicissitudes of Chinese history that went beyond treating history as a moral reflection of the success or failure of meeting Confucian standards. And its focus was on a practical assessment of Chinese policies and society by the standards of wealth, strength, and wisdom. Zhang wanted to search for patterns of establishment and change in political practices, comparative studies between state strength and state policies, changes in people's nature, including wisdom and stupidity, strength and weaknesses, reasons for wealth and poverty of different dynasties, the rise and fall of education, relevance of the literati and scholarship to national strength and social customs, changes in military systems, the ups and downs in agriculture, the difference between useful and non-useful craftsmanship, the relationship between land and water routes and national prosperity, changes in prices, the pros and cons of taxation, different dynasties' financial planning, the pros and cons of criminal law, changes in the strategic importance of the coastal region, reasons for foreign penetration of China, each dynasty's success or failure at foreign policies, reasons for political problems, changes in rituals, music, etiquette, prose, and mourning uniforms, changes in calendars, different institutional emphases in each dynasty, differences between the reforms in each dynasty, and evaluation of historical writing styles of different dynasties. Chinese history, in other words, became a way of expanding the study of Chinese political systems and practices. For that reason, histories that

did not follow orthodox Confucian traditions were also accepted for study. Historical genres thus went beyond official dynastic histories—which had usually been considered orthodox histories—to various unofficial histories and general histories. As in the Classics Division, to further link Chinese history with the present and Western culture and politics, Zhang stipulated elective courses including logic, legal history of various foreign countries, Chinese literature, anthropology, sociology, education, archaeology, writings on metal ornaments and stone tablets, finance, and foreign relations.[23]

Like Chinese history, Chinese literature in Zhang's curriculum was coopted to further the study of politics. The Confucian exhortation that literary genres were to transmit the moral messages of the sages and that there should be a special correlation between prose style and moral messages led to the dismissal of many forms of prose, including the novel, from respectable writings in Chinese history. Although the traditional emphasis on writing style persisted—reflected in Zhang's exhortation that students should be selective about literary genres, differentiating between those with and without virtue, with or without scholarship, singling out those that were empty and useless in improving the quality of the people—Zhang introduced to the curriculum a wide range of prose styles, from parallel prose to novels and bibliography, and especially literary genres that were of present practical use. Zhang tried to link literary studies with more direct practical relevance, such as their connection with the nation, geography, world archaeology, diplomacy, and the study of new knowledge and new machinery manufacturing. The elective courses Chinese literature majors were to take included psychology, logic, diplomatic history, Western legal history, sociology, education, Latin and Greek, which were fundamentally similar to the elective courses for Chinese history and Confucian classics, showing that the ultimate goals of the three areas were similar, if not identical. In the field of geography, similar linkages were also built between Chinese and foreign geography and climate, finance, sea and land communications, history, zoology and botany, culture, military administration, customs, and industry.[24]

Therefore in Zhang's curriculum for Chinese learning, one finds a recreated universe *qua* moral universe: the universe now included historical Chinese practices in many areas of life and many Western subjects of learning. On the surface, Zhang tried to show that the principles remained Confucian, hence his famous "essence/application" formula. However, unlike the historical curriculum for the imperial college, where Confucian learning comprised the whole universe, Zhang's curriculum expanded upon the previous Confucian classics and created a new integration between Chinese learning and the myriad reality as represented by the many supplementary and elective foreign and Chinese learning courses associated with the Chinese subjects. With regard to this integrated body of Chinese and Western learning, I agree with the basic premise of

Min Tu-ki. Namely, in his exhortation of Chinese learning as inner (governing body and mind) and Western learning as outer (governing worldly affairs), Zhang Zhidong was concerned not with the logical relationship between "principle" and "utility," but with their functional difference: Western learning was needed so that Chinese learning might be preserved.[25] Although Confucian learning remained a separate division, its status as "principles" or "essence" was primarily in form and its functions in the curriculum did not fundamentally differ from an integrated curriculum in which Confucian learning was offered as subdivisions of different academic disciplines.

The interesting thing about Zhang Zhidong's curriculum was the contrast between the newly constituted universe of Chinese and Western learning, complementing each other to form a new sociopolitical reality, and divisions that comprised only specialized Western learning. As a modern university, Peking University introduced the structure of the Western university, including many specialized areas of learning in the arts and sciences, some of which, such as law, politics, science, and medicine, had very little Chinese learning content. Unlike many nineteenth-century Chinese scholars who traced Western science to early Chinese developments in mathematics and astronomy to show the fundamentally Chinese origins of all knowledge, Zhang made no attempt to integrate Chinese and Western learning in the related areas. If anything, he tried to separate the discussion of certain Western disciplines from Chinese ones, especially those in science, technology, and medicine, traditionally beyond the pale of Confucian learning and the imperial examinations. He did not hesitate to omit these subjects of Chinese learning from his curriculum and replace them almost completely with their counterparts from the West. Chinese law and politics were mostly studied not on their own merits but as supplementary courses to Chinese history and literature for a greater understanding of the Chinese political past. Both criminal and civil laws existed in China and were fully developed in the Qing dynasty, although they largely followed the moral criteria of Confucian learning. In Zhang Zhidong's curriculum for the Division of Law and Politics, he relied almost completely on Japanese curricula and Japanese textbooks. The few courses in the field of politics dealing with China included the *Qing Legal Compendium* (Da Qing huidian), and a history of Chinese legal systems. In the field of law, aside from a few courses on the history of Chinese laws, the focus was on foreign constitutional, civil, criminal, and commercial laws, including Roman, British, French, and German laws, and the lectures were to be based on appropriate books from abroad.[26] The inclusion of Chinese law and politics as supplementary courses in the study of Chinese history and the lack of their coverage as proper academic disciplines reflected a disconnect Zhang created between the modern emphasis on scientific and technological and legal/political developments and traditional Chinese science, technology,

law, and politics. On the one hand, there was a greater emphasis on practical learning, as shown in the exhaustive study of the Chinese past for a better understanding of the workings of Chinese politics; on the other hand, the Confucian value system that favored politics and moral studies over the practical arts seemed to persist. Western science and technology were introduced because they would be instrumental for leading China to national prosperity. Chinese science and technology, since they were not immediately associated with a Western-style economic or political outcome, were irrelevant to his curriculum. Yet, although law and politics were deemed superior to science and technology, Chinese law and politics would not be the primary focus of study because the social outcome Zhang was concerned with was associated with Western legal and political practices. Moreover, historically, political practices never gained an independent right on their own apart from Confucian practices. Although law had been practiced in China, it never became a respectful field of study compared with the Confucian ethics and was not tested in the imperial examinations. The result of his treatment of Chinese science, technology, law, and politics was that, despite the new goal of focusing more on the practical and integrating Chinese and Western learning, the continued Chinese hierarchy of knowledge that prioritized political/moral knowledge over any other kind hindered the integration of practical learning into the Chinese value system. And within the body of political/moral knowledge, the emphasis was on integration despite specialization. Chinese law and political studies were studied along with history and literature, but not as specialized fields. Although the core of the reconstituted Chinese political/moral knowledge was more tilted toward what was traditionally considered moral knowledge, namely, history and literature, the encyclopedic listing of courses in these areas of study suggested that Zhang's ultimate goal was an integrated body of both Chinese and Western knowledge that contrasted with the specialized subjects of learning in Western law, politics, commerce, medicine, and the sciences.

What is ironic about Zhang Zhidong's dichotomy of the more integrated curriculum of Chinese learning and the specializations of Western learning is that it was the latter with their detailed rules that would achieve the social prosperity he desired. The former was only a construct that linked the various aspects of the Chinese world, including the Chinese past, to the Western subjects of learning that would ultimately achieve for him the desired social outcome. It could not by itself directly bring about that social outcome but, rather, represented Zhang's moral ideal. Zhang was trying to achieve two things in this curriculum: to reconstruct the Chinese universe *qua* moral universe, and to introduce the specialized fields of learning that would help build China into an industrialized society made up of professionals. Zhang's dilemma over how to bal-

ance the two reflected the clash between preindustrialized China—where the moral world loomed larger than anything else—and the industrialized West—which China, however remote from it, wanted to imitate. As such, Zhang was dominated by the pragmatic consideration that specialized Western learning would help him engineer a Western-style social outcome. Guided by such a mindset, Zhang failed to introduce an appreciation of these specialized "practical" trades. The Western "practical" subjects were introduced not for their intrinsic value but for the social outcome they would bring about. Zhang simply refrained from an evaluation of Western learning in his 1903 curriculum. The dichotomy between "essence" and "application" as assigned separately to Chinese and Western learning conveniently allowed him to bypass this evaluation process by resorting to a most pragmatic explanation, although he did include Western learning in the body of moral knowledge to redefine Chinese learning.

Written in 1903, two years before the establishment of the Ministry of Education, Zhang Zhidong's school program provided the basis for not only Peking University but also all modern schools in China from the primary to the tertiary level. The Imperial Peking University not only would be the highest state university at the national level but also would serve as a model for all provincial state universities. This arrangement was based on the Japanese educational model, a hybrid of Japanese, French, and German traditions—whose goal was a hierarchical educational system under state control. According to Zhang's regulations, universities could be established only at the provincial level, and prefectures could only establish primary schools. The national university would be the model for the provincial universities. This was actually part of the original plan for Imperial Peking University. Thus Sun Jianai (1827–1909), who was to become the first imperial minister in charge of education, therefore directly supervising the university, had proposed to the crown in the summer of 1898 that a translation bureau be established and attached to the university so that it could compile and translate standard textbooks for the schools and universities of China.

Reform of the Educational System: Zhang Zhidong in Perspective

Three drafts of the university curriculum were written between 1898 and 1902, before Zhang Zhidong's the following year. Compared with these, Zhang's was more successful in recreating a Chinese culture geared to current reality. Unlike the other drafts, which often tended to be impatient with the slow pace of practical results from Confucian learning in twentieth-century China, Zhang's was aimed at re-engineering Confucian learning toward a new social reality.

To many early twentieth-century Chinese reformers, from a pragmatic point of view, Confucian learning appeared inadequate. It therefore is no surprise that criticism began to mount against the imperial examination system, which was focused on Confucian learning. Nor is it surprising that the main criticism was the vacuity of the examinations—that they were divorced from life, especially in view of contacts with the West. Although similar criticisms of the imperial examinations had been raised in both the Ming and Qing dynasties, they lacked any real momentum, nor did they bring about change in the examination system. The Ming and Qing governments both tried to reform the examination format, but stopped short because of the enormity of the task .[27] The technical inconvenience of the examination system to accommodate specialized Western learning, and the reluctance of many Chinese scholars to pursue Western learning so long as the imperial examinations on the classics continued, led the Chinese government to end the examination system altogether. The force of the Western entry into China forced the Chinese state to change its educational format, and the reality of Western society fed Chinese reformers' desire for change.

In 1895, many Chinese scholars, led by Liang Qichao, a leading reform scholar, had denounced the examination system in a memorial presented to the emperor, after China's defeat in the war with Japan. Zhang Zhidong also called for reform of the imperial examination system.[28] Later, Zhang and Yuan Shikai (1859–1916), viceroy of Shili Province and later grand councillor, petitioned the throne to cut back on the examination system and eventually abolish it.[29] Even the emperor had issued an edict in 1898 calling on all state officials to study assiduously and, based on classical Chinese teachings, to introduce those aspects of Western learning that were appropriate for dealing with current affairs, so as to save themselves from the problem of vacuity, backwardness, and error.[30] European missionaries also championed learning to bring about social change. One of them, Gilbert Reid, proposed that a university curriculum include Chinese and European languages, writing, grammar, history, politics, law, policies, geography, topology, mathematics, physics, chemistry, astronomy, machinery, minerals, engineering, agriculture, physiology, medicine, and so forth. But, as Chen Pingyuan, a biographer of Peking University, commented, these subjects did not include literature and the arts. Another missionary, Calvin Mateer, who established Dengzhou wenhuiguan (Dengzhou Culture School), the first missionary university in China, also proposed a similar curriculum for an imperial university. Mateer organized a "literature committee" that consisted of various European missionaries in China. The literature they wanted to promote was not classical literature but, rather, popular literature. This was reflected in the works of these missionaries, including Ernst Faber's *German Schools* and Timothy Richard's *Reference on New Education in Seven*

Countries. These books had a tremendous influence on late Qing Chinese society, and reformers such as Liang Qichao learned a great deal about the details of Western education through them.[31]

Against the background of this nationwide call for change among the elite, the question was how to change. Before Zhang Zhidong submitted his curriculum, there were three versions of the university curriculum, each with a different approach to Chinese and Western learning. Liang Qichao's tried to compartmentalize the two while privileging Western learning, Sun Jianai's compartmentalized the two and did not differentiate between the practical and the theoretical in Western learning, and Zhang Baixi's aimed at a liberal arts curriculum.

Liang Qichao (1873–1929), one of the most ardent early champions of Western learning and reform, did the first draft for Peking University's curriculum in 1898. His draft put Chinese and Western learning on an equal footing but assigned them to two separate spheres, ethics and science. Sun Jianai appointed Kang Youwei (1858–1927), famous Confucian scholar, together with his student Liang Qichao to draft the first university regulations, which, according to Kang, showed the influence of the educational systems of Britain, the United States, and Japan. The regulations drafted in the spring of 1898 by Liang Qichao, despite the Western influence and emphasis on a standard procedure in educational structure and content, dichotomized Chinese and Western learning into ethics and science, and ultimately privileged the latter over the former. Liang's university plan was divided into comprehensive and specialized studies. The comprehensive studies included Chinese humanities subjects and mostly science subjects from the West: Confucian classics before Zhu Xi (*jingxue*), Confucian classics as interpreted by Zhu Xi and his followers (*lixue*), Chinese and foreign histories, various schools of thought, elementary mathematics, elementary physics, elementary political science, elementary geography, literature, and gymnastics, which the students would study for three years. Students would also choose from among five foreign languages: English, French, Japanese, Russian, and German. The Translation Bureau in Shanghai would compile textbooks. After that, students would specialize in one field of science, such as advanced mathematics, advanced geography, agriculture, mineralogy, engineering, or commerce.[32] Confucian learning, in this curriculum, served as a part of the comprehensive curriculum to pave the way for more specialized fields of study that would be more directly connected to the building of a new social order.

Compared with Zhang's draft, Liang's curriculum had a much narrower conception of knowledge. Dividing Chinese and Western learning into ethical and scientific, Liang compartmentalized Chinese and Western learning into different areas of life in this curriculum. As Liang said to Chinese students while

visiting the United States in 1903, they should not specialize in philosophy, literature, and politics but only in the practical fields.[33] Although Liang did not label Chinese learning as "essential" and privilege it over Western learning and seemed to privilege Western science over Confucian learning, Liang's limitation of Western learning to science severely compromised his coverage of Western learning in his curriculum. Like Zhang, however, Liang failed to assign any value to Western science but treated it as an instrument for achieving a particular social outcome.

A similar approach to Western learning was shown in a curriculum proposed by Sun Jianai in 1896. Sun, the first Qing official in charge of the establishment of an imperial university, proposed ten disciplines: astronomy, classics, politics, literature, military science, engineering, commerce, and medicine. As in Liang's draft, Sun's curriculum placed Chinese and Western learning parallel to each other. Furthermore, Sun mixed the practical and theoretical in his taxonomy of knowledge. For instance, he subordinated the sciences to the practical learning of engineering and medicine. The subject of mathematics was put under astronomy; the study of minerals under geology; the study of ships, railways, and telegraphs under commerce.[34] It showed that Sun's attention was not on the intrinsic rules of learning but, rather, on the practical ramifications of specialized learning.

The last curriculum drafted before Zhang Zhidong's was by Zhang Baixi in 1902, after closing down in 1900 and 1901, as a result of the Boxer Uprising. In 1900, Beijing was occupied by troops from eight foreign governments that held the imperial government responsible for the havoc wreaked by peasant rebels who belonged to an organization called the Yihetuan (Boxers). Sun Jianai, the first minister in charge of education, resigned in 1900 because of Empress Cixi's attempt to force the Guangxu emperor to abdicate the throne.[35] Sun was the emperor's former tutor and sided with the emperor on reforms that disagreed with the Empress Dowager. In 1901, after making peace with the foreign governments that had troops occupying Beijing, the Qing government revived educational reform and appointed Zhang Baixi as minister in charge of the imperial university. Before this appointment, Zhang had been minister of education in Chinese provinces including Shandong and Guangdong and secretary (*shangshu*) of several imperial ministries. He was often outspoken in his petitions to the throne on the corruption of the government, including Empress Dowager Cixi's intention to mount a lavish celebration of her sixtieth birthday investing money in a summer palace instead of the Chinese navy as the charge usually went, and on the need for China to modernize. He was responsible for recommending Kang Youwei to the emperor. After the failure of the 1898 reform movement, he was temporarily demoted because of his recommendation of Kang. In 1900, however, he again petitioned the throne for reform of China's

financial and educational systems. His appointment in 1901 as minister in charge of Imperial Peking University was controversial and apparently came about through patronage from the emperor, who ratified Zhang's memorial to improve the university through increase of budget, books, housing, and the establishment of a translation bureau on the same day it was submitted. To balance ethnic ranks of the government, the emperor had to put a second minister, Rong Qing, of Manchu descent, in charge of Imperial Peking University, and named Zhang Hengjia general supervisor of the university, thus dividing the power initially entrusted to Zhang Baixi.[36] Zhang, however, still shouldered great responsibility because, in the absence of a Ministry of Education (created only later, in 1905), he was minister in charge of both the imperial university and the education of the whole country.

Compared to Sun Jianai and Liang Qichao, Zhang Baixi paid greater attention to the educational structures of European countries and the United States. In 1902, Zhang Baixi drafted a new set of regulations for the Imperial Peking University. That year and afterward, he sent relevant government personnel to study the Japanese educational system and solicited university curricula and regulations from many foreign countries, including curricula from Harvard, Yale, Columbia, and the University of Pennsylvania as well as primary and secondary schools in Washington, DC.[37] Thus his draft was closer to Zhang Zhidong's curriculum, drafted a year later, which adhered more closely to Western educational structures than did earlier drafts.

The Japanese and American influence certainly left an impact on Zhang Baixi's 1902 university regulations. More than the curriculum of his predecessors, however, his school regulations, including comprehensive and specialized studies, placed great emphasis on research that would build a hierarchy of learning to facilitate specialized research at the very top. Because of the lack of primary and secondary schools in China, Zhang's school program included a three-year preparatory school with an elaborate curriculum. Students entering it would specialize in either politics (*zheng*) or the practical arts (*yi*). Those specializing in the former would advance to the fields of politics, literature, business, and commerce at the university level, whereas those specializing in the latter would go into agriculture, physics, engineering, and medicine. Unlike the drafts of Liang Qichao and Sun Jianai, Zhang Baixi's curriculum integrated Chinese and Western learning. Zhang Baixi adopted Western subjects of learning in the humanities and the social sciences as well as the sciences. In addition to Confucian learning and ethics, Zhang Baixi's curriculum for those majoring in political science in the preparatory school also included Chinese prose and poetry, mathematics, comparative history of China and foreign countries, Chinese and foreign geography, geology, foreign languages, physics, logic, law, finance, gymnastics, and military training. His curriculum for practical arts

majors was similar to that for political science majors, except that their natural sciences course load was heavier, including botany, zoology, chemistry, advanced geology. Moreover, the practical arts majors, although they had to take a course in ethics, were not required to take a course on Confucian or non-Confucian schools of thought.[38]

Like Zhang Zhidong's draft, in Zhang Baixi's curriculum the content of Chinese learning included non-Confucian schools of thought, although it still focused on ethical education. Aside from Confucian learning, which included a series of classics and their annotations since the Han dynasty, Zhang Baixi introduced ethics (*lunli*), which covered famous sayings from the Zhou dynasty to the Han and Tang dynasties, important subjects studied in the imperial courts of the Song, Yuan, and Ming dynasties, and the sayings and activities of famous foreigners. The purpose of the study of ethics, according to Zhang Baixi, was its influence on practice. There was a third field of study dealing with the various schools of thought in Chinese history, including Legalism, Militarism, Sophism, and Daoism. Here, Confucian and non-Confucian learning were treated as contributing equally to Chinese culture. Zhang Baixi went even further than Zhang Zhidong in integrating Chinese and Western learning, especially in the curriculum for the college proper, where Confucian learning became a subdivision of study in the Division of Literature together with other subjects of both Chinese and foreign studies, which included Confucian classics, history, neo-Confucian schools of thought, history of institutional changes (*zhanggu xue*), Chinese prose and poetry, and foreign languages and philology.[39] Zhang Baixi's curriculum presented a specialized Chinese studies curriculum without giving Chinese subjects more universal moral relevance. It resembled a liberal arts curriculum at a Western college.

The great ambiguity toward Confucian learning in Zhang Baixi's school program was perhaps one of the causes for the dissatisfaction of Rong Qing and other conservative members of the Qing government. Regarding the imperial school program drafted by Zhang Zhidong in 1903, many have pointed out Rong Qing's acrimony with Zhang Baixi as the reason for the need of yet a new draft of curriculum. Zhang Baixi himself, however, made a petition to the throne soliciting Zhang Zhidong's participation in a new and more detailed school program in 1903, which the emperor approved on the same day.[40]

In the face of the Western presence in China and motivated by pragmatic concerns, all four drafters of the university curriculum searched for new knowledge content to achieve the desired social outcome. Of the four, Zhang Baixi and Zhang Zhidong's were most successful in integrating a broad range of Western and Chinese subjects of learning. Zhang Baixi's, however, failed to uphold the superiority or priority of Chinese learning; hence it was soon dismissed, although the preparatory school and other affiliated schools proposed by Zhang

Baixi were established and allowed to continue operation. By contrast, Zhang Zhidong's draft balanced the pragmatic engineering for a new social outcome with the preservation of Confucian and more generally moral principles. Yet Zhang Zhidong's curriculum, continuing the Confucian cosmological identification of the physical with the moral universes, also failed to rationalize the massive introduction of specialized Western learning and justify it using Confucian principles.

Zhang Zhidong's attitude toward Confucian learning was characteristic of early twentieth-century national views. As shown in an official announcement on the new school system proposed by Yuan Shikai in 1905, Yuan not only classified Confucian learning as a specialized field at the university level but also referred to it as national essence (*guocui*).[41] National essence, a term borrowed from Japan by Chinese scholars at the turn of the twentieth century, essentialized a culture as a transcendental spirit. Confucian learning was increasingly treated as transcendental principles that were reified in various subjects of learning. As such, Confucian institutions were ignored, and Confucian studies receded into the realm of individual moral cultivation. The emphasis on Confucian learning as individual cultivation was also shown in Yuan's request that it be extensively taught in primary and secondary schools but constitute only one field of learning at the college leve1.[42] Momentum across the country to bring about a new, Western-style society in China and a corresponding set of principles to describe that new society gradually pushed Confucian learning to the periphery. Zhang's major contribution to the decline of Confucian learning was his instrumental approach to Chinese learning, eliminating Chinese science and technology, while de-emphasizing Chinese medicine, law, and politics—topics he did not consider relevant for his building of a new Western-style reality. This instrumental approach to knowledge was reflected in later generations' attitude toward Confucian learning, including the slogan of "Down with Confucius and Sons," during the May fourth (1919) student demonstrations and after because students of a younger generation saw no logical connection between Confucian learning and a Western-style political outcome.

Zhang Zhidong's curriculum left important legacies for later generations. The first legacy was the elimination of morality from the study of history and literature. For Zhang, history and literature continued to impart moral lessons and theoretically were manifestations of Confucian principles on a more concrete level, but the study of them was integrated with that of other subjects of non-Confucian Chinese learning and of Western learning, which could easily make their linkage to Confucian learning tenuous. For later generations, this development eased the acceptance of a scientific approach to these disciplines, which treated history and literature as not moral treatises, but historical documents. The second legacy was the divorce Zhang created between the Chinese

present and much of the Chinese past, due to his elimination or reduction of state patronage practices that would not contribute directly to a desired social outcome. But if one is tempted to blame Zhang Zhidong for single-handedly departing from tradition, one need only look at the curricula for Peking University proposed by Sun Jianai, Liang Qichao, or Zhang Baixi to realize that Zhang Zhidong was by no means the most pragmatic in his treatment of Chinese learning, and that his pragmatism was probably characteristic of many of his contemporaries. Zhang's approach, however, contains one irony. Because most of the subjects of Chinese learning Zhang Zhidong dispensed with concerned applied learning, their disappearance contrasted with Zhang's continued support of Confucian principles, accentuating a Chinese dichotomy between the moral and political and the practical realms, which Zhang seemed to mitigate through his focus on "practical learning."