Cultural Encounters and the Discourses of Scholarship

Edited by Gesa Mackenthun

Volume 4

This series seeks to stimulate fresh and critical perspectives on the interpretation of phenomena of cultural contact in both transhistorical and transdisciplinary ways. It brings together the research results of the graduate school "Cultural Encounters and the Discourses of Scholarship," located at Rostock University and sponsored by the German Research Foundation (DFG). One of the concerns of the volumes published in this series is to test and explore contemporary theoretical concepts and analytical tools used for the study of intercultural relations, from antiquity to the present. Aware of significant recent changes in the ways in which other cultures are represented, and "culture" as such is defined and described, the series seeks to promote a dialogical over a monological theoretical paradigm and advocates approaches to the study of cultural alterity that are conscious of the representational character of our knowledge about other cultures. It wants to strengthen a recognition of the interdependencies between the production of knowledge about unfamiliar peoples and societies in various scholarly disciplines and ideologies of nationality, empire, and globalization. In critically investigating the analytical potential of postcolonial key terms such as "hybridity," "contact zone," and "transculturation," the series contributes to international scholarly debates in various fields oriented at finding more balanced and reciprocal ways of studying and writing about intercultural relations both past and present.

Klaus Hock Gesa Mackenthun (eds.)

Entangled Knowledge Scientific Discourses and Cultural Difference



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Contested Science. Discourse and Competition of Affective Regimes in Early TwentiethCentury China

ANGELIKA C. MESSNER

Introduction

In the late nineteenth and early twentieth century in the Western and Eastern hemispheres, 'science' was unanimously perceived as natural science, as objective, and as universal. And it was the factor common to all the modernizing discourses in early twentieth-century China. However, there, its discursive formations were colored by a Chinese sense of inferiority and linked with the struggle for national survival. This was how things stood at least as early as 1895, when China suffered defeat at the hands of the Japanese, and attempts to save the old order became bracketed with efforts to renew the country's position of strength and power. The feelings of inferiority were shared by scholars and students alike, who later supported the Communist Party and, a few decades further on, became part of the national elite.

Chinese scholars in the early twentieth century who claimed science as being the key to the nation's continuance were not generally interested in the Western idealization of science as an end in itself. Knowledge for knowledge's sake held no attractions for them. Moreover, the scope of the application of knowledge in early twentieth-century China was the domain of morals and religion. When Chinese scholars and students accused China of lacking a scientific spirit, they were referring, in an unspoken way, to a particular feature of an indigenous perspective on knowledge and knowledge acquisition, namely, the inseparability of knowledge from its context.

The association of modernity with progress, natural science, and technology is a metanarrative that still informs historians when linking Chinese modernity with the beginning of the discourse on enlightenment (qimeng 資家) surrounding the May Fourth movement of 1919, which contributed to the overthrow of the Qing dynasty. This view, however, marginalizes every 'modern' process prior to 1919 as somehow 'pre-modern' (Fogel 168-85; Cohen 10; Zurndorfer 461-85). In fact, a Chinese modernity had already been detected in much earlier periods by the

Japanese historian Naitō Konan (1866-1934). The Naitō thesis suggests that Chinese modernity (kinsei 近世) was in place at the beginning of the Song dynasties, 960-1279. This early modern period was followed by a second period in the fourteenth century that ended in 1911. In the early twentieth century, the assumption of an early modernity in Chinese history facilitated China's relationship with the international community of nations. In addition, this model had already called into question the idea of a single kind of modernity, that is, the Western one. Modifications of the Naitō Thesis were further utilized for research projects that focused on economic, political, and military changes in the tenth century (Eberhard 236). "Late Imperial China," a term that today historians mostly apply to the period between the tenth and nineteenth centuries, represents China's modernity as existing from about 1000 to 1900, as opposed to that of the Western, Indian, and Islamic worlds.

In order to evaluate Chinese modernity discourses, we also have to take into consideration the propagators of the self-strengthening movement (ziqiang yundong 白運運動, 1861-1895), who suggested a significant distinction between the two postures: Western knowledge was only important in a practical sense; Chinese knowledge was still seen as the essential foundation (tiyong 體用 formula of science and technology, with ti meaning "essence" and yong meaning "practical use"). According to Prasenjit Duara, a discursive tension between Chinese traditional scholarship as being the national essence (guo cui 國粹) on the one hand, and Western-derived technological knowledge as only superficial useful knowledge on the other hand, was part of an emerging nationalism (renmin zhuyi 人民主義) and/or patriotism (aiguo zhuyi 爱國主義) that played a crucial role in early twentieth-century Chinese modernizing discourses.

Research on early twentieth-century Chinese history conventionally focuses on two areas that have been most radically transformed: the nation and urban spaces.

My contribution adds a third area, one that changed significantly during the early twentieth century: the human body. This article investigates discourses and practices that were concerned with the total renovation of the Chinese self. For this purpose, it is not necessary to demonstrate the Chinese advancements and failures in science and technology realized in the late nineteenth century between 1865 and 1895. Rather, I will trace the importing of science vocabularies, with a particular focus on psychology, a rhetoric that urged people to seek a radical reimagination and transformation of themselves. This process of appropriation can be tracked in terms of competitions of affective regimes.

Semicolonial Settings

The revolution in 1911 led to the collapse of two millennia of imperial government and its replacement by the Republic of China. This event was preceded by a complex semicolonial era that began with the Opium Wars in 1840-42, and cata-

pulted China into highly uneven sociopolitical relations. The 1860 Treaties opened China up to foreigners, especially to missionaries, who increased in number from about one hundred in 1835 to about one thousand in the 1870s (Latourette 479; Feuerwerker 42). Chinese treaty ports, put in place as early as 1842, were sites of Sino-foreign interaction with regard to business, newspapers, arsenals, schools, and hospitals (Rogaski 108-11). The schools and hospitals founded by missionaries were intended to help distribute the benefits of Western civilization throughout China and, simultaneously, to convert Chinese people to Christianity: from about 1850 onward, Protestant missionaries and their Chinese coworkers translated a huge number of books on astronomy, mathematics, medicine, botany, geography, geology, mechanics, and navigation into Chinese. In 1861, the Chinese government established a General Affairs Office, which included a School for Foreign Languages, with locations in Beijing, Shanghai, and Guangzhou. In 1865, an American machine shop in the Shanghai Foreign Settlement was purchased and the Jiangnan Arsenal (the Jiangnan Machine Manufacturing General Bureau -Jiangnan jiqi zhizao zongju) was founded. Nearly thirty arsenals, machine shops, arms manufactures, and naval stations were opened in China between the 1860s and the 1890s (Elman, On Their Own Terms 389), with the Jiangnan Arsenal serving as the new industry's headquarters and incorporating a department for the translation of scientific and technical texts. Technical work was still carried out by foreign machinists, and by 1870 the arsenal had become the greatest manufacturing center of modern arms in East Asia (Wright 211-12; Elman On Their Own Terms 360). Beginning in 1867, the translation department came under the guidance of John Fryer (1839-1928), a former teacher of English at the School of Foreign Languages in Beijing (from 1863 to 1865), and at the Anglo-Chinese School in Shanghai (from 1865 to 1867). Although his Chinese collaborators were much more versed in Chinese and in scientific studies, Fryer, as David Wright has convincingly shown, is remembered as the most prominent and prolific translator and as the most important popularizer of Western science. He published about thirtyfour translations of natural science and technology texts between 1870 and 1880 (Spence 140-54; Svarverud 516-18).

The Boxer uprising (1900) was the last major attempt by the imperial government to control the foreign powers within its borders. The rebellion's failure finally resulted in the New Policy (xinzheng 渐政) reforms in 1902 whose aim was to install and operate an efficient bureaucracy and tax regime. In 1905, France, Germany, the United Kingdom, and the United States claimed important mining rights as well as control of railroad construction in China. In 1905, the court at Qing enacted a new criminal code (based on the Japanese codex, which was in turn based on that of Germany), formed new regional armies, and instituted political and educational reforms.

From 1905 to 1911, the Qing government experimented with constitutional practices at the local level, and economic reforms were launched, with many Chinese-owned factories being set up in the treaty ports between 1903 and 1908. After 1905, the total number of Protestant schools increased to 2585 with a total of 572,683 pupils (Morse 413). Despite these significant changes, the impression of both national and individual inferiority remained:

At the turn of the century, boys of my age who lived in treaty ports like Shanghai grew up with a strong inferiority complex. The best buildings in Shanghai were occupied by Westerners and most carriages were owned and used by foreigners. Racial segregation was unashamedly the order of the day. Public parks had signs at the entrances that dogs and Chinese were not admitted inside, and a tall Sikh police man, whom the Chinese called 'the Redheaded Devil', enforced the order with a big stick.'

Soon after the fall of the Qing dynasty in 1911, China was divided and controlled for the next ten years by warlords and bandits. It was during this period that the New Culture movement (Xin wenhua yundong 新文化運動) was formed. Another initiative, the May Fourth Movement (wusi yundong 五四運動) of 1919, came as a reaction to the Treaty of Versailles settlement, one that was dominated by the Western Allies and paid little attention to Chinese concerns. In Article 156 of the treaty, France and the United Kingdom, in their attempt to punish Germany, transferred German concessions in China to Japan rather than returning sovereign authority over these territories to China. In response, on May 4, 1919, more than 3000 students attending Beijing University and other schools gathered in front of Tian'anmen Square and demonstrated against the betrayal of China by the Allies and the government's inability to secure Chinese interests at the conference. In early June, the movement traveled from Beijing to Shanghai and workers and businessmen there also went on strike. Iconoclastic students and scholars within the movement adopted the radical position of opposing any kind of antiscientific efforts, based on the view that science was universally applicable regardless of its cultural (Western) origin. In the face of this sweeping claim for science as the key for national survival (jiuguo 救國), historians in 1919 began to link Chinese modernity with the beginning of a discourse of a specifically Chinese Enlightenment.

Contested Conceptions of Science, Knowledge, Morality, and Modernity

The first thing I learned in [... my Sino-Western school] was that the earth is round like a ball. To me it was decidedly flat. I was dumbfounded on being further told that lightning is created by electricity and is not the reflection from the mirror of a goddess; that thunder is a by-product of the same electricity and not the beating of a drum by

the god of thunder. In elementary physics I learned how rain is formed. It made me give up the idea that a gigantic dragon showers it from his mouth like a fountain high above the clouds. To understand the meaning of combustion was to banish the idea of fire gods from my mind. One after another, the gods worshipped by my people melted away in my mind like snowmen in the sun. It was the beginning of what little science I know and the end of animism in me. (Monglin Chiang, quoted in Richard Smith 41-47)

The foreigner appeared [...] half divine and half devlish [sic!], doublefaced and many-handed like Vishnu, holding an electric light, a steam boat, and a pretty doll in one set of hands, and a policeman's club, revolver, and handful opium in the other. When looked at his bright side, he was an angel, on the dark side he was a demon. (Monglin Chiang, quoted in Saari 215)

This reminiscence of a missionary schoolboy describes his perception of the gradual replacement of indigenous orders of knowledge by modern knowledge regimes. This simultaneously reflects the competition of two differing affective regimes that cannot be separated from their epistemological backgrounds. In the late nineteenth century, the term gezhi 格知 was already being used by Chinese students educated abroad in Western and Japanese universities to denote science in a modern sense. They regarded modern science in the light of the Japanese version of Western science, that is, as kagaku 科學 (kexue), meaning "branch of learning" (Masini 185). As with many thousands of terms and words, the word kagaku 科學 was also taken from the Japanese versions of English-Chinese dictionaries, where it had first appeared in its "modern" meaning. In classical Chinese (wenvan 文言), kexue 科學 meant to "study for the official examinations (keju 科举)." In the modern China, starting in about 1865, an emerging group of artisans, technicians, and engineers from the arsenals were no longer relying on the traditional fields of learning in mathematics and astronomy. Alongside the efforts to popularize modern science (gezhi xue 格知學) in the treaty ports and among the literati, private printing houses rapidly grew into huge publishing companies in the larger metropolises. The attempts to establish new morals for education started as early as 1902, when the Commercial Press started publishing textbooks of new knowledge to be used in primary schools (Dikötter 5-10). In particular, ideas concerned with the cultivating of one's personality included notions about how to govern oneself (zizhi 自治), a skill that was considered as the basis of freedom, and explained as a necessary and integral part of the progress of civilization (Schulz Zinda 689-700). Public health and racial health (weisheng 衛 (E) began to be associated with the concept of civilization itself; weisheng now became a crucial term in the move to renew society and as well as the whole Chinese population (Lei 1999). As Rogaski (22-47) has shown, the semantics of weisheng in Chinese history prior to the twentieth century referred to various ways of protecting and guarding life: for example, leaving the table slightly hungry and knowing when to stop drinking wine were matters that medical officials were appointed to monitor in Zhou-times (ca. 1046-771 BCE). Furthermore, these views became part of the Confucian precepts on leading a life in balance with societal duties and connections. The way of health (weisheng zhi dao 衛生之道) therefore depended heavily on knowing how to restrain oneself from indulging in food, drink, or sexual excess, on knowing the right time and place for sitting, sleeping, getting up, moving, eating, and drinking. These mores were consonant with a view of the human body as part of cosmic activities. As Donald Harper has demonstrated, these regulative ideas regarding the human body predated the emergence of Daoism, which operated between 200 BCE and AD 200, as a conceptual system of thought (Harper 53). At that time, yangsheng 養生 (nurturing life) was not considered a part of medicine. Nurturing life comprised various practices to prevent disease and increase longevity, and as such, it was integrated into Daoism. By the late nineteenth century, the contents of yangsheng and weisheng appeared in syncretistic textbooks on the preservation and extension of life, based on Daoist views of internal body processes and focusing on the circulation of vitalities in the various parts of the body.

Similar to the significant reshaping and reimaging of kexue (studying for the examination) into "science," as well as of weisheng (nurturing life) into "public health," the terms gewu zhizhi 格物致知 (investigating things and extending knowledge) and zhi 知 (knowledge) were used to communicate the newly imported connections of public health to civilization; a modern and healthy person within a strong nation.

As mentioned in the introduction to this essay, Chinese propagators of science sought to employ science in aid of China's survival, and they were generally disinterested in the idealist concept in which science was an end in itself. Accordingly, they also were not concerned with any historical perspective on the semantics of knowledge (zhi 知) and of gewu zhizhi 格物致知 (extending knowledge by investigating things) in China. Such a historical reconstruction, however, will help shed some light on the ways indigenous categories of knowledge in Chinese history changed without epistemologically separating knowledge from its practical contexts and from the cosmological order.

Gewu zhizhi 格物致知 (Extending Knowledge by Investigating Things)

Accompanying the efforts made by arsenals and official schools, private initiatives popularized the notion of gezhixue 格知學 (lit.: learning of investigating things) among scholars and official literati in the treaty ports. The term and concept gezhi 格知 (investigation of things) at that time (late 19th century) was used as an epistemological tool for fighting traditional thinking and ethics (anti-Confucianism). However, the term gezhi 格知 referred to an old concept that

had been used by Chinese scholars and students when referring to their attempts to extend knowledge by investigating things (gewu zhizhi 格物致知). The locus classicus of gezhi 格知 can be found in the chapter Daxue 大學 (The Great Learning) of the book Liji 禮記 (Record of the Rites), which was one the five classics of the Confucian canon. The chapter Daxue describes the governmental system and ancient rites of the Zhou dynasty (ca. 1046-256 BCE). This text was reworked and reedited several times and by several scholars during the Han dynasty (202 BCE-220 CE), and this edition from the Han dynasty was used by scholars as preparatory material for the official examinations until the early twentieth century.

In the following, I quote from those passages in the Daxue chapter that explain and define knowledge and the ways people should and could achieve it:

大學: 大學之道, 在明明德, 在親民, 在止於至善。知止而後有定, 定而後能靜,靜而後能安,安而後能慮,慮而後能得。物有本末, 事有終始,知所先後,則近道矣。(Liji zhuzi suoyin 禮記逐字索引 43, 1)

Daxue: What the Great Learning teaches is to show luminous virtue. to renovate the people and to rest in the highest excellence. The point where to rest being known, the object of pursuit is then determined and. that being determined, serenity may be attained. To that calmness, there will succeed a tranquil repose. In that repose, there may be careful deliberation, and that deliberation will be followed by the attainment of the desired end. Things have their roots and their branches. Affairs have their ends and their beginnings. To know what is first and what is last will lead closely to what is taught in the Great Learning.

These students rejected the traditional Chinese epistemology of learning (gezhi xue).

古之欲明明德於天下者,先治其國;欲治其國者,先齊其家;欲齊 其家者,先修其身; 欲修其身者,先正其心;欲正其心者,先誠其 意;欲誠其意者,先致其知,致知在格物。物格而後知至,知至而 後意誠,意誠而後心正,心正而後身修,身修而後家 齊,家齊而後 國治,國治而後天下平。自天子以至於庶人,壹是皆以修身為本。 其本亂而末治者否矣,其所厚者薄,而其所薄者厚,未之有也!此 謂知本,此謂知之 至也。(Liji zhuzi suoyin 禮記逐字索引 43,1)

Daxue: The ancients, who wished to show luminous virtue throughout the empire, firstly ordered well their own states. Wishing to order their own states well, they firstly regulated their families. Wishing to regulate their families, they firstly cultivated their persons. Wishing to cultivate their persons, they firstly rectified their hearts. Wishing to rectify their hearts, they firstly sought to be sincere in their thoughts. Wishing to be sincere in their thoughts, they firstly extended to the utmost their knowledge. Such extension of knowledge lay in the investigation of things. Things being investigated, knowledge became complete. Their knowledge being complete, their thoughts were sincere. Their thoughts being sincere, their hearts were then rectified. Their hearts being rectified, their persons were cultivated. Their persons being cultivated, their families were regulated. Their families being regulated, their states were rightly governed. Their states being rightly governed, the whole kingdom was made tranquil and happy. From the Son of Heaven down to the mass of the people, all must consider the cultivation of the person as foundation. It cannot be, when the root is neglected, that what should spring from it will be well ordered. It has never been the case that what was of great importance has been slightly cared for, and, at the same time, that what was of slight importance has been greatly cared for.²

Knowledge here is clearly connected to refinement of behavior: wu (things) as behavior (in an ethical way) implies that only when behavior (things) is investigated, does knowledge become complete. Knowledge, therefore, is in no way separated from ethics. The root of all knowledge lies in cultivation of the self (xiu shen \$%). It is important to note that prior to the abolition of the testing system in 1905 this epistemology was the authoritative one for everyone studying for examinations in Imperial China.

Zhi 知 (Knowledge)

2

In the eighth century BCE, when the state administration grew increasingly complex, *Zhi* became a crucial category. Privately directed academies educated young people for their future duties as administration officials. Once appointed to their posts, in addition to their proved loyalty to the emperor, they also had to demonstrate their abilities to carry out their jobs. Consequently, loyalty and kinship ties, knowledge and skills were utilized to bind subjects to their imperial rulers.

Officials were recruited through examination, which at least as early as the fourteenth century consisted primarily of memorizing neo-Confucian texts, including the classics quoted above. This material became officially sanctioned since the fourteenth century as the exclusive fundamentals of the examination (Elman, *Cultural History* 148; Esherick and Rankin; Wagner 118-34). With minor changes, it remained central to the examinations system until 1905. An enormous number of private and official library catalogues and bibliographies were critical to scholars working under the pre-1905 knowledge regime. As printed books, they shaped knowledge and its classification. The bibliographic organization of these catalogues was adjusted from time to time when new lines of argument and new perspectives and topics appeared, and when fields of knowledge fused or became differentiated. In the eighth century, for instance, when Confucianism gradually became the foundation of state ideology, we can observe one of these

radical restructurings: skills in fields of practical knowledge such as martial arts, numerology, treatment methods, and recipes, lost their relevance for the examinations. They were integrated into scholarly canonical texts in a four-field classification: Jingbu 經部 (classics), Shibu 史部 (history), Zibu 子部 (philosophy), and Jibu 集部 (literary works) (Siebert; Kaderas). Under the Qing dynasty (1644-1911), when China reached geographical dimensions hitherto unknown, spatial expansions produced knowledge about rural ethnic groups, flora and fauna, and stimulated exploration into new spheres (Hostetler; Zögner 33-57; Selin 569-70). Between 1708 and 1718, Jesuits, together with local officials, were asked to serve as surveyors of the expanding empire's borders. Local officials were called on to carry out ethnographical investigations of the newly integrated non-Han populations since the empire now included Mongolia, Tibet, Manchuria, and Turkestan (Xinjiang) in the Northeast, and Yunnan and Guangxi in the Southwest. Moreover, in the eighteenth century, the knowledge bases from earlier periods had to be reordered in a systematic way. The court launched mammoth projects, encyclopedic works that would today include as distinct fields of knowledge mathematics (suanfa 算法) and astronomy (tianwen 天文). An adequate assessment of the knowledge classification that took place during this period is nearly impossible. Knowing that the nearly 900,000 pages of the Gujin tushu jicheng 古今圖書集成 (imperially approved synthesis of books and illustrations past and present), which were presented to the throne in 1726, were divided into six categories, which in turn were subdivided into thirty-two sections (dian 典), which themselves were subdivided into ten thousand subsections (bu $\frac{dy}{dx}$), is not really helpful in translating terms or establishing lists from these texts. Furthermore, lists and terms shed light only in a restricted sense on the knowledge traditions that have been recorded in catalogues on the origin of things and on the technical and cultural innovations since the tenth century.

These fragmentary snapshots from the historical landscape of the knowledgeorder/s in China illustrate that changes in the perception of knowledge and its relevance for societal positions and roles, as well as for innovation, have been on the agenda throughout Chinese history. As shown above, the notion of the category zhi 知 (knowledge) was an integral part of ethical duty as well as of aesthetic and sensitive perception. However, scholars also debated the relation between ethic-generalistic contents, on the one hand, and the more specific skills and qualifications, on the other hand; and although they mostly favored the ethic-generalistic contents, the formula "Investigation of things in order to extend knowledge" (gewu zhizhi 格物致知), which since the twelfth century was meant to exercise authority over every action and practice, included a few uncertainties. This formula was based on the preposition that everything inherited a principle, a structure (li 理) that had to be investigated. In practice, investigation of things meant studying and memorizing the canonized classics, reading them carefully, and looking for (hidden) references. In addition, the formula was also to be used as a guide for refinement and ethical self-accomplishment via cultivation (xiu shen 修 身) of the self. Simultaneously, this formula also served as the starting point for "concrete investigations" (shice 實測), e.g., "concrete, practical studies" (shixue 實學), which in the sixteenth and seventeenth centuries became of special interest to many scholars and official literati, and which also served as a means for legit-imizing technical innovations. This is the background for the historical observation of the emergence of an epistemology of empirical knowledge in seventeenth-century China, which had already been suggested in the 1960s (Levenson).

On the other hand, historians generally agree that Imperial China lacked an equivalent to the Latin concept of "scientia" because during that era knowledge was never separated from its context. In opposition to earlier studies in the field of Chinese science, which, since the seminal studies of Joseph Needham (1900-1995), beginning in the 1950s, mostly dwelled on progress and innovations, historians have recently turned their attention to configurations of knowledge and innovations in their relation to practices in specific fields, for instance, screws and bores in mining, as well as technological improvements in bookprinting, the production of silk, and porcelain work. When dealing with handcrafting modes of production in sixteenth- and seventeenth-century China, historians look at the relationship between module production and aesthetics. Additionally, in the field of curative strategies (i.e., 'regulation-knowledge'), new formations of identities within social spaces can be observed in the case of physicians who, in order to elevate their social status, tried to demonstrate their superior expertise using fashionable scholarly rhetoric. These new formations should be seen in connection with new etiological challenges since epidemics of unknown scope and origins could not be addressed using conventional methods (Messner, Zirkulierende Leidenschaften 145-68).

These epistemological and conceptual changes in knowledge, skills, and the social self during Late Imperial China differ significantly from those attempted in the early twentieth century.

Changing Epistemologies: Changing Selves in the Twentieth Century

Revolutionary discourses in the early twentieth century focused heavily on the total renewal of the Chinese mind. Most of the political elite characterized the Chinese nation as being a sick person, referring to that sickness as "insanity." This rhetoric was used by these aristocrats, a high percentage of whom were Christians. Many were also doctors trained in Western medicine, Sun Yatsen (1866-1925) being one example. He played an instrumental role in inspiring the overthrow of the Qing dynasty in 1911. The first provisional President of the newly founded (1912) Republic of China (ROC), Sun Yatsen used the concept of psychological construction (xinli jianshe 心理建設) to explain that in order for the revolution to succeed, hearts and minds would need to be reformed. This

proclamation served as a powerful metaphor in the campaigns against superstition (Nedostup 91). Sun Yatsen had been educated in Christian schools in Hawai'i and Hong Kong (Goossaert 213), and in 1884, at the age of eighteen, he was baptized. The introduction of such Western dichotomies as "religion and superstition" (zongjiao 宗教 mixin 迷信) were popularized in early twentieth-century China (Goossaert 215), and Western-trained Chinese physicians utilized these kinds of dualities, especially when dealing with cases of insanity. They charged traditionally trained Chinese doctors of holding "absurd" and "totally wrong" notions about derangement, of being ignorant about its "psychological" (xinli 心理), and "physiological" (shengli 生理) causes (Messner, Medizinische Diskurse 245). This observation was congruent with the perception that the Chinese did not feel as intensely as Europeans did, and with the image of China as static and unchanging: from a Western perspective, change and activity were connected to the ability to experience strong emotions. Ultimately, these assumptions and perceptions solidified the view that China was less civilized than and inferior to the West.

Hsü Dau-lin (1906-1973), who began his graduate studies in law at the University of Berlin in 1929, published several scholarly articles on China and its citizens in the sinological journal Sinica during his years in Berlin. He wrote: "Sie können nie sehr leidenschaftlich lieben, nie sich ganz hingeben, und der chinesische Liebesbegriff ist viel zu eng, um eine Verehrung oder eine Anbetung in sich zu schließen" (Hsü 247). The modernization of Chinese minds was essentially a matter of the reformation of their hearts. Some people observed that the Chinese could not really feel humility, although they could show it. Western observers somehow felt disappointed and frustrated when they realized that the Chinese just followed etiquette and did not 'really' feel what they put on display (Smith 1902).

Reforming hearts and minds was also the goal of the purity and mental health campaigns run by missionary doctors. People were expected, for instance in Canton, to attend meetings during which presentations were made by doctors, as well as by the police, the senate and governor of Canton, and deputies of the Board of Trade, who were invited as speakers (Messner, "Translations and Transformations"). This kind of cooperation, between police and physicians, had first occurred in nineteenth-century North America and Central Europe. In China, physicians were now instructed to be alert to issues of 'racial purity' and to 'educating the young to an orderly, clean social life without sexual excess' in order to prevent insanity. This aspect of practicing medicine paralleled the problematization of venereal diseases at the 1899 conference on "Social Hygiene" in Brussels, one of whose proposals was the confinement of prostitutes to special hospitals (Oldt 777).

Indigenous views of mental health focused on the five inner viscera (heart, lungs, kidney, spleen, and liver) as the loci of mental and emotional processes. They dealt with imbalances and disturbances in body fluids that were connected to qi 氣-malfunctions, such as qi-reversal, states of repletion and depletion, and blockages of qi within the various organ systems. Eventually, it was neuroscience (at the time, recently introduced and categorized as a branch of biology) and psychology that ultimately defined insanity as a disease of the brain (naobing 脑病) and helped shape the understanding and educating of the human being in early twentieth-century China. From this perspective, the indigenous views of mental health, including the concept of "sputum which blocks the heart holes" or of "demons and ghosts," were considered ridiculous, beliefs held only by dumb people (wuzhi yumin 無知愚民) in China (Wang Wanbai 127).

The notion that the brain was the part of the body that directed all intellectual, mental, and psychic activities was alien to Chinese indigenous medical training. At the same time, it was also an idea that had been promulgated in the late nineteenth century by Tan Sitong 譚嗣同 (1865-1898), one of China's most prominent intellectuals. He was among the reformers at the Court in Beijing who, between June 11 and September 21, 1898, succeeded in implementing reforms (Hundred Days Reform in 1898) based on Russian and Japanese models. The result was that he and five other intellectuals were executed later that same month. As the son of a high official, Tan Sitong had been educated in conventional Confucian ethics and philosophy. However, as Shek and Kwong have pointed out, after having read the Chinese translation of Henry Wood's (1834-1909) Ideal Suggestion through Mental Photography (1893) in 1896, he eagerly supported the necessity of founding a school devoted to the study of the mind (the power of the heart, xinli 心力): "We can say that senses (knowledge, zhi 知) come from the heart. But as the heart controls the circulation of the red and purple blood, how can you see the so-called senses (knowledge) there? They must, then, come from the brain" (Tan Sitong 251).

This shift in approach could not take place without creating new terms in Chinese, which were partly based on translations from Japanese and were partly neologisms. For instance, both the terms "psychology" (xinlixue 心理學), on the one hand, and "physiology" (shenglixue 生理學), on the other, were neologisms that were introduced through Japanese translations from Western textbooks. No Chinese term existed for the word "nerves," and a new one had to be invented, and the term shenjing 神經 (a compound of two words: 1. life force (spirit) and 2. warp) is still in use. Another example is the term shenjing shuairuo 神經衰 (lit.: weakness of the nerves) for neurasthenia, which is no longer employed in Western contexts, but in China remains as a general classifier for derangement.

Wang Wanbai 王完白, a Christian physician who also worked as a missionary, accused the Chinese people of being oblivious to the fact that ex-prisoners and bandits stirred up trouble everywhere (raoluan defang zhi feitu 擾亂地方之匪徒), and idiots (chunyu 蠡愚) were actually a disguised kind of mad people (fengren 臧人) who could only be cured in special hospitals. Demands for a nationwide construction of such institutions were based on the argument that they would protect society from the handicapped (canzei 殘賊), stupid (yu 愚), and weak (ruo 弱) since reproduction among members of these groups could be prevented if they were so constrained. In order to segregate problematic individuals from society,

the provision of more than one thousand hospitals for the insane was proposed by Ross in 1926 (Ross 12). The purity campaigns in the 1920s animated several thousand Chinese Christians to participate in prayer groups and Bible reading courses whose focus was explaining the dangers of prostitution as a source of insanity. The monograph Social Pathology in China by Herbert Day Lamson (1934) cited North America as the standard example of facilitating the separation of the insane from their families. The Chinese custom of keeping at home patients so declared was characterized as emblematic of an uncivilized country (Lamson 383, 385). North America and Germany were held up as the standard bearers of public health, and it was against this background that in 1913 China made the decision to officially recognize Western medicine; in 1915 it became the sole examination subject in the medical curriculum. In 1921, however, Chinese medicine was again officially acknowledged as part of medical studies in the country. Nonetheless, the improvement of the Chinese health infrastructure was based on the basis of Western-style medicine. When the Nationalist government came to power, among their first activities was to set up a Ministry of Health on November 1, 1928. The ministry's plans included the rapid dissemination of Western scientific medicine with the old style medicine (jiu vixue 舊醫學) opening up for its "scientification" (kexue hua 科學化) and for the new medicine (xin vixue 新醫學) (Taylor 30-60). The site from which most of the public health campaigns mentioned above took place was the First Hospital for the Insane. It was established by the American medical missionary, John Glasgow Kerr (1824-1901), in Canton in 1898. During the hospital's first ten years patients came from the city's (and its hinterland) Christian convert families and their friends. Later, patients included people from Hong Kong, from well-to-do families as well as uprooted vagabonds. Gradually, First Hospital grew into a functional poor house, and beginning in 1915, poor and helpless people were also brought there by the Canton police. Around 1915 the time seemed to be ripe to promote the orientation, among Chinese scholars and physicians as well, that insanity was to be treated as a major medical and social problem (Messner, Medizinische Diskurse 63-67). Accordingly, the Hospital for the Insane can be seen as the most explicit and concrete attempt to change Chinese bodies and selves into civilized and Christian beings in the late nineteenth and early twentieth centuries. Among the therapeutic methods used - informed by the ethics of Puritanism and Protestanism - in addition to hydrotherapy and other calming formulas, were work, occupational therapy, development of detailed daily schedules, instructions in personal hygiene, and as hours of prayer and Bible study. Starting in 1909, restraint methods were implemented, and in special cases people were kept in horizontal positions in metal cages or were forced to wear strait jackets. First Hospital for the Insane was closed down in 1927, and between then and 1949, only six smaller Hospitals for the Insane were opened in China.

Conclusion

The ontology of all reform and renewing conceptions in the late nineteenth and early twentieth century was based on the idea of progress and evolutionary development. These ideas were integral to Sun Yatsen's views on the revolution and reformation of China. Consistent with the goal of renewing Chinese hearts and minds, the notions of sentiment, passion, and free love came to be celebrated in early twentieth-century literary works. The hygiene campaigns conducted by medical missionaries in the early twentieth century were partly based on Christian views of purity and partly on the so-called scientific evidence of racial purity. Both attitudes prompted the segregation of certain identified segments of society, such as prostitutes and the insane, from societal and familial contexts. Chinese Christians who had been trained as doctors demanded the complete renewal of the Chinese population via psychological construction. They repeatedly made use of the metaphor of China as being sick and its population insane. Most significantly, they reproached the Chinese for being completely ignorant of the real causes of insanity, and argued that superstitious views should be replaced by scientific perspectives, that the idea of the brain as the single and only cause of insanity should replace the multiple indigenous concepts of madness (e.g., qi 氣-disturbances). These discordant concepts of madness mirrored differing affective regimes. The opposing affective regimes were reflected in the different ways in which authenticity was conceived - Chinese people were accused of not being able to feel deeply - and last but not least, by different approaches to knowledge and the ways knowledge should be acquired and science employed. Whereas the newly imported concept of science rested on a foundation of the separation of knowledge from its practical contexts, the indigenous epistemological frame encompassed knowledge acquisition processes in concert with ethics and the cultivation of the self.

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