Ex Oriente Scientia? Reconsidering the Ideology of a Chinese Origin of Western Knowledge

A notion that all of Western science was actually of Chinese origin was popular during the 1890s among Chinese literati, as well as among those Chinese who were just then creating what one may call a class or profession of intellectuals. Narratives were crafted that told either of Chinese who had traveled to the West equipped with their own knowledge and devices, or of Westerners who had stolen both from China.¹ This is, of course, one variant of the autochthonous culture myth, known to countless epochs and found in many locales. It is one that frequently emerges in situations in which a society or culture is confronted with something new that is of such overwhelming power that one's own position – or perhaps better, one's sense of what has been taken for granted – is placed under such threat that it must needs be defended.

Thus, Guillaume Postel, one of Europe's first great orientalists, encountered the Druze in 1550 in the area of today's Golan Heights. Though he was unsuccessful at gaining complete access to their secret lore, Postel was at least aware of its existence. Yet rather than assuming an independent origin of this people or their teachings, Postel argued that the Druze must be the descendants of Gallic druids. This assertion came even though Postel was searching for an alternative origin for the antique world that was not European, and if possible, even anti-European.² Or take the example of Jean Frédéric Maximilien de

¹ For a brief outline of some of the ideas expressed here, see my "Lai zi dongfang de kexue, Zhongguoshi ziduan xingtai" 來自東方的科學中國式自斷形態, *Ershiyi shiji* 二十一世纪 (*The Twenty-First Century*), April 2003. A sabbatical year at the Institute for Advanced Study in Princeton gave me the time and the inspiration for a considerable revision and elaboration of a number of details.

The most detailed account of the development of this idea is still Quan Hansheng's article written in the 10300s; Quan Hansheng 全漢升, "Qing mo de xixue yuanchu Zhongguo shuo" 清末的西學源出中國說, *Lingnan xuebao* 嶺南學報 6 (1035), pp. 57-102. For a more recent summary see Theodore Huters, *Bringing the World Home: Appropriating the West in Late Qing and Early Republican China* (Honolulu: U. Hawai'i P., 2005), pp. 23-42.

² William J. Bowsma, *Concordia Mundi: The Career and Thought of Guillaume Postel* (1510–1581) (Cambridge, Mass.: Harvard U.P., 1957), p. 144, and n. 10.

Waldeck, who upon discovering the Mayan ruins concluded they must be of Greek origin.³

Closer to our topic are the so-called "figurists," who were among the French mission to China during the seventeenth and eighteenth centuries. They suspected the existence of Christian dogma and tenets of belief that must have existed as an *Ur*-text lying behind the Chinese classics. These Figurists then engaged in a systematic decontextualization of what they considered to be later texts, in an effort to find clues to the true nature of this Ur-text.⁴

The list of such misconceptions could be extended considerably.⁵ However, they all have a cognitive process, namely that of comparison, at their heart – though it is a rather peculiar comparison inasmuch as the Other may only be accepted if it is seen as having always been a part of one's own culture or society. Yet in that case, what is seen as one's own is taken as universal – so all Others by definition have no rights or claims to it. Another way of explaining this is that since ancient Greece is generally considered the cradle of civilization, then all evidence of civilization found elsewhere must by definition be traceable back to the ancient Greeks; it is simply a little less familiar to Westerners that some Chinese have made exactly the same kind of argument about ancient (and not so ancient) China.

Clearly, these are diffusionist arguments, perhaps even protoglobalization arguments. They are problematic in part, too, because diffusion requires judging conditions as they were before and then after contact. Thus, once stimulated by an outside culture, the emergent later civilization cannot envision itself as an initiator civilization. What is genuinely new and different is robbed of its right to have been independently, innovatively created. The possibility of multiple creation, or similar discoveries arrived at independently in different places, is negated by the diffusionist view. China is a highly instructive example for how, in the course of asserting itself, its view of its own traditions and history came to be radically altered.

⁵ For the case of India, see Gyan Prakash, *Another Reason: Science and the Imagination of Modern India* (Princeton: Princeton U.P., 1999).

³ J.F.M. Waldeck, Voyage pittoresque et archéologique dans la province d'Yucaatan pendant les années 1834 et 1836 (Paris: 1938).

⁴ See Michael Lackner, "Jesuit Figurism," in Thomas H. C. Lee, ed., *China and Europe* (Hong Kong: U. Hong Kong P, 1991), pp. 129–49, and idem, "A Figurist at Work: The Vestigia of Joseph de Prémare S.J.," in Catherine Jami and Hubert Delahaye, eds., *L'Europe en Chine: Interactions scientifiques, religieuses et culturelles aux XVII et XVIII siècles*, Mémoires de l'Institut des Hautes Etudes Chinoises 6.34 (Paris: Collège de France, Institut des Hautes Etudes Chinoises, 1993), pp. 23–56.

The effort to define one's cultural identity in the late-nineteenth century by ascribing to the alien that which was always one's own, had its precedents in China. Fourth century AD texts, relating an apparently widely-known legend, speak of Laozi having gone to the West once he had completed his *Daodejing*, there to educate – as well as civilize – the barbarians. The result of this edification was nothing less than Buddhism itself, which "was in essence based on the Chinese classic by Laozi."⁶ Assertions such as that "Laozi transforms himself into a barbarian," or that "Laozi transforms the barbarians, civilizing them in the process 老子化胡," can be found both among apologists for Buddhism who were seeking its greater acceptance among Chinese elites, as well as among those who employed a more hard-line rhetoric, a kind of nationally-oriented sentiment centuries before our modern sense of nation emerged, a sentiment that preferred the original over the civilized barbarian.⁷

Since the end of the sixteenth century, Jesuit missionaries had brought not only a new religion and a new perspective on how one might interpret the Chinese classics, but had also introduced new - or at least more efficient – mathematical and astronomical techniques to China. The new "science of the heavens 天學" was at first welcomed by numerous Chinese scholars, because it reinforced their own position on two fronts. On the one hand, the practical knowledge the Jesuits provided, not only with respect to the abstractions of mathematics or astronomy but also to the practicalities of irrigation and mining techniques, helped the Chinese scholars' efforts to draft guidelines for good government based on the classical canon, helped the Chinese scholars' efforts to draft guidelines for good government based on the classical canon, although this canon provided relatively few (or, at least, less explicit) guidelines of this kind. At the same time, this effort to govern well also had a moral aspect that was reinforced by the Christianhumanistic reading of the canonical texts.

Still, as might be expected, Christian teachings did not meet only with approval. A new conservatism had spread by the end of the Ming dynasty (around the mid-seventeenth century) which saw the technical prowess of the Westerners as having a dangerously close affinity to traditional forms of Chinese divinatory arts. So, neither the Jesuits' new technical arts nor China's old divinatory arts was, in the view of

⁶ Quan, "Qing mo de xixue," p. 58.

⁷ See Erik Zürcher, The Buddhist Conquest of China: The Spread and Adaptation of Buddhism in Early Medieval China (Leiden: Brill, 1959), pp. 37, 280.

these Chinese scholars, worth trying to explain in terms of Chrstian self-reflection.

It was against this background that even those scholars who were interested in astronomy, or who in effect were full-time astronomers, tended toward the view that European knowledge had been stolen from China by the Occidentals. The most important representatives of this view, Huang Zongxi 黃宗羲 (1609–1695), Fang Yizhi 方以智 (1601–1671) and Wang Xishan 王錫闡 (1628–1682), refused to follow the new rulers, that is the Manchu dynasty that took power after 1644, and remained loyal to the declining Ming. A rather vague allusion to a Chinese origin of Western knowledge had already been made by Xiong Mingyu 熊明愚 (1579–1649) in his book on natural knowledge titled *Gezhi cao* 格致草. Xiong had in fact modified and extrapolated a passage from the *Records of the Grand Historian*.⁸

Myths of autochthony always need to be seen in context, as they are far more an expression of political rhetoric than they are of political practice. That practice is one that rarely bothers itself with origins when it is a matter of replacing something worse with something better. For that reason, it is typical that the idea that Western astronomy and mathematics came from China would be promulgated from the very top. It is also noteworthy that this forceful assertion was made in conjunction with domestic political differences. Emperor Kangxi (1654-1723), himself instructed by the Jesuits, had had to contend with a group of anti-Christian bureaucrats since his accession to the throne, and that group could not accept the high position Ferdinand Verbiest and other Jesuits held at court.

In part, there was the not so readily dismissible, if latent, suggestion that as a Manchu, thus a foreigner, it was hardly surprising if the emperor made common cause with other foreigners, namely the Jesuits. So, in a treatise on trigonometry written in 1704, the emperor condemned "those scholars who arbitrarily draw a distinction between the old and the new methods." Those scholars, he opined, "did not know the origin of astronomy, which had its origins in China and then spread to the West. The people there [in the West] preserved it, making endless measurements and adding something to it year after year. But it was only for that reason they achieved greater accuracy, not because they had used different methods."

⁸ Xiong, *Gezhi cao* (1648 edn.). For the most extensive study of early-modern Chinese reactions to Western science, see Benjamin A. Elman, *On Their Own Terms: Science in China*, 1550–1900 (Cambridge, Mass.: Harvard U.P., 2005).

It is not known whether the emperor was familiar with the ideas of the literati noted above who had first uttered this hypothesis, and who, as Ming loyalists, were opposed to the Manchu rule. However, a person who was definitely familiar and even conversant with these ideas was the mathematician Mei Wending 梅文鼎 (1633-1721), who, in a book entitled Problems of Calendrical Knowledge (Lixue viwen 歷學疑問, written 1691/92, published 1699), had argued that Chinese knowledge constituted the germs or the seeds of Western knowledge. Once again, this had been articulated in a rather vague way, without concrete evidence. Following the suggestion of his mentor Li Guangdi 李光地, Kangxi had read the book by 1702. A meeting of Kangxi with Mei Wending took place in 1705, and the result of the affinity both men discovered was the explicit verbalization of the doctrine of a Chinese origin of Western knowledge.⁹ It is known that the emperor's official imprimatur unleashed a flood of writings in which the "proofs" for the Chinese origins of Western science were provided. So one can take for granted that the assumptions of the Ming loyalists were known to Mei Wending, the most important Chinese mathematician of the day, but it would be left to him to take up the imperial suggestion with enthusiasm and to systematize it. According to this restatement, the legendary emperor Yao had sent one of his three most talented men, He Zhong 和仲, to the West. There he had promulgated Chinese "Ur-knowledge," which the inhabitants of the West then preserved and further developed. Indisputable similarities, particularly in algebraic formulations, were construed to mean temporal precedence, supported by the Jesuits having let it be known that their knowledge of algebra came from the East – though this was the Jesuits' East, meaning the Arab or Indian worlds. Thus, the term algebra was rendered in Chinese as *donglaifa* 東來法, meaning the "method from the East," conveniently omitting which 'East' was meant.¹⁰

⁹ For the vicissitudes of the relationship between Kangxi and Mei Wending, see Wang Yangzong 王揚宗, "Ming mo Qing chu Xixue Zhongyuan shuo xinkao" 明末清初西學中源 說新考, in Liu Dun 劉鈍 and Han Qi 韓琦, eds., *Keshi xinzhuan, Qingzhu Du Shiran xian-sheng congshi kexu shi yanjiu* 40 zhou nian xueshu lunwenji Hy史薪傳, 慶祝杜石然先生從事科 學史研究 40 周年學術論文集 (Shenyang: Liaoning jiaoyu chubanshe, 1997), pp. 71-83. For modifications of *Mingshi* with regard to the idea of a Chinese origin of Western learning, see Han Qi 韓琦, "Cong Mingshi lizhi de zuanxiu kan xixue zai Zhongguo de chuanbo" 從明史 歷志的纂修看西學在中國的傳播, in Liu and Han, *Keshi xinzhuan*, pp. 61-70. I am indebted to Professor Nathan Sivin for having drawn my attention to these two articles. For the influence of earlier ideas on on the articulation of the idea of a Chinese origin of Western sciences see Han Qi, "Astronomy, Chinese and Western: The Influence of Xu Guangqi's Views in the Early and Mid-Qing", Catherine Jami and Peter Engelfriet, eds., *Statecraft and Intellectual Renewal in Late Ming China: The Cross-Cultural Perspective of Xu Guangqi* (1562-1633) (Leiden: Brill, 2001), pp. 360-79.

¹⁰ See also Li Zhaohua 李兆華, "Jianping xixue yuanyu Zhongfa" 簡評西學源於中法, *Ziran bianzhengfa tonglun* 自然便正法通論 6 (1985), pp. 45-49. See also the volume on scientific

One can see such interpretation as an early form of what was known late in the twentieth century as "the Orient fights back." Numerous Jesuits, following the hermeneutic notion of a common origin for humankind, had suggested the diffusion of the Christian revelation both towards the East and towards the West, moving outward in synchronous and concentric circles, the origin point located in the Near East.¹¹ In the place of the Near East, Mei Wending substituted China as the origin, implicitly substituting the revelation of knowledge for biblical revelation.

However, there was no lack of voices in opposition (for instance, Jiang Yong Ξ 1681-1762), ^{12} and the many objections raised at the time clearly show how deeply this entire enterprise was marked by political rhetoric and ideology. Put differently, not all Chinese felt it necessary to save a sense of injured pride in their culture – proclaiming wounded pride perhaps being a form of proto-nationalism – inasmuch as not all of them felt their identity threatened.

Regardless of whether the myth-creation encouraged by the emperor might actually imply a common origin of both Western and Chinese mathematics out of an Arab-Indian synthesis – one which itself might have contained older Chinese elements – the origin myth as formulated does reveal several elements relevant to the much later versions of this argument. First, there is the issue of temporal priority: China's is the older culture, and thus precedes all others. Second, there is the idea of a genuine migration of relevant teachings and ideas, which contrasts with the observation that a coincidence can be found in both mathematical systems.

Let us note that this first explicit verbalization of a Chinese origin of Western knowledge was to the benefit of almost every party involved in the discourse on China's relationship with the West. First was the emperor, who, in his early period as a pious disciple of Western mathematics, had often pronounced a devastating judgment on Chinese mathematical practices and had been converted to the dignity of the Chinese tradition, while still being able to allow Western practices to continue. This conversion was to attenuate the resentment many

thought in Lu Jiaxi 盧家錫 and Xi Zezong 席澤宗, eds., Zhongguo kexue jishu shi, kexue sixiang juan 中國科學技術史, 科學思想卷 (Beijing: Kexue chubanshe, 2001), pp. 489-98.

¹¹ A prominent expression of this idea is *Tianxue chuangai* 天學傳概 (An outline of the dissemination of the science of heaven), written by Lodovico Buglio and Li Zubai in 1664; see following n.

¹² See his work on mathematics Shuxue 數學 (Shanghai: Shangwu, 1936; 2d pref.), p. 3.

Chinese scholars still harbored vis-à-vis a non-Chinese, "barbarian" dynasty. Next were the Jesuits, who, from the very beginning of their mission, had operated with a more or less vague idea of a coincidence between Chinese and Western approaches to the truth and could tacitly agree with the new doctrine, which did not really weaken their practical influence. And, finally, Chinese scholarship experienced a revival, because, on the basis of this doctrine, efforts to redirect attention to a neglected Chinese tradition became legitimate. This is not yet the history of a loss but rather of a benefit, as awareness of a Chinese tradition increased.¹³ Let us also note that the object of the discussion was a field of science, not knowledge in general, although, in this discussion, the term "knowledge 學" was used alongside the more specific word for "scientific method 法." It took more than a century to form the claim for a Chinese origin of a much broader range of Western knowledge, incorporating not only science and technology, but also religion, political and social institutions, philosophy and other fields into a new organization of knowledge.

The idea of the Chinese origins of Western science might remain a curious footnote in the history of the diffusion of ideas had China been spared greater humiliations. But in the wake of the Opium Wars, the basis for the entire traditional organization of Chinese knowledge began to falter during the second half of the nineteenth century. Western superiority made itself oppressively noticeable everywhere, and not just in areas with a long tradition in China such as the military arts, mathematics, and cartography. Of far greater consequence was the realization that entire disciplines – chemistry, physics (in particular optics, acoustics, mechanics, and electricity), engineering, and international law - had no place, no standing in the Chinese canon. Given this situation, it is not surprising that appeals to make China "rich and strong" again carried increasing weight. Put in more prosaic terms, this meant China needed to catch up with the West, among other things by strengthening those fields the West had stolen from China - true, improving upon them in the process, and China had indeed been neglecting them – as rapidly as possible.

Feng Guifen 馮桂芬 (1798–1874) played a major role in the unsurprising rediscovery (and promulgation) of the thesis about the Chinese origin of Western science. In a work completed in 1861 but only published *in toto* in 1885, he protested its decline in his day, particu-

¹³ See Chu Ping-yi, "Remembering Our Grand Tradition: The Historical Memory of the Scientific Exchanges between China and Europe, 1600–1800," *History of Science* 41.2 (2003), pp. 193–215.

larly as compared to the golden age of early Chinese antiquity (tenth to seventh centuries BC). "The old practices have been lost; one must go seek them in the desert," by which, given Chinese geography, he meant the West. Even more starkly, he went on, "Foreigners emerged after China did; they must have stolen our leftovers."¹⁴ What this formulation means is that on the one hand, we have not honored or sufficiently acknowledged certain things, things we have treated as leftovers compared to the more important things in our culture. On the other hand, nowadays they have become important, so we need to fetch them back again. If the foreigners took the good practices of China into the desert, then the temporal precedence of Chinese culture is proven; in addition, in this fashion one can suggest that Chinese accomplishments have been illegitimately acquired by foreigners. The imperial censor Wei Muting 魏慕廷 also wrote a memorandum in 1861 in which one reads that firearms were invented during the Jin dynasty (1115–1234); Europeans had merely improved upon them. This in turn provided justification for the use of weapons of this kind in putting down the Taiping rebels in 1864.15

These notions of Chinese origin reached their highpoint only in the mid-1890s, or more precisely, with China's crushing defeat in 1895 at the hands of the vastly more modern Japanese, an event that deeply shook the self-assurance of large segments of the Chinese elite. After this, the notion of Chinese origins was applied in an almost inflationary manner to nearly every realm of Western knowledge. The ancient thinker Mo Di, traditionally dated as living from 480 to 390 BC, now became an important reference figure. His altruistic doctrine – preaching love without differentiation, urging simplicity and satisfaction, asking for respect of god and the spirits – had a certain utilitarianism about them (as well, one should add, having a somewhat mysterious history of how his works came down to us). Such teachings seemed to provide the closest Chinese parallel to Occidental doctrines. Huang Zunxian 黃尊憲 (1848–1905), China's most important source on the Meiji Restoration, asserted in his Monograph about the Japanese State - completed in 1887 but only published in the fateful year 1895 - that Mo Di's students had gone to the West, and there had preached the right of popular self-determination, of loving thy neighbor, and of honoring the Lord.¹⁶

¹⁴ Feng Guifen, Jiaobin lu kangyi 校邠盧抗議 (Beijing: Zhongzhou guji, 1998), p. 197.

¹⁵ Quan, "Qing mo de xixue," p. 80.

¹⁶ Huang Zunxian, Riben guozhi 日本國志 (Shanghai: Shanghai guji 2001), chap. 32, p. 332.

It might be that the idea of "imitation," or of the illegitimate "theft" of Chinese accomplishments, was revived by Huang Zunxian's claim that the Japanese had long imitated China and had only recently begun aping the West. It may have also been a comfort to see the western-oriented reforms in Meiji Japan as merely the imitation of an imitation. Still, the rather open question remains: if everything of substance had been stolen, copied, or improved upon, what was still uniquely Chinese?

In the Book of the Correct Methods (Yongshu 庸書), which appeared in 1896, Chen Chi 陳熾 (1855–1899) thoroughly addressed the question of the Chinese origins of Western technology and techniques.¹⁷ Chen had achieved the highest grade in the civil examinations, and after being employed for some time in the Customs Administration, bringing him into contact with foreigners, he was given a central government post. Chen was also president of the Study Association for Strengthening China launched the year before, and was the first Chinese translator of Adam Smith's Wealth of Nations.

Like many others, Chen saw the history of China as a steady decline from past greatness, and following the conventional Confucian wisdom, regarded the rule of the first Chinese emperor (beginning 221 BC, with his unification of the empire) as the greatest catastrophe that had befallen China to that point. Among other things, this emperor was alleged to have had books burned and scribes buried alive. This disaster, however, also gives Chen a precise date for the export of Chinese learning to the West.

To make sense of this, one needs to bear in mind that the earliest of China's rulers are both largely legendary and, as founders, they became culture heroes. Their lives, and the acts ascribed to them, were regarded as the basis of what later Confucians regarded as in some sense a doctrine. If it was a doctrine, however, it was eviscerated by the chaotic political conditions that accompanied the rise to power, not to speak of the exercise of rule, of these early rulers. Appropriating or asserting historical continuity where none likely existed, the core, early doctrines were understood as having been revived under Confucius. At least in Chen's version, "Heaven took mercy and as a consequence brought forth Confucius...." Confucius created the preconditions for a differentiation that became one of the central themes of the discourse on autochthony, as "he named a large number of objects, images, and numbers. This is actually what the 'devices' (or instruments 器) referred

¹⁷ Chen Ciliang (Chen Chi) 陳次亮, Yongshu (Shenji shuzhuang yin, 1896).

to, though these also contained a 'Way' (dao $\ddot{\Xi}$) within them. In the chaos under the First Emperor, those who owned the devices turned to the West."¹⁸

By this, Chen Chi meant the migration of civilization from East to West, which in turn was taken as proof for the origin of civilization in the East. "One after another, civilizations west of the Pamir Mountains arose and flowered: Babylonia, Macedonia, Egypt, Greece. These countries obtained the scant remnants of the doctrines laid out by the earliest legendary rulers of China, and yet that was enough to fill the four oceans with honor." Still, the "Way" itself did not make it into the West: all the West obtained were the "gross traces" in the form of the devices. The Confucian Way remained behind, preserving for China the distinction between coarse and refined, interior and exterior.

The relation between Way and device (or instrument) has farreaching consequences because it means that what once existed is by definition better, as it is more inward, more true, more real. The West only possesses the virtue, or has developed the ability, to perfect devices/instruments – which is to say only the external or exterior aspects. The Occident may be more skilful, clever, even more crafty, but a Way could not ever develop in the West. That is even true for Christian religion. Chen Chi condemned it as "a mishmash of the tradition of honouring Heaven while forgetting oneself and ones' ancestors, or having the desire to save the world while yet begging from everyone on the street" – by which he meant soliciting charitable donations. Some of this assessment may have come in part from the previously mentioned notion of Christianity as the bastardization of heretical Chinese teachings.

The basis for speculation about the "Way" and the "devices" lies in a sentence from the "Great Commentary" to the *Book of Changes*, part A, section 12, which states: "What lies outside form is called the Way; what is formed is called the devices 形而上者謂之道, 形而下者謂之 器." This in effect means to Chen Chi's way of reading the Great Commentary that metaphysics remains in China while *physis*, the physical (and, by extension, the study of physics), is the basis for the Western perfecting (of techniques). A scholar named Tang Zhen 唐振, advisor to the emperor's teacher Weng Tonghe 翁同和, put it in a nutshell when he wrote: "The people in the West show great strength with respect to the instruments, though they at times rather unreflectedly equate it with the Way."¹⁹

¹⁸ Chen, Yongshu, p. 21.

¹⁹ Quan, "Qing mo de xixue," p. 70.

Yet if Western techniques are nothing more than a one-sided perfecting of what the Chinese have provided, then China might see itself as justified in appropriating them back again. The "instruments" yearn to return to their source, Chen Chi argued:

For over 2,000 years, they have remained in the Western lands, but they must now return. Initially, land and water, and extensive deserts, separated them by a distance of many ten-thousand miles. There was no way to reunite them on their own. Then Heaven generously equipped the people of the West with firearms, telegraphs, vehicles and steamships, and they marched into China, without meeting any opposition.... Did Heaven thus bring disaster upon China? No - on the contrary! Heaven was blessing China. The love of Heaven for China is like a rare jewel left unwittingly on the street. The finder will keep it for himself, secretly - that is just how humankind is.... The more we refuse to accept Western techniques, the stronger the wish of such things will be to return to us. Every thing has its master, which Heaven determines. Even if the people of the West want to keep things for themselves, or keep them secret, they will not be successful. It would mean acting in a manner opposed to Heaven if we continue to offer resistance.²⁰

It seems clear that Chen Chi can be counted as belonging to those conservative reformers among his compatriots – in some sense educated disdainers of the West – who wanted to sweeten the bitter pill of modernization.

Far more interesting, I think, is the imagery of marvelous things being dropped off, as it were, which has parallels to phenomena like the Melanesian cargo cult, which saw such gifts in terms of the return of the dead. The Melanesian prophecy takes the form of a ship filled with white people who bring rich goods and bliss from a land of plenty. Vittorio Lanternari, a chronicler of nativism, noted that "the Melanesians were unaware of the industrial origin of European products, and were unaware of that production process. What they saw instead, as they watched the cargo being unloaded from the ships, were wares that in their eyes were treasures created as if by wondrous, fantastical means. These wares were ascribed to an unreal world that the whites were somehow connected with. In their view, these wares came out of the realm of the dead, and the dead themselves were embodied, in the bearers and givers of these riches, as white ghosts from Europe,

²⁰ Chen, Yongshu, pp. 21-22. For a slightly different translation, see also Huters, Bringing the World Home, p. 36.

for white is the color of the dead in Melanesia."²¹ There are certainly many differences, but in both Chinese and Melanesian cases, the wares of the West are arrogated by the receivers to themselves: since they are regarded as having been made by the ancestors, they are simply returning to their proper owners.

The globalization of the occidental forms of interpreting, naming, and subdividing the world need not necessarily lead to the result sketched out by Max Weber, who argued that where a discovery has not been made, an imbalance exists with respect to that discovery.²² Though we might disagree with Weber, particularly in his insistence on the persistence of such an imbalance, we nevertheless cannot get around the fact that such a dissonance certainly exists at first contact. That which is new and better, and also comes from somewhere else, evokes our envy. Such envy, carrying a low regard of the Other, whispers to us that we certainly had prior rights precisely to that new thing. Yet as soon as we appropriate the Other, under the pretext that it has long belonged to us, we open a Pandora's Box.

In 1896, Wang Renjun 王仁俊 (1866–1914) published a work entitled *Gezhi guwei* 格致古微 (*Ancient Subtleties of Natural Knowledge*)."²³ Wang had achieved highest honors in the state examinations, and in this work he provided a comprehensive handbook about the genuinely Chinese traces of new-old knowledge. In fact, such knowledge was long a standard element in the state examinations, a part of testing practical statecraft. Chinese officials were far from being aesthetes as late as the eighteenth century, so although by Wang Renjun's time these kinds of practical question took up a far less prominent part of the examinations, he could nonetheless look back on a certain tradition.

Correspondingly, he structured his opus quite conventionally, that is, according to the Imperial Library catalogue of 1782, which was divided into four subject headings: classics, historical works, great masters, and collections. His first entry under classics was given to the most significant work in that tradition, the *Book of Changes*; historical works begin with the *Records of the Grand Historian*; the great masters with the philosopher Xunzi, and so on. Natural history, with its broad

²¹ Vittorio Lanternari, *The Religions of the Oppressed: A Study of Modern Messianic Cults*, trans. Lisa Sergio (New York: New American Library, 1965), p. 316.

²² Max Weber, "Die 'Objektivität' sozialwissenschaftlicher und sozialpolitischer Erkenntnis," *Gesammelte Aufsätze zur Wissenschaftslehre* (Tübingen: Mohr, 1985), pp. 146-214.

²³ For a modern edition of his work, see Ren Jiyu 任繼愈, ed., *Zhongguo kexue jishu dianji tonghui* 中國科學技術典籍通匯 (Zhengzhou: Henan jiaoyu chubanshe, 2001) 7, pp. 789-886; the first two pages of this give a short introduction to *Gezhi guwei* by Wang Yangzong 王揚 宗 (titled 格致古微 提要).

conceptual sweep, led to variations in the way the entries were dispersed among the four headings. One entry under the Great Masters heading, for example, was the speculations by the philosopher Zhang Zai \mathbb{R} \mathbb{R} (1020–1078) regarding the direction the heavens rotated in; another, under the Classics heading, was a sentence from the commentary to the *Book of Changes* according to which the heavens were round but the earth was "mother." Entries were also commented upon. Thus, with respect to the sentence about the round heavens and Mother Earth, a note was added by Wang to state that it had not been called square because the round shape of the earth had been known at least since the time the *Book of Changes* appeared.

Wang Renjun's reference book was a compilation, in the traditional style, in which an interested reader could find out in which canonical or ancient text natural history themes appeared. In some sense he was creating an "*Ur*-text" of Western science or knowledge, though in this case as it was manifested in the writings from China's past. In its organization, this *Ur*-text followed the givens of traditional Chinese systematization, whereby the taxonomy of learning placed holy and therefore venerable books in the foreground.

One thing should be noted, however. On the last pages of his compendium, Wang added a kind of thematic index by which one could find specific topics. In order, they were: Astronomy, Mathematics, Geography, Military Arts, Medicine, Chemistry, Mining, Mechanics, Meteorology, Hydraulics, Thermodynamics, Electricity, Optics, Acoustics, Script, Painting, Trade, Engineering, Botany, and Governmental Practices. A final point provided information about "strengthening China," its very placement suggesting equal status with the various scientific disciplines.

A plagiarized version of Wang's compendium appeared only a year later, bearing the title *Gezhi jinghua lu* 格致菁華錄 (*Notes on the Flowering of Natural Knowledge*). In a most surprising way,²⁴ the plagiarized version does not differ from the original in its contents. Yet a closer examination of how the work is organized shows that the Rubicon had been crossed. For it is not the venerable works in the Chinese tradition that provide the reader with guidance; instead, Wang Renjun's index of Western sciences comes first, constituting the structure of the new book, and the Chinese works are found only within the index.

²⁴ Wang's introduction (see previous n.), p. 790; see also Wang Yangzong, "Gezhi guwei yu wan Qing Xixue Zhongyuan shuo" 格致古微與晚清西學中源說, *Zhongzhou xuekan* 6 (November 2000), pp. 146-50.

With this, the Ur-text has been given a new systematization, and an alien one at that. From this time onward, the classics speak the language of Western science: the Occident is no longer seen through Confucian lenses, but instead Confucius is understood through Western eyes – even when, and perhaps just for that reason, he is held up as a key witness to the antiquity of Chinese science and knowledge. This reversal has far-reaching consequences.

In 1898, Admonition to Learning (Quan xue pian 勸學篇) by Zhang Zhidong 張之洞 (1837-1909) appeared. Zhang, an influential innovator, was governor-general of Hubei and Hunan provinces at the time, and he had launched a whole series of modern, large-scale projects that depended on adopting western production techniques and organizational forms: armaments factories, wharves, mines, a telegraph network, cotton (spinning) mills. One chapter in the work is entitled "Integration," and in it Zhang provides a catalogue of analogies and correspondences between the new ways and the old, represented through passages drawn from the canon of classic Chinese works. Chemistry, modern agricultural science, mining, public works, novel machines, expositions and trade fairs, railroads, modern tax policy, foreign trade, military academies, specialist civil servants, sending students to study abroad, physical exercise, toys for children, impartial judicial proceedings, dual parliamentary chambers, the press: all this Zhang Zhidong can find already mentioned in the classics.²⁵

To be sure, some references lack precision: novel machines are legitimated by citing the Confucian adage "the craftsman sharpens his tools." Railroads are justified with a sentence from the *Great Learning*: "The creation of wealth requires that the active make haste." The classics, the author himself notes, only contained the "patterns and rules" that the West had perfected into techniques. China, following Zhang at a later point in the text, had to maintain its own teachings as its core; teachings from the West existed largely to be exploited. This dictum became well-known; every educated Chinese today is still familiar with it.

Yet what, in 1898, was still so undeniably Chinese that it could be retained as the core? If the classics could only serve as spurious sources to legitimize the introduction of railroads, parliamentary constitutions, and chemistry, then we have here the beginning of a history of loss that characterizes the modern phase, and perhaps the entire twentieth century in China. To assert this seems in contradiction to what I

²⁵ Zhang Zhidong, Quan xue pian (Zhengzhou: Zhongzhou guji, 1998), p. 159.

have argued thus far. In fact, the history of Chinese appropriations of Western techniques, science, and even the history of ideas can seem an unparalleled success story. By 1911, and thus the end of the imperial era, all the significant decisions to reform China in such a manner as to turn it into a modern state had been taken.

The key switches had been thrown that would permit the transfer of western philosophy, literature, and pedagogy. Foreign languages were taught using up-to-date methods found around the world, and natural sciences and technology had long since found their place in China. So how can it be a history of loss?

At no moment in early-modern and modern Chinese history was the idea of a Chinese origin of Western sciences the only concept to explain the transfer of notions and practices between China and the West. Another important way of coming to terms with the invented or factual similarities between Chinese and Western approaches to knowledge was a diffusionism based on a foreign origin of the Chinese race. An early predecessor, the work *Tianxue chuan'gai* Ξ (*Exposition* of the Spread of the Heavenly Teaching) by Lodovico Buglio (1606–1682) and the astronomer and convert Li Zubai 李祖白 (d. 1665), written in 1664, had indicated the present-day Middle East as the cradle of mankind, from where the simultaneous spread of the human races had taken place. The notion of a common origin of mankind was part of the "accommodationist" branch of Jesuit proselytizing strategies.²⁶

It is far from probable that the scholars responsible for the rise of these diffusionist ideas at the turn of the twentieth century were aware of a Christian anticipation of this notion. However, even this new sort of diffusionism was modeled on Western ideas: the theory of a Babylonian origin of the Chinese had been advocated by Albert Étienne Jean-Baptiste Terrien de Lacouperie (1845-1894) who taught Indo-Chinese philology at the University of London. His book *Western Origins of the Early Chinese Civilization from* 2300 *B.C. to* 200 *A.D.* appeared in 1894. Although his theory was mainly aiming at a proof that the entire Chinese civilization was only a degenerated imitation of Babylonian inventions (and thus unwillingly resumed Athanasius Kircher's idea of an Egyptian descent of the Chinese that was expressed in his *China Il-lustrata* in 1667), Liu Shipei 劉師陪 (1884-1919) and others used Terrien de Lacouperies's ideas to give evidence for the migration of the Yellow Emperor from the Pamir (Kunlun) mountains to the East and

²⁶ See David E. Mungello, "Die Schrift T'ien-hsüeh ch'uan-kai als Zwischenformulierung der jesuitischen Anpassungsmethode im 17. Jahrhundert," *China Mission Studies (1550–1800) Bulletin* 4 (1982), pp. 24–38.

his subsequent conquest of so-called China. This adaptation was made possible by the fact that the Chinese reception of Terrien de Lacouperie was based on Japanese publications on East Asian history which had considerably attenuated the notion of Chinese inferiority that Terrien de Lacouperie had proposed.²⁷

Very soon, the stimulus provided by the theory of Liu and others evolved into an independent articulation of an ideology praising the Yellow Emperor as the ancestor of the Chinese race, and the lore of his conquest was increasingly exploited for strengthening the martial character of that race. Terrien de Lacouperie's work had never been completely translated into Japanese or Chinese, and in the new Chinese lore of the Yellow Emperor as a predominantly martial figure the Babylonian origin was never mentioned, but the Yellow Emperor's point of departure was reduced to the Pamir/Kunlun mountains. Just as the China-based diffusionism of a Chinese origin of Western knowledge was aimed at asserting a Chinese superiority vis-à-vis the West, the Kunlunbased diffusionism with its new ethnic-national criteria allowed a national Han-Chinese self-consciousness that was mainly directed against the Manchus. A bellicose conqueror as the ancestor of the Han enabled Han-Chinese nationalism to envisage a new hierarchy of competing imperial powers. It is interesting to note that the persuasive power of this ideology was strong enough to find its way even into schoolbooks of the late-Qing whose government, towards the end of the dynasty, was forced to emphasize the national character of education.

The respective provenances that both diffusionist theories indicated for knowledge, namely science or race, notwithstanding, both emphasized superiority. Since the anti-Manchu resentment was more transient than the anti-Western ideology, the diffusionism based on the Yellow Emperor's peregrination and subsequent conquest survived only in a rather vague awareness of a common offspring of the Chinese people; on the other hand, the idea of a Chinese origin of Western knowledge has been able to weather all the major challenges of the twentieth century. During a complex process of adaptation, it has been able to leave behind the simplistic historical argumentation of its beginnings, such as migration and the like. It has evolved into a more

²⁷ The first Japanese mention of a Babylonian origin of the Chinese dates from 1893; more important for the Chinese reception of Lacouperie's ideas were the historian Kuwabara Jitsuzu's (1870–1931) article and the even more influential book *A History of the Chinese Civilization* by Shirakawa Jiro and Kokubu Tanenori, published in 1899. I am indebted to Elisabeth Kaske and Marc André Matten for having drawn my attention to the details of the Japanese side of Terrien de Lacouperie's reception in East Asia; this subject will be treated in detail in their forthcoming Ph.D. dissertations.

sophisticated method of providing evidence for a Chinese anticipation of major Western theories and concepts. The list of these anticipations being almost inexhaustible, a few examples will serve, coming towards the end of my concluding remarks.

Many countries in the non-Western world aside from China continue to struggle with how to deal with Western imports, whether that means the globalization of science and technology, or more acutely, of lifestyles and modes of thought that even in English are called Weltanschauung. We too rarely realize that the break with cultural continuity in China was more radical and occurred more swiftly than in the West; in many areas, it has had traumatic aftershocks. Despite the widespread, vulgar Darwinist view that what is new is by definition better, nowadays in Asia - and especially in China - one often hears arguments that are based on what we might call Anciennität, a term that means seniority based on length of service rather than age alone. Precisely because the assertion was made that all science always had come from China, hardly anything genuinely Chinese was still left by the end. In a sense, China could enter the modern era unencumbered, like a slate wiped clean. Mao Zedong, after all, argued that the old culture was an obstacle and had to be eradicated, but completely wiping away the old is not a recipe for the creation of a new identity – and as we have learned, neither is calling for the creation of a new Socialist Man, as in the Soviet Union.

There are also sharp contrasts, if not disjunctures, in areas whose names, terms, and even concepts have been rather alien to China. For years now, the Chinese government has been pumping enormous sums into paleontological research to prove that the Chinese were not, in fact, originally from Africa but instead descended from Peking Man.²⁸ Considerable state resources also go to campaigns to emphasize to the Chinese populace the world-historical significance of the so-called Four Great Chinese Discoveries – paper, printing, gunpowder, and the compass. On the other hand, it is true that the original arguments by Mei Wending and others eventually fell out of favor in the twentieth century. Textbooks in China today give true credit to Galileo and Kepler for astronomical discoveries without recourse to the notion of Chinese origins of Western science.

²⁸ Barry Sautman, "Myths of Descent, Racial Nationalism, and Ethnic Minorities in the People's Republic of China," in Frank Dikötter, ed., *The Construction of Racial Identities in China and Japan: Historical and Contemporary Perspectives* (Honolulu: U. Hawai'i P., 1997), pp. 75-95.

To be sure, the arguments of Mei Wending and, particularly, his late-nineteenth century followers are less subtle forms of self-assertion of what the Japanese philosopher Mishima Ken'ichi has called "heteronomously-steered ethnocentrism."²⁹ But even in the more demanding history of ideas, the efforts have not ceased even to this day to place the Chinese tradition on a higher plane than the Western – with the added irony that the comparison itself is undertaken using Western categories. Liu Shuxian, a "modern neo-Confucian" born in 1934, has argued that Confucius formulated a "belief without God" long before Paul Tillich.³⁰ The philosopher Mou Zongsan, who died in 1992, tried to provide evidence that the eleventh-century thinker Zhang Zai had resolved the problem of the "intellectual intuition" better than Immanuel Kant had.³¹ We also shouldn't forget that the leader of the Taiping Rebellion in the 1860s had styled himself as Jesus's younger brother, arguing that he had received a new mission from their common father.

In a novel published in 1998,³² Turkish author Orhan Pamuk has a tradition-minded old master in the painting atelier at the late-sixteenthcentury Ottoman court in Istanbul say: "For if someone starts to paint a horse in a different manner, he will soon regard the entire world in a different light." This new world view may appear to be painted on a blank canvas, yet it is less a tabula rasa than a palimpsest, one in which the old images shimmer through.

²⁹ Mishima Ken'ichi 三島憲一, "Die Schmerzen der Modernisierung als Auslöser kultureller Selbstbehauptung: zur geistigen Auseinandersetzung Japans mit dem 'Westen,'" in Irmela Hijiya-Kirschnereit, ed., *Überwindung der Moderne?Japan am Ende des zwanzigsten Jahrhunderts* (Frankfurt am Main: Suhrkamp, 1996), pp. 86–122.

³⁰ Liu Shuxian 劉述先, "You dangdai xifang zongjiao sixiang ruhe miandui xiandaihua wenti de jiaodu lun rujia chuantong de zongjiao yihan" 由當代西方宗教思想如何面對現代化 問題的角度論儒家傳統的宗教意涵, in Liu, ed., *Dangdai rujia lunji: chuantong yu chuangxin* 當代儒家論集, 傳統與創新 (Taipei: Zhongyang yanjiu yuan, 1995), pp. 1–32; also see Michael Lackner, "Philosophie, Theologie oder Kulturwissenschaft? Legitimationen des Modernen Neokonfuzianismus," in Iwo Amelung et al., eds., *Selbstbehauptungsdiskurse in Asien: China, Japan, Korea* (Munich: Iudicium, 2003), pp. 275–90.

³¹ Mou Zongsan 牟宗三, *Zhide zhijue yu Zhongguo zhexue* 智的直覺與中國哲學 (Taipei: Xuesheng shuju, 1971).

³² Orhan Pamuk, *Rot ist mein Name* (German translation) (Munich: Carl Hanser, 2001), p. 559.