Minghui Hu

China's Transition to Modernity. The New Classical Vision of Dai Zhen. Seattle; London: University of Washington Press, 2015. Pp xi + 285. Hb \$50.

Research on the transmission of Western learning in China has focused on the writings of the Jesuits, a few converts, and direct opponents. Influence on literati is quite elusive either because the Qing censored Western learning outside the court, or because the literati framed it within their own indigenous tradition. Minghui Hu precisely investigates the connection between Dai Zhen's (1724–1777) scholarship and the knowledge brought by the Jesuits. More broadly, he wonders about the possibility of “portray[ing] Dai in the rise of Western rationalism” (23), and the book shows that the answer is not one-sided. Dai's evidentiary method applied to natural facts and classical texts had prepared China's transition to modernity, but his project of anchoring universal knowledge in pre-Han classical texts can be seen as anti-modern. Much literature has focused on Dai's *Evidential Analysis of Meaning of Terms in the Mencius* 孟子字義疏證 (in *The Complete Works of Dai Zhen* 戴震全書, Hefei, 1994), and Hu pays attention to his scientific work in mathematical astronomy, historical geography, analytical phonology and historical etymology, showing how Dai used technical knowledge to reconstruct classical knowledge.

The four first chapters present at length the intellectual and political background. The Manchu court and Chinese officials adopted the Jesuit astronomy based on Tycho's cosmographic only on pragmatic grounds, and their own ontological and cosmological representation of the universe remained undisturbed. Then, Yang Guangxian 楊光先 attacked Jesuits as a foreign and seditious organization that was attempting to overthrow the dynasty. This ended in political failure, and Kangxi reaffirmed the authority of Western astronomy.

But how to articulate Western learning and Chinese tradition within a single coherent discourse? The French Jesuit Joachim Bouvet attempted to show correspondences between the cosmology of the *Yijing* and the Bible, but Kangxi bluntly rejected his efforts, and the Frenchman became estranged from both the emperor and his fellow Jesuits. In a completely different direction, Mei Wending 梅文鼎 pointed out that astronomical knowledge is acquired only through accumulation of observations over a long time, and so scientific knowledge and methods are always changing. This developmental view of science allowed Mei Wending to integrate ancient Chinese methods with the Jesuit methods, but Mei still maintained that the latter ultimately found their origins in China.

The Chinese Rite Controversy had a strong impact on the development of a true collaboration between the Jesuits and the Chinese. As Rome insisted on a

ban on ancestor worship for Chinese converts, Kangxi became suspicious of Catholicism, and the Western learning was restricted to the court. The Chinese scholars who studied under the Jesuits constituted a “Science Faction” that flourished under Kangxi, was marginalized under Yongzheng, and revived under Qianlong, especially with Mei Juecheng 梅珏成, Mei Wending’s grandson, as director of the Institute for the Revision of Mathematical Astronomy.

Starting from the fifth chapter, the author discusses Dai directly. Born from a poor family, Dai did not benefit from elite schooling, which consisted of learning the classics by heart and then understanding their meaning. Being self-taught, Dai went the other way around: he first asked question of the texts and went through a laborious investigation. In 1750, in a letter to the scholar Shi Jing 是鏡, Dai explained his two-step method: lexicology—looking at cross-references of the same word in *The Thirteen Classics*—and technical analysis based on his knowledge of astronomy, phonology, rituals, geography, mathematics, and natural history. For Dai, the classical world was real and perfect, and classical scholarship had to be seamlessly interconnected in order to reconstruct the ancient world. He also claimed that the methods he was using had always been part of the classical worldview, but had been forgotten and passed to foreign lands, until Buddhists brought back ancient phonology, and the Jesuits, ancient astronomy.

In 1754, Dai arrived in Beijing and contributed to a work on rituals with his *Base-Altitude and Circle Division Mathematics* 勾股割圓記 (in *The Complete Works of Dai Zhen*, Hefei, 1994). The treatise, based on Jesuit astronomy, replaced the Jesuit vocabulary, in use among the “Science Faction” for decades, with ancient Chinese terms, which had not been employed since the Han dynasty. This ethnocentric strategy was a way to make the new learning more acceptable beyond the small circle of the “Science Faction.” Chinese scholars also pointed out that Jesuits often changed mathematical models, and so their science was far from being absolute.

Chapter eight presents a highly complex case of evidential scholarship. Ancient classical texts mention the “Palace of Light” 明堂 of the ancient rulers of Zhou, and many later Chinese scholars attempted to reconstruct the layout of this edifice based on the descriptions. Dai used his integrative method, applying a cosmological passage in the *Book of Rituals*, to reconstruct the layout of the palace.

In the final chapter, the author shows three other examples of Dai’s method. First, Dai reinterpreted *The Gnomon of the Zhou Polity* 周髀算經 (in *The Complete Works of Dai Zhen*, Hefei, 1994) on the basis of Tychonic cosmography. Second, one of Dai’s disciple argued on the basis of ancient texts that Lake

Tai cannot be viewed as an isolated system of waterways. Third, Dai promoted the use of the long garment mentioned in the *Five Classics* (the most important text in Ancient China, equivalent of the Bible for Westerners) as a good approximation of the physical patterns of the cosmological order. In all these domains, Dai provided the imperial ideology with practical solutions as well as a classical vision as an alternative to Neo-Confucianism.

In many ways, Minghui Hu shares with Dai his great erudition. He leads the reader through highly technical astronomical theories, philology, state rituals, and conflicting interpretations of the classics. Unfortunately, Hu ignores two recent studies on Dai: Li Tiangang 李天綱 (*“The True Meaning of the Lord of Heaven” and ‘Evidential Analysis of Meaning of Terms in the Mencius’* 《天主實義》與《孟子字義疏證》, in *Cross-Cultural Hermeneutics* 跨文化的詮釋, Shanghai: Xinxing chubanshe, 2007) and Zhang Xiaolin 張曉林 (*‘The True Meaning of the Lord of Heaven’ and the Chinese Learned Tradition* 天主實義與中國學統, Shanghai: Xuelin chubanshe, 2005). According to those two authors, not only were Dai’s philosophical works directly influenced by Ricci, but he also developed innovative views on human nature. This indicates to me that Dai’s reconstitution of the ancient classical world was conservative in nature, and yet, under the cover of the ancients, he imported modern views.

Despite the great erudition of this work, some errors do occur. It is said that in the aftermath of the Calendar Case, most Jesuits were exiled to Macao (24); in fact, this should read Guangzhou, as correctly stated on page 27. It is affirmed that Jesuits avoided the deciphering the *Yijing* (27); but Bouvet did precisely this, as correctly stated on page 55. More problematically, concerning Mars, Jupiter and Saturn, the description of Tycho Brahe’s geo-heliocentric system (35) does not match with the illustration and its explanation (37). The Jesuit Adam Schall is said to have died in jail (49), but in fact was released from jail and died at home three months later. Also, as a note of regret, many Chinese names appearing in transliteration are left without the Chinese characters, and their absence in the index leaves one guessing about the characters behind the approximations.

This book invites us to a deeper reflection on the split between the humanities and the sciences. During the Renaissance, Western science was claiming its independence from the classical corpus of Aristotle, while Jesuits were still attempting to fit new discoveries within the ancient models. Similarly, with the coming of Western learning, scholars like Dai were trying to preserve the humanistic culture embodied in the classics. Dai’s efforts are praiseworthy, but his attempt in reconstructing a mythic and perfect classical world, which had never existed, sounds anti-modern. Instead of making the ancient classics the

keys of understanding of every topic, it is perhaps more useful to understand them as symbolic resources of meaning for human life.

This highly erudite book will surely reach a broad audience among historians of science and philosophy in China.

Thierry Meynard

Sun Yat-sen University, Guangzhou

meiqianl@mail.sysu.edu.cn

DOI 10.1163/22141332-00301005-17