

BOOK REVIEW

Lim Jongtae 임종태, *Travel, Reform, and Science and Technology in Eighteenth-Century Korea* 여행과 개혁, 그리고 18세기 조선의 과학기술 (Paju: Deulnyeok, 2021), 355 pp.

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In 1765, after returning from a trip to Beijing, a cosmopolitan hub teeming with luxury goods, mechanical curios, and the latest hybrid sciences produced by Chinese scholars and European Jesuits, the scholar-astronomer Hong Dae-yong authored a travelogue that captivated his peers in Joseon Korea (1392–1910). His accounts inspired a small circle of reform-minded scholars, later known as the “Northern Learning (*bukhak*)” group, who were deeply impressed by Hong’s observations of Beijing. Moved by his experiences, some of these scholars traveled to China themselves, producing similar writings, while still more engaged with Hong’s tales from their armchairs. Remarkably, this process brought the scholars together in advocating for drastic changes in Korean state and society. Despite some differences in emphasis, they called for importing new agricultural and transportation technologies from Qing China (the “north”), supported the practical application of Sino-Jesuit mathematical sciences, and criticized domestic scholars and artisans for their perceived narrow-mindedness and lack of competence compared to their Chinese counterparts.

This momentous shift in Korean intellectual and political history has to date been misunderstood by many historians. For long, historians took the writings of Hong and his associates literally and accepted their “narrative strategy” uncritically, including the rhetorical binary of a stagnant Joseon versus a vibrant China. Moreover, historians often anachronistically interpreted “Northern Learning” as a precursor to indigenous modernity, emphasizing that the reformers represented an early attempt to “overcome” neo-Confucianism, replace it with “Western” science, and hasten the age of industrial capitalism.

The longstanding view of eighteenth-century Korean reformers has now been rightfully revised by Lim Jongtae’s book, *Travel, Reform, and Science and Technology in Eighteenth-Century Korea*. This field-defining work offers an innovative re-reading of the reformers, their identities, and their policies. Recent studies by histo-

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rians like Jung Lee, Yun Yongchul, and others have begun to correct the exaggerations of earlier scholars, showing that the reformers were not as groundbreaking as once thought. These studies reveal that much of what the reformers prescribed for Korean society was already in progress and that they were often begrudging, if not disingenuous, about acknowledging the dynamism of their social inferiors—the artisans and practitioners.

Lim builds on these recent works and goes further. Rather than essentializing the reformers as pathfinding modernists or mere loudmouths, he compellingly reconstructs their epistemology as “traveling” scholar-practitioners and potent rhetoricians. As Lim shows in chapters one and two, the reformers were not only well-versed in the latest astronomical sciences imported from China. They also engaged fluidly with the so-called *jungin* (“middle people”) practitioners such as astronomers, crafting their own hybrids of Western and neo-Confucian sciences. Even more important, the third chapter shows, they were adept writers who used travel as a “rhetorical strategy” to articulate a reformist vision that was more fundamental than changes being made by the artisans and practitioners. Lim highlights that this approach even led to the development of a novel “knowledge-practice network” that embraced the universality of the new sciences and technologies for understanding and utilizing nature. The reformers argued that the mathematical sciences should guide the production and design of useful devices, from water wheels to weapons, and that these devices should, in turn, be adopted inexorably (by substituting domestic technologies with exact copies of “advanced” foreign technologies), with the ultimate aim of stimulating commerce and industry.

Did their reforms succeed? The answer is a sober no, according to Lim. Hong and his colleagues represented only a fraction of the Joseon literati. While they were influential, their ideas never coalesced into a cohesive movement, and the emerging “convergence” of knowledge between the elite scholars and *jungin* practitioners remained nascent and fragile. The reformers also started off on the wrong foot with the artisans. Instead of thoroughly investigating and codifying the artisans’ knowledge—an essential source of the new sciences and technologies, the reformers marginalized them and insisted on the binary of stagnant Joseon/vibrant China.

Importantly, this approach by the reformers also created an enduring “blind spot” in historical memory, which has ever since obscured our understanding of the development of Korean science and technology in the centuries that followed. The “knowledge-practice network” established in the late eighteenth century extended into the twentieth century, when ethnocentric historians coined the term “science-technology” (*gwahak gisul*, 과학기술) and traced its genealogy to “Northern Learning.” Similarly, modern historians and historians of science have echoed the reformers’ politics of exclusion towards the artisans and blamed their supposed lack of dynamism in Korean history. By uncovering this “collective amnesia” for the first time, then, Lim makes another valuable contribution to the field. His book also con-

cludes with insightful questions that push the boundaries of the discipline and suggest promising directions for future research. “What happened to the scientific and technological vivacity we find in the *yangban* aristocrats, *jungin* practitioners, and artisans of the eighteenth century and the growing exchanges and synergies between them? Did they entirely vanish during the processes of so-called “modernization” and “Westernization”? Or might they have perdured and evolved into intriguing, hybrid forms that surround us until today?”

My critiques of Lim’s book are too few and too minor to warrant discussion here. Instead, I conclude this review by placing his work in dialogue with another recent study on the intersections of science, travel, and reform. Paola Bertucci’s *In the Land of Marvels* examines the journey of French experimentalist Jean-Antoine Nollet to Italy in 1749, ostensibly undertaken in the name of science, to investigate an international controversy over the medical uses of electricity. Bertucci reveals, however, that Nollet’s mission was driven by “fabricated realities” and “stereotypes”—such as the notion that Italians were enamored with the “marvelous”—with the ulterior motive of uncovering the secrets of the Italian silk industry. I find Bertucci’s book to be a compelling companion to Lim’s work; they together raise several intriguing questions about the Korean reformers, for instance. Which scenes, devices, and encounters described by Joseon travelers in China might also be “fabricated realities” crafted to serve the rhetorical goals of the writers? How were new “stereotypes” about China, its science, and its technology being manufactured and circulated among Korean elites through the lens of travel and in the name of “true” scholarship? What about Japan? Did Korean travelers romanticize China or Japan similarly to Nollet’s portrayal of Italy as the home of “misguided devotees of the marvelous”? Could there have been a hidden network of Joseon artisans, *jungin*, and elite scholars who like in France may have gone undetected by historians—one whose extent has only been partially revealed and distorted by the reformers’ rhetoric?

Readers interested in the history of science and technology regardless of geographical and temporal focus will find Lim’s book rich with potential questions and insights that are relevant to their own fields. Similarly, historians of Asia, intellectual historians, philosophers, cultural and literary scholars interested in travel, and historians of diplomacy will find Lim’s work both relevant and engaging.