

Assessing a Legacy and Exploring Beyond: Jeon Sang-woon 全相運 and the History of Science in Korea

Panel Organizer: Kim Yung Sik (Seoul National University)

After almost half a century since the publication of his masterpiece, *A History of Science in Korea* (1966, in Korean), Professor Jeon Sang-woon is still a leading figure in the field of the history of Korean science. With his groundbreaking researches, active involvement on every aspect concerning traditional Korean science, and his personal vigor, he set the foundation of the field and promoted it to a flourishing academic discipline. His works translated in English and Japanese are still the best sources that provide our international colleagues with a full range of survey about the Korean scientific tradition. Quite parallel to Joseph Needham in the history of Chinese science, Professor Jeon Sang-woon, despite many attempts of younger scholars to criticize and to go beyond his scholarship, plays (and we believe, will play) his multifarious role to the later generations as a source of inspirations, a model to emulate, and at the same time, to overcome.

This panel is an attempt of the younger generation of the field to assess the multifarious legacy of Professor Jeon Sang-woon and to explore the new perspectives lying beyond it. **Lim Jongtae's** paper examines the origin and the subsequent development of Professor Jeon Sang-woon's historiography during the formative years in his academic career in 1960s and 1970s. **Lee Myon U's** paper, focusing on a specific issue concerning the celestial planisphere of early Chosŏn dynasty (1392-1910) Korea, examines Professor Jeon's contribution to this topic and its subsequent ramifications among the Korean researchers, illuminating Professor Jeon's formative role in this field. **Moon Joong-Yang's** paper makes an attempt to go beyond Professor Jeon's legacy. Focusing on "the King Sejong period (1418-1450)," the so-called golden era of traditional Korean science, Moon Joong-Yang challenges the "nationalist" account of it handed down mainly from Professor Jeon's research. **Song Sang-yong** will end the session with some personal recollections based on his close relationship with Professor Jeon Sang-woon over the past five decades.

Presenters and the Titles of Presentations:

Lim Jongtae (Seoul National University), “From the National Pride to the Korean Uniqueness: Jeon Sang-woon’s Innovation of Nationalistic Historiography of Korean Science”

Lee Myon U (Chuncheon National University of Education), “Studies on the “Cheonsang yeolcha bunya ji do 天象列次分野之圖” since Dr. Jeon Sang-woon’s Research”

Moon Joong-Yang (Seoul National University), “Korean Science and Technology in King Sejong’s Era(1418-1450): Was it different from China’s?”

Song Sang-yong (The Korean Academy of Science and Technology), “A Junior Outsider Looks at Jeon Sang-woon”

Individual Paper Abstracts

“From National Pride to Korean Uniqueness: Jeon Sang-woon’s Innovation of Nationalistic Historiography in Korean Science”

LIM Jongtae

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Contrary to his widespread image as a champion of the nationalist history of Korean science, Jeon Sang-woon started his research career in the 1960s pronouncing a sharp break with the prevalent nationalist historiography. Denouncing the “vain” efforts of previous writers to promote national pride by listing the brilliant scientific achievements of the past, he instead emphasized “objective” approaches to Korean scientific tradition. This paper attempts to identify the innovative elements that distinguished his approach from the previous nationalist ones while examining its inherent tension that bounded his narrative still within the sphere of nationalist historiography. I will demonstrate that Jeon Sang-woon’s “objective” approach was shaped under the influence of two contemporary trends: first, Hong I-söp’s socio-economic history of Korean science and second, the research projects of Needham and Yabuuti on the history of Chinese science. Hong I-söp’s “contextualist” scholarship encouraged Jeon Sang-woon to treat the Korean science not as a discrete array of Korean

scientific genius, but as a historical tradition bounded in the socio-economic environments of “feudalistic” Korean society. Needham and Yabuuti’s works on Chinese science, on the other hand, provided him with an “objective” measure against which he evaluated Korea’s contribution to the world history of science. These two innovative elements, however, gave his narrative an evaluative tension, each pulling his account in opposite directions: the former toward the “negative” (or “feudalistic”) aspects of Korean science, the latter toward the “original contributions” of Korean science. Interestingly, during the early 1970s, this tension resolved in favor of the latter, letting him increasingly to focus on the uniqueness and creativity of Korean scientific traditions compared to those of China. Perhaps the growing international presence of Chinese scientific achievements Jeon Sang-woon witnessed during his stay in Japan and the US gave a sense of urgency to his work in identifying Korea’s unique position in the world history of science.

Studies on the ‘Cheonsang yeolcha bunya ji do 天象列次分野之圖’ since Jeon Sang-woon’s Research

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“Cheonsang yeolcha bunya ji do” is a traditional celestial planisphere of Joseon Dynasty, which was carved on a stone slab in 1395. This star map became the National Treasure No. 228 of Korea after the report of Jeon et al. (1984). This paper examines the studies on this star map, “Cheonsang yeolcha bunya ji do”, focusing on the two trends. The one is the astronomical analysis of traditional star map by scientists, the other was historical approach by historians of science in Korea.

**Korean Science and Technology in King Sejong's Era(1418-1450):
Was It Different from China's?**

MOON Joong-Yang

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The history of Korean science and technology during King Sejong's reign has received special attention since Jeon Sang-woon showed that its scientific and technological development was more remarkable than in any other period. I will re-evaluate the historical characteristics of science and technology during King Sejong's reign. Most contemporary Korean historians, including Jeon Sang-woon, thought that science and technology flourished under King Sejong and became independent from the Chinese scientific tradition, which had previously been considered the most advanced in the East Asia. Some scholars were proud of superiority of Korea's astronomy, instrumental technology, agricultural technology, indigenous medicine, and Korean alphabet over Chinas.

However, I do not think Korean science and technology in King Sejong's era were either different from or superior to Chinese science and technology, but I do believe that the two became independent. King Sejong and the scholar-officials conducted scientific projects to introduce, study and assimilate Chinese prototypes in science, technology, liberal arts, and crafts. The purpose of these projects was to elevate Korean science and technology to the level of the Chinese, which was considered the highest in the world. King Sejong believed these projects would make Korean culture develop and prosper on a par with China's.

In the first part of this presentation, contemporary perspectives on agricultural technology, indigenous medicine, and Korean alphabet will be re-evaluated as neither different from nor superior to the Chinese but, rather, as products to introduce, study, and naturalize Chinese counterparts in Korea. The latter half of the presentation will analyze projects on national music and astronomy. Through these projects, King Sejong wanted Korean culture to reach the Confucian ideal.