

Preface

You can see on the Internet an organization on the history of astronomy in Asia called the *International Conference on Oriental Astronomy* (ICOA). The concept of this organization was initially proposed by Professor Nha Il-Seong from Yonsei University in Korea, and the first meeting (ICOA-1) was held in Seoul in 1993 and was organized by Professor Nha and Professor Richard Stephenson from Durham University in Britain. Since 1993, ICOA conferences have been held about every 3 years, and thus far there have been nine successful meetings, and proceedings have been published (or are in the process of being published) for each one.

At the ICOA-6 meeting, which was held in July 2008 at James Cook University in Townsville, northern Australia, one of the editors of this book (T.N.) presented a paper on “The Emergence of Modern Astronomy and Astrophysics in Japan”. Soon after returning home from the conference, the idea came to him that the theme of his talk was not specific to his country but also was equally relevant to the history of astronomy in other nations in Asia. He noted that the introduction of modern science and technology only took place in many Asian countries after WWII. Previously they had been colonized by European or Japanese powers, so it seemed to him that the emergence of astrophysics in Asia would be worth pursuing from an international perspective since it was very different to that experienced in many European and North American countries. After discussing the concept with the second editor (W.O.) and gaining his wholehearted support, the two editors invited ICOA-related people to contribute papers describing the development of astronomy and emergence of astrophysics in different Asian countries. As a result, this book eventually took shape.

Although the central concept of this book was reasonably straightforward, the editorial processes proved challenging, and it took years before all of the national overview chapters were written. One of the reasons for the delay in publication related to the differences in the process of ‘modernization’ that existed in the West and in the East. During the eighteenth and nineteenth centuries, the development of science and technology in central Europe and the USA proceeded roughly in parallel with the formation of modern states and nationalism, so the transition from the so-called ‘classical astronomy’ to the ‘new astronomy’ (astrophysics) in these

countries proceeded relatively smoothly and at about the same time, perhaps because of shared knowledge and regular communication between astronomers.

However, the situation in Asia was quite different, and varied from country to country. In the case of Japan, for example, the process of modernization was similar to that experienced in the West. Consequently, the emergence of astrophysics in Japan also occurred gradually and similarly, but with a delay of one century relative to European nations, following the early introduction of Western classical astronomy. On the other hand, some other Asian countries walked very different historical paths. In the past they had only their own traditional indigenous astronomical systems, and/or the old calendrical astronomy inherited from ancient China or India. Then after WWII, advanced astronomical instruments and astrophysical knowledge developed in Europe and the USA suddenly flooded into these countries. Therefore, some astronomers found it hard to accept that the emergence of astrophysics had made any meaningful impact on the history of astronomy in these countries.

Consequently, as editors we spent a lot of time and effort requesting rewrites of some chapters or substantially revising them ourselves. Despite this, some readers still may feel that there is an inhomogeneity of descriptions in comparison to similar books about the history of astronomy in the Western world. Readers should understand that this mainly reflects the different historical paths that Asian countries have followed.

Itabashi, Tokyo, Japan
Chiang Mai, Thailand

Tsuko Nakamura
Wayne Orchiston

The Emergence of Astrophysics in Asia

Opening a New Window on the Universe

Nakamura, T.; Orchiston, W. (Eds.)

2017, XV, 878 p. 578 illus., 212 illus. in color.,

Hardcover

ISBN: 978-3-319-62080-0