UNIVERZITA KARLOVA FILOZOFICKÁ FAKULTA

Historické vědy (XDAA)

(Dějiny a kultury zemí Asie a Afriky)

Autoreferát (teze) disertační práce

Mgr. Václav Laifr

Historiografie čínské astronomie v předválečné a válečné Čínské republice (1911-1949) a v rané Čínské lidové republice (1949-1966): politické, sociální a nacionalistické vlivy

Historiography of Chinese Astronomy in Pre-war and War-time Chinese Republic (1911-1949) and in the Early People's Republic of China (1949-1966): political, social and nationalist influences

Vedoucí: Mgr. et Ing. Jiří Hudeček, Ph. D.

2019

The present PhD thesis researched the political, social and nationalist influences on the historiography of traditional Chinese astronomy in two different periods, in the pre-war and war-time Chinese Republic (1911-1949) and in the early People's Republic of China (1949-1966). In both these periods, the historiography of Chinese astronomy, as a part of national heritage, was under influences of different ideologies and was organized in different ways.

When one examines the Chinese monographs and articles on the history of Chinese astronomy written in the 20th century, one must notice that in many of them China's achievements were significantly amplified. This is how the efforts to encourage the national self-confidence were represented in the works on the history of Chinese astronomy. This presentation of history had a certain development and was caused by certain political and social background. These political, social and nationalist influences on the historiography of Chinese astronomy are the topic of the present PhD thesis. The manifestation of such influences was examined in the works of Zhu Wenxin 朱文鑫(1883-1939), the most prolific pre-war historian of Chinese astronomy and in the works of other authors active in the first period. For the second period, the attention was concentrated mainly on the early works of Xi Zezong 席泽宗(1927-2008), the leading figure of the after-war historiography of Chinese astronomy.

What are the main theses of this research? For the first period, the author concentrated on the questions of the motivation on the basis of which the modern historiography of Chinese astronomy was established, its relation to the 'reorganization of the national past' movement and the influence of the construction of Sino-centric cultural tradition in the 1930s on the historiography of Chinese astronomy that brought amplifications of the Chinese achievements in the history as a result of the encouragement of the nation's self-confidence.

1) Establishment of the Scientific Historiography of Astronomy (the Narrow Relation between Modern Historiography of Astronomy and Gu Jiegang's 'Reorganization of the National Past' Movement).

During the period of the pre-war Chinese Republic, historians of Chinese astronomy studied their subject in order to explain and systemise historical astronomical sources and their use for modern scientific purposes, and it was shown that they were guided in this by the spirit of the 'reorganisation of the national past' that was backed at that time by many contemporary intellectuals. Shortly after the establishment of the Chinese Astronomical

Society in 1922, research principles and a plan for the research on the history of Chinese astronomy were created, following the same trend of these new historical methods.

During the 1910s and 1920s, many Chinese intellectuals who shared the ideals of the *New Culture Movement* (1915) and the *May Fourth Movement* (1919) advocated the *reorganisation of the national past*. Among them, the most significant were Hu Shi 胡適 (1891-1962) and Gu Jiegang 顧頡剛 (1893-1980).). Seeing the introduction of Western scientific methods as a tool of modernisation, Hu Shi, Gu Jiegang and others strove for new objectivity in historiography by adopting Western style criticism and rejecting authority of Chinese classics and other schools of thought.

The influence of these ideas was evident when comparing historical papers in the journal Observatory Reports (*Guanxiang congbao* 觀象叢報) published before the May Fourth Movement and the research principles established by the Chinese Astronomical Society after the May Fourth Movement in 1922. The creation and publication of the Observatory Reports from 1915 onwards by the Central Observatory led by Gao Lu 高魯 (1877-1947), who was also its editor-in-chief, was also intended as a preliminary phase for the establishment of the *Chinese Astronomical Society*. The main purpose of the *Observatory Reports* was to spread scientific and namely astronomical knowledge but also to recruit new members for the *Chinese Astronomical Society* from among its subscribers.

The *Chinese Astronomical Society* was established in 1922 following the model of many Western countries which already had their astronomical societies at that time. Another reason for its establishment was to pool experience and expertise together as a reaction to the Chinese tradition according to which the imperial astronomers had been rather insulated as individuals and their achievements could even be entirely lost following a change in imperial dynasties.

Several members of the *Astronomical Society*, especially Gao Pingzi 高平子 (1888-1970) and Gao Lu were deeply interested in the history of Chinese astronomy and shortly after the establishment of the *Society* created the *Four Research Principles*. In these principles, they highlighted the need for the use of systematic and scientific methods in research on the history of Chinese astronomy and the application of research results according to scientific needs. Moreover, they created the *17 General Outlines* (or topics to be researched) that resemble Gu Jiegang's systemising principles of the 'reorganisation of the

national past'. Both the *Four Research Principles* and *17 General Outlines* clearly showed that the historians of Chinese astronomy shared these new methods of writing history as proposed by contemporary intellectuals. Another example of the strong commitment of one of these authors, Gao Lu, to these new principles and methods was the obituary written by him for the most prolific historian of Chinese astronomy active in that period, Zhu Wenxin 朱文鑫 (1883-1939). In the obituary, Gao evaluated how Zhu's particular works conformed to the *Five Phases of Systemising History*, as put by contemporary scholars.

2) The Spur from Japanese Historiography and the Nationalist Turn in the 1930s

Many Chinese writings on the history of astronomy in the 1930s bore strong nationalist tones and strived to encourage national self-confidence. This thesis argues that this was caused by the social and political climate after the Japanese occupation of Manchuria, which eventually called for the construction of a Sino-centric cultural tradition. This was the case with the *Short History of Astronomy* written by Zhu Wenxin in 1935 and the *Brief History of Chinese Ancient Astronomy* written by Chen Zungui during wartime but published much later in 1955.

The social and political climate that demanded the construction of the Sino-centric cultural tradition was primarily caused by the Japanese annexation of Manchuria and the reaction of intellectuals to it. A large proportion of intellectuals felt the need to make a contribution to the nation's self defence. Moreover, the construction of the Sino-centric cultural tradition was directly supported by the *Guomindang*.

Moreover in the case of Zhu Wenxin, the most prolific historian of astronomy, it is highly probable that Zhu was influenced by the *Guomindang*'s party policies and actively took part in the construction of the Sino-centric cultural tradition. The reason was his family background and official posts that drew him close to the government party.

The Japanese played an important role in stimulating the research on the history of Chinese astronomy conducted by the Chinese themselves. On one hand they stimulated this research through their debates in their own works. The Japanese *Historians' School* advocated that the origin of Chinese astronomy was actually not Chinese at all and that it happened quite late, while the *Astronomers' School* supported the idea of the independent and earlier origin of Chinese astronomy and its significant influence on other cultures outside of China. The work of Shinjō Shinzō was translated into Chinese and published in China prior to the publication

of Zhu Wenxin's *Short History of Astronomy*. On the other hand, it was anti-Japanese sentiment that encouraged new writings on the history of astronomy. This was the case with Chen Zungui who directly acknowledged anti-Japanese sentiment as his motivation and was probably at least indirectly also the case with some other authors.

Although during the pre-war Chinese Republic period historians highlighted new ways and methods of writing historical works (especially Hu Shi and Gu Jiegang) and historians of Chinese astronomy also adopted these new principles, many works actually deviated from these ideas. In the case of the historiographical works written in pre-war China, the nationalist undertone was one of the main factors that caused this deviation. Zhu Wenxin's *Short History of Astronomy* was clearly an example of this.

If Zhu Wenxin's account of the origins of world astronomy and Chinese astronomy in his *Short History of Astronomy* is taken as an example, one can clearly see that it was written in a Sino-centric way. From Zhu's point of view, in antiquity, the other cultures learned from China and were far less developed, so astronomy among other knowledge spread from China to them. Actually, the origins of Chinese astronomy was still being debated in Zhu's time, but Zhu asserted only this one Sino-centric view and did not provide other alternative theories with much space. Among his accounts of other events in the history of Chinese astronomy one can see that they were formulated in order to encourage a national self-confidence. In Zhu Wenxin's work, one can find several categories of arguments that encourage patriotism and represent the Sino-centric view: 1) arguments that have a tendency to try to prove the primacy of Chinese astronomy indirectly by way of asserting the alleged cultural superiority of China in particular historical periods; 2) arguments which praised China's brilliant ancient history with consequent soul-searching why later in the course of history something went wrong and China fell behind; 3) arguments which anachronistically explained certain Chinese ancient concepts as foreshadowing modern astronomy.

For the second period, the early PRC, the author focuses on the questions of the motivations on the basic of which the research on history of natural sciences was professionalized, what was the role of the stimulation of the nation's self-confidence in the professionalization and how the quality of research changed as a result. Closely connected are the questions on refutation of certain theses that were presented by the authors in the previous period and the comparison of texts of both periods. Further questions related to comparison are on the reappearance of tendencies anachronistically highlighting certain Chinese

primacies and on the influence of Marxism and the historical materialism that as a method of writing caused the major differences between the texts of both periods.

3) The Professionalisation of the History of Astronomy after 1949 and the Need to Stimulate the Nation's Self-confidence

The professionalization of research on the history of natural sciences was a result of the efforts of Zhu Kezhen, who was then vice-chairman of the Chinese Academy of Sciences. It began with the establishment of the Research Committee for the History of Natural Sciences in China in 1954 and continued with the establishment of the Cabinet for the Research on the History of Natural Sciences in 1957. From the relevant sources one can clearly see that this professionalization was motivated by the efforts to encourage a national self-confidence as this kind of research was considered a tool for "conducting patriotic education and the encouragement of national pride" (according to one of Guo Moruo's key speeches). Other main factors that prompted the creation of these institutions were the Soviet influence and the need for delineation from and competition with Joseph Needham's project -Science and Civilization in China. The professionalization of the research on the history of natural sciences was a part of the Twelve Year Long Term Plan prepared under the supervision of Soviet advisors. This plan aimed to concentrate all resources in the key industrial sectors and bring them as close to the global level as possible. Historians of natural sciences, including astronomy, also prepared their own twelve year plans that included publications, translations and the training of a large number of doctoral students. However, only a small portion of the plans was eventually realised due to the political campaigns of that period.

4) Higher Perfection as a Result of Professionalisation: Xi Zezong versus Zhu Wenxin

The institutionalisation of research on the history of astronomy led to a higher diligence and a higher consistency in the quest to 'seek the truth from facts'. Some of the claims of China's primacies in astronomy mentioned in earlier works including those of Zhu Wenxin were refuted by the historiography of the post war PRC.

It should be added that in spite of the political campaigns that slowed down research work considerably at certain times, professionalization (and institutionalisation) allowed a more intensive focus on research subjects. The concept of to 'seek the truth from facts' *shi shi*

qiu shi 实事求是, an ancient principle that can be traced to the Han dynasty (202 BCE – 220 CE), was enshrined with a new interpretation in 'Mao Zedong Thought' and in the political theories of all Chinese communist leaders since then. When the principle was allowed to prevail, it acted as a powerful corrective to unfounded hubris and boasting. Moreover, the need to compete with Western research on the history of natural sciences including astronomy also demanded the diligent analysis of facts, lest Chinese historiography of science not be able to withstand scrutiny when measuring itself against the West.

Chinese historical primacies in astronomy highlighted in earlier works, including those of Zhu Wenxin and Chen Zungui on the discovery of proper stellar motion by monk Yixing in the 8th century CE and Zhu Wenxin's account of Wang Xichan's prediction of the Venus transit were convincingly refuted by Xi Zezong.

5) Anachronism for National Glory

While careful attention to facts led to certain claims of primacy being refuted, others were produced at the same time. There was a tendency to present certain Chinese concepts as early forerunners of modern astronomical theories, even though these concepts did not have a long term influence or did not contribute anything to understanding the nature of their particular phenomenon.

In the period of the early People's Republic, the tendency to highlight such Chinese historical primacies already began to appear to a lesser extent than in earlier times. However, there were still a lot of these kinds of tendencies, though much more carefully formulated than in the earlier works. The popular articles used a much more patriotic and boastful style. One example was the ancient Chinese concept of space-time that allegedly forerun Einstein's theories by two millennia. Another example was the *Xuan ye* 宣夜 theory that described the universe as infinite and the motion of celestial bodies as freely floating in space powered by the energy *qi*. It was esteemed for its foreshadowing of the modern cosmological concept of the universe. Nonetheless, both the ancient Chinese space-time concept and the *Xuan ye* theory were just spontaneous concepts deduced from their intuition. In the history of Chinese astronomy, this theory was much less influential than the other two, *Gaitian* 盖天 and *Huntian* 浑天.

6) Influence of Marxism

Under the influence of Marxist literature, monographs and articles on the history of astronomy from the early PRC period were written in the spirit of historical materialism. Compared to earlier works, they observe much more their social and political context and are more structured and synthetically built. The History of Chinese Astronomy (Li et al 1981) that was originally meant to be published before the Cultural Revolution was written in this manner.

The influence of historical materialism is very visible in Li et al. (1981). When a particular period is discussed, material, technological and production conditions together with the relationships among classes are provided as a background to the evolution of astronomy. The authors paid much more attention to the broader political and social context of the events in the history of astronomy, structured their arguments and amalgamated their hypotheses with more diligence than the authors of earlier works. It should be added that the influence of historical materialism is much more visible in monographs than in articles (except for fairly long ones).

This thesis uses as its main methods an interpretation/close reading of the historical texts, especially the evaluations of particular events, combined with basic quantitative comparisons (how much space is devoted to a particular topic in different monographs). These basic quantitative comparisons reveal some fundamental patterns not fully captured just from a close reading of these texts.

This PhD thesis has demonstrated a clear thread that links the second phase of the historiography of Chinese astronomy in the pre-war Chinese Republic and the historiography of Chinese astronomy in the early People's Republic. The thread linking them was the patriotic motivation and the need to encourage the nation's self-confidence. In both periods, this motivation was treated in a different way and had a different undertone.

The research presented by this PhD thesis has contributed not only to better understanding the historiography of Chinese astronomy and the related political, social and nationalist influences from the beginning of the Chinese Republic to the 1960s. Moreover, it has certain contributions to the general understanding of the influences on writing history in the 20th century China. The research also helps the better understanding of China's modernization and building the Chinese state in both researched periods, for which the encouragement of the nation's self-confidence was an indispensable tool.

Bibliography

Primary Sources:

Chen, Walter Hanming. The New Life Movement. *Information Bulletin* 2, No. 11 (1936): 189-230.

Chen, Zungui. Beijing tianwenguan 北京天文馆 [Beijing Planetarium]. *Kexue dazhong* [*Popular Science*] No. 10 (1957): 455–458.

Chen, Zungui. Mianyi Zhu Gongsan xiansheng 緬憶朱貢三先生 [Remembering Mr. Zhu Gongsan (Zhu Wenxin)]. *Yuzhou* 10, No. 11 (1940): 153-155.

Chen, Zungui. Zhongguo gudai tianwenxue jian shi 中國古代天文學簡史 [Short History of Ancient Chinese Astronomy]. Shanghai: Shanghai renmin chubanshe, 1955.

Gao, Lu. Tianwen jiangyan lu: tianwenxue shi 天文講演錄:天文學史 [Lectures on Astronomy: History of Astronomy]. *Guanxiang congbao* 3, No. 10 (1918): 29-35.

Gao, Lu. Zhuihuai Zhu Gongsan xiansheng 追懷朱貢三先生 [Recalling Mr. Zhu Gongsan (Zhu Wenxin)]. *Yuzhou* 10, No. 11 (1940): 149-153.

Gao, Pingzi (Gao, Jun). *Gao Pingzi tianwen lixue lunzhu xuan* 高平子天文曆學論著選 [Selected Works of Gao Pingzi on Astronomical Systems]. Taipei: Mathematical Institute of Academia Sinica, 1987.

Gao, Pingzi (Gao, Jun). *Pingzi zhushu yugao* 平子著述餘稿 [*Pingzi's Writings and Drafts*]. Taipei: Jinshan lü Tai tongxianghui [The Natives Association from Jinshan in Taiwan], 1967.

Gao, Pingzi (Gao, Jun). Zhoubi beiji jiji kao 周髀北極潛璣考[A Study of the North Pole in Zhoubi suanjing]. Zhongguo tianwenxuehui huibao 4 (1923).

Hu, Shi. Intellectual Life, Past and Present. Chinese Renaissance. 66-71.

Hummel, Arthur W. The Autobiography of a Chinese Historian Being the Preface to A Symposium on Ancient Chinese History (Ku Shih Pien). Leiden: Brill, 1931.

Li Changduan (ed.) Zhongguo tianwenxue shi. 中国天文学史 [History of Chinese Astronomy]. Beijing: Kexue chubanshe, 1981

Minguo ershisi nian Zhongwen tianwenxue shuji jieshao [On the Astronomical Works published in Chinese in the 24th year of the Republic] *Yuzhou* 7, No. 6-11 (1936): 229-232.

Xi Zezong. Seng Yixing guance hengxing weizhi de gongzuo 僧一行观测恒星位置的工作 [Monk Yixing's Work on the Observation of Stellar Positions]. *Tianwen xuebao* 4, No. 2, 1956.

Xi Zezong. Shilun Wang Xichan de tianwen gongzuo 试论王锡阐的天文工作. [On the Astronomical Work of Wang Xichan]. *Kexueshi jikan* 6, 1963.

Xi, Zezong and Bo, Shuren. Zhong, Chao, Ri san guo gudai de xinxing jilu ji qi zai shedian tianwenxue zhong de yiyi 中、朝、日三国古代的新星记录及其在射电天文学中的意义 [Ancient Novae and Supernovae Recorded in the Annals of China, Korea and Japan and Their Significance in Radio Astronomy]. *Tianwen xuebao* [Astronomical Journal] 13, No. 1 (1965). Or English translation in Science 154 No. 3749.

Xi, Zezong. Gu xinxing xin biao yu kexue shi sousuo: Xi Zezong yuanshi zixuanji 古新星新表与科学史搜索: 席泽宗院士自选集 [A New Catalogue of Ancient Novae and Explorations in the History of Science: Self-selected Works of Academician Xi Zezong]. Xi'an: Shaanxi shifan daxue chubanshe, 2002.

Xi, Zezong. Taiyang shang de heiban 太阳上的黑斑 [Spots on the Sun]. *Kexue dazhong* [Popular Science] No. 7 (1957): 296–297.

Zhu, Kezhen. Canjia Sulian tianti yanhua lun di si ci huiyi de baogao 參加蘇聯天體演化論 第四次會議的報告 [Report on Participating at the Fourth Conference on Evolution of Heavenly Bodies in the Soviet Union]. *Kexue tongbao* [Scientific Journal] No. 1 (1955): 89–92.

Zhu, Kezhen. Zhu Kezhen quan ji 竺可桢全集 [The Complete Works of Coching Chu]. Shanghai: Shanghai keji jiaoyu chubanshe, 2004-2007.

Zhu, Wenxin, *Tianwenxue xiao shi* 天文學小史 [*The Short History of Astronomy*]. Shanghai: Shangwu yinshuguan, 1935.

Zhu, Wenxin. Jinshi yuzhou lun 近世宇宙論 [Modern Cosmologies]. Shanghai: Shangwu yinshuguan, 1935.

Zhu, Wenxin. Lidai rishi kao 歷代日食考 [A Study on Historical Solar Eclipses]. Shanghai: Shangwu yinshuguan, 1934.

Zhu, Wenxin. *Lifa tongzhi* 曆法通志 [Annals of Astronomical Systems]. Shanghai: Shangwu yinshuguan, 1934.

Zhu, Wenxin. Shiji-Tianguan shu hengxing tukao 史記天官書恆星圖考 [A Treatise on Maps of the Fixed Stars in the Book on Celestial Officials of the Records of the Grand Historian]. Shanghai: Shangwu yinshuguan, 1927.

Zhu, Wenxin. The Observations of Halley's Comet in Chinese History. *Popular Astronomy* 42, No. 8 (1934): 191-201.

Zhu, Wenxin. *Tianwen kaogu lu* 天文考古錄 [Archeoastronomical Records]. Shanghai: Shangwu yinshuguan, 1933.

Zhu, Wenxin. Xingtuan xingyun shi ce lu 星團星雲實測錄 [Records of the Observations of Stellar Clusters and Nebulae]. Shanghai: Shangwu yinshuguan, 1934.

Zhu, Wenxin. Zhongguo shi zhi Halei hui 中國史之哈雷彗 [Observations of Halley's Comet in Chinese History]. Zhongguo tianwen xuehui huibao [Journal of the Chinese Astronomical Society] No. 6 (1929): 1-14.

Archive Documents:

from University of Communications, Shanghai

LS2-035, May 1st 1936.

LS2-050, March 1st 1922.

LS3-449, December 1st 1930, February 1st 1931.

from Fudan University, Shanghai

Two archive documents dated December of the seventh (1918) and eighth (1919) year of the Republic. The 1918 document was reprinted in Lu 2013: 15.

Secondary Sources:

Dirlik, Arif, Li, Guannan and Yen, Hsiao-pei. *Sociology and anthropology in twentieth-century China: between universalism and indigenism.* Hong Kong: Chinese University Press, 2012.

Guo Jinhai, ed. *Xi Zezong koushu zizhuan* 席泽宗口述自传 [Oral Autobiography of Xi Zezong]. Changsha: Hunan jiaoyu chubanshe, 2011.

Ho, Peng Yoke. *Modern Scholarship on the History of Chinese Astronomy*. Occasional paper 16, Faculty of Asian Studies. Canberra: The Australian National University, 1977. Hummel, Arthur W. *The Autobiography of a Chinese Historian Being the Preface to A Symposium on Ancient Chinese History (Ku Shih Pien)*. Leiden: Brill, 1931.

Chen, Meidong and Chen, Kaige, eds. *Zhu Wenxin: Jinian Zhongguo xiandai tianwenxuejia Zhu Wenxin danchen 120 zhounian* 朱文鑫: 纪念中国现代天文学家朱文鑫诞辰 120 周年 [*Zhu Wenxin: Memory of the 120th Anniversary of the Birth of Modern Chinese Astronomer Zhu Wenxin*]. Beijing: Qunyan chubanshe, 2008.

Chen, Zungui. Zhongguo tianwenxue shi (di si ce) 中国天文学史 (第四册) [History of Chinese Astronomy, Vol. 4]. Shanghai: Shanghai renmin chubanshe, 1989.

Kwok, D. W. Y. *Scientism in Chinese Thought, 1900–1950*. New Haven, Conn.: Yale University Press, 1965.

Li, Daguang and Chen, Xi, eds. *Li Yuan fangtan lu / Li Yuan koushu* 李元访谈录/李元口述 [*The Record of the Interview with Li Yuan / Oral Narration by Li Yuan*]. Changsha: Hunan jiaoyu chubanshe, 2010.

Li, Jiancheng and Chen, Jiujin eds. Liu Chaoyang Zhongguo tianwenxue shi lunwen xuan / Liu Chaoyang zhu 刘朝阳中国天文学史论文选/刘朝阳著 [A Selection of the Studies on History of Chinese Astronomy by Liu Chaoyang]. Zhengzhou: Daxiang chubanshe, 1999.

Lu, Yitai, ed. Jinxi jiechu renwu (4): Zhu Wenxin, Zhu Wenxiong jinian zhuanji 锦溪杰出人物(四): 朱文鑫、朱文熊纪念专辑 [Outstanding Personalities of Jinxi: commemorative album of Zhu Wenxin and Zhu Wenxiong]. Jinxi (Kunshan), 2013.

Nakayama, Shigeru. Japanese Studies in the History of Astronomy. *Japanese Studies in the History of Science* 1. Tokyo: The History of Science Society of Japan, 1962. Needham Joseph et al. *Science and Civilization in China, Vol. 1-3*. Cambridge: Cambridge University Press, 1959.

Ning Xiaoyu. 20 shiji de Zhongguo tianwenxue 20 世纪的中国天文学 [Astronomy in the 20th Century China]. 2012. Probably an unpublished study.

Sivin, Nathan. Astronomy in the PRC. University of Pennsylvania, 1978.

Sivin, Nathan. *Granting the Seasons: The Chinese Astronomical Reform of 1280, With a Study of Its Many Dimensions and an Annotated Translation of Its Records*. Springer Science & Business Media, 2009.

Sun, Xiaochun and Ning, Xiaoyu. *The Emergence of Astrophysics in China*. Beijing: Institute for History of Natural Sciences, 2014. (the author got the paper before publication, it might have been included in a compendium)

Vaněk, Miroslav, Mücke, Pavel and Pelikánová, Hana. *Naslouchat hlasům paměti: teoretické a praktické aspekty orální historie* [*Listen to Voices of Memory: Theoretical and Practical Aspects of Oral History*]. Praha: ÚSD – FHS UK, 2007.

Wang, Q. Edward. *Inventing China through History: the May Fourth Approach to Historiography*. Albany, NY: State University of New York Press, 2001.

Wang, Shouguan, ed. Zhongguo tianwenxue zai qian jin 中国天文学在前进 [Chinese Astronomy on the March]. Nanjing: Chinese Astronomical Society, 1982.

Ye, Shuhua and Qian, Weichang, eds. 20 shiji *Zhongguo zhiming kexuejia xueshu chengjiu gailan, tianwenxue juan, di yi fence* 20 世纪中国知名科学家学术成就概览•天文学卷•第一分册 [Overview of the Academic Achievements of Famous Chinese Scientists of the 20th century, Astronomy Volume No. 1]. Beijing: Kexue chubanshe, 2014.

Zhang, Jian. Kexue shetuan zai jindai Zhongguo de mingyun-yi Zhongguo Kexue she wei zhongxin 科学社团在近代中国的命运--以中国科学社为中心 [The Science Associations and the Change of Society in Modern China: A Study on the Science Society of China]. Jinan: Shandong jiaoyu chubanshe, 2005.

Author's Own Publication Activity:

Laifr, Václav. Čínská astronomie a čínská souhvězdí [Chinese Astronomy and Chinese Constellations]. *Astropis* No. 3-4 (1999). ISSN 1211-0485.

Laifr, Václav. Observatoře v Pekingu a Nankingu: Historie a současnost. [Observatories in Beijing and Nanjing: History and Present]. *Astropis* No. 4 (2000). ISSN 1211-0485.

Laifr, Václav. Čína vstoupila do klubu vyvolených [China Has Entered the Cosmic Powers' Club]. *Astropis* 10, No. 4 (2003). ISSN 1211-0485.

Laifr, Václav. Gnómóny v srdci Říše středu. [Gnomons in the Heart of Middle Kingdom] *Astropis* 13, No. 1 (2006). ISSN 1211-0485.

Laifr, Václav. Bohyně na Měsíci [Goddess on Moon]. *Astropis* 15, No. 2 (2008). ISSN 1211-0485.

Laifr, Václav. Druhá měsíční mise Chang'e 2 [The Second Lunar Mission Chang'e 2]. *Astropis* 17, No. 4 (2010). ISSN 1211-0485.

Laifr, Václav. Čínská orbitální stanice Tian gong-1 [Chinese Space Station Tian Gong-1]. *Astropis* 18, No. 4 (2011). ISSN 1211-0485.

Laifr, Václav. Čang Cheng, čínský astronom, současník Ptolemaia [Zhang Heng, Chinese Astronomer and a Contemporary of Ptolemy]. *Astropis* 20, No. 1 (2013).

Laifr, Václav. Building of "New China's Astronomy" and the Establishment of New Historiography of Traditional Astronomy in the 1950s and 1960s: An insight from the oral history sources. In: LAVIČKA, Martin - RYSOVÁ, Martina. *Proceedings from the 8th Annual Czech and Slovak Sinological Conference 2014*. Olomouc: Univerzita Palackého, 2015, p. 93-109. ISBN 978-80-244-4827-5.

Laifr, Václav. První čínský lunochod: čínská lunární mise Chang'e-3. [First Chinese Lunar Rover: Chinese Lunar Mission Chang'e-3]. *Astropis* 20, No. 4 (2013): 33-33. ISSN 1211-0485.

Laifr, Václav. Přežil Nefritový zajíc druhou lunární noc? [Had the Jade Rabbit Survived the Second Lunar Night?] *Astropis* 21, No. 1 (2014): 40-41. ISSN 1211-0485.

Laifr, Václav. Čínská lidová republika ve vesmíru, model 2016. [2016 Activities of the People's Republic of China in Space] *Astropis* 24, No. 1 (2017): 26-28. ISSN 1211-0485.

Laifr, Václav. Čínské nebe a souhvězdí. [Chinese Heavens and Constellations] *Fénix - časopis Česko-čínské společnosti* 19, No 2. (2018): 43-49. ISSN 1214-7311.

Abstracts:

Laifr, Václav. Zhu Wenxin (1883-1939) a jeho dějiny astronomie: co vypovídají o něm samém, jeho motivaci a jeho době. In: BERÁNEK, Ondřej. 9. česko-slovenská sinologická konference. 2015, p. 4-5.

Laifr, Václav. Planning Historiography of Science: Chinese Historians of Science and the "Twelve Years' Plan" (1956-1967). In: 7th ESHS Conference Prague Book of Abstracts. 2016, p. 200-201.

Laifr, Václav. Historiography of Traditional Chinese Astronomy in Early 20th Century China and in the Early PRC: Different Origins and Influences. In: JAMI, Catherine - CULLEN, Christopher. *Sources, Locality and Global History: Science, Technology and Medicine in East Asia.* 2015, p. 89-90.