Abstract

This PhD dissertation surveys the development of the concept and the academic discipline of mathematical logic in the transitional period between late Republican and early socialist China. Providing a contrastive analysis of the main developmental aspects of its conceptual variegations, its institutional life and research-related development, this dissertation focusses on the main continuities and discontinuities between these two important periods of its existence in the period of China's modernisation. The main analytical apparatus of this treatise is divided into two main parts. The first part outlines the main developmental milestones in research and teaching of mathematical logic in Chinese academic community in the late Republican period (1930-1949). Its main focus lies on the establishment of mathematical logic as a philosophical discipline in framework of the "Qinghua School of Logic" at National Qinghua University, on the one side, and the beginnings of Chinese mathematicians' research in mathematical logic in the early 1930s, on the other.

The second part, on the other hand, closely examines the main three aspects of change which the idea and discipline of mathematical logic underwent in the first decade after the founding of the People's Republic (PRC): from its unique role in Chinese Marxist discourse on philosophy of mathematics, to the institutional reform related to its reestablishment in Chinese academia, down to its newly acquired content-related identity as an applicative branch of mathematics in the late 1950s.

By evaluating both its role in Chinese general intellectual discourse and its development as a branch of Chinese academic philosophy and mathematics, this survey offers a comprehensive insight into the mechanism, motives and the intellectual foundations which underlay the development of mathematical logic in the pivotal period of Chinese modernisation. Most importantly, in its main analysis, the survey presents an extensive overview of the life and work of leading Chinese mathematical logicians, who provided vital contributions to its propagation and advancement in modern China.

Key words: mathematical logic, history and philosophy of science, modern Chinese philosophy, Late Republican China, Socialist China