

# *A Comparative Study of Buddhist Scripture Translation and Scientific and Technical Translation in the Late Ming and Early Qing Dynasties*

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**Abstract:** This paper compares two major translation waves in China's history: the translation of Buddhist scriptures and the translation of scientific and technical works during the late Ming and early Qing dynasties. It analyzes their differences in five aspects: duration, translators, content selection, modes of translation, and impact, along with highlighting two similarities. Buddhist scripture translation lasted for thousands of years and had a profound impact on Chinese culture, while the scientific and technical translation, though shorter, marked the beginning of academic exchanges between China and the West. Both translation activities were products of social needs and played significant roles in their respective contexts. Studying these traditional translation activities helps to better understand the development of modern Chinese translation theories.

## 1. Introduction

In China's translation history spanning over 2000 years, there have been three major waves of translation: the translation of Buddhist scriptures from the Eastern Han Dynasty to the early Song Dynasty; the science and technology translation from the late Ming to the early Qing Dynasty; and the translation of Western studies from the Opium War to the May Fourth Movement<sup>[1]</sup>. Vividly reflecting the distinct characteristics of certain eras, each of them played a pivotal role in modern Chinese history. This paper compares the first two translation waves and analyzes their differences in five aspects: duration, translators, content, modes, and impacts, along with two similarities, in order to provide a deeper understanding of modern China from the perspective of translation history.

## 2. Differences between the Two Translation Waves

### 2.1. Differences in Duration

The translation of Buddhist scriptures lasted significantly longer than the science and technology translation in the late Ming and early Qing dynasties. Buddhist scripture translation began in the Eastern Han Dynasty, flourished during the Sui and Tang dynasties, and continued into the Song and Yuan dynasties, experiencing four phases: initiation, development, flourishing, and decline,

spanning thousands of years.<sup>[2]</sup> In contrast, science and technology translation in the late Ming and early Qing dynasties began with Matteo Ricci's visit to China in 1582 and was interrupted by Pope Clement XIV's dissolution of the Jesuits in 1773, resulting in a much shorter duration.<sup>[3]</sup> Accordingly, Buddhist translation made a more profound and sustained impact on Chinese culture, philosophy, and society, embedding itself deeply into the fabric of Chinese civilization, while the science and technology translation did not have the same depth of integration.

## 2.2. Differences in Translators

The translators of Buddhist scriptures evolved over time. Initially, foreign monks fluent in both Sanskrit and Chinese dominated the translation efforts. As Buddhism flourished, more Chinese people learned Sanskrit, and the number of Chinese translators gradually increased. Thus, the translation of Buddhist scriptures transitioned through three periods: "dominated by foreigners", "Chinese and foreigners cooperated", and "dominated by Chinese".<sup>[4]</sup> This evolution reflects the gradual assimilation and localization of Buddhism in China, moving from a foreign import to an integral part of Chinese culture.

In the late Ming and early Qing dynasties, the translation of scientific and technical works also involved both foreign missionaries and native Chinese scholars. Seeking to facilitate their missionary work, the Jesuits brought many Western scientific and technological texts to China. They aimed to use scientific knowledge to foster empathy and reduce Chinese resistance to foreign civilizations, thus paving the way for the spread of Catholicism. Impressed by Western advancements, enlightened Chinese scholars collaborated with the Jesuits to introduce Western technology for the benefit of the country. According to Ji (1995), between Matteo Ricci's arrival in China and the dissolution of the Jesuits in 1773, there were 478 missionaries in China, 87 of whom were prominent writers. The missionaries, fluent in Chinese, played a dominant role in the translation process, with native translators supporting them. This collaboration between foreign and local scholars illustrates the blending of Western and Chinese knowledge systems, albeit briefly.

Moreover, the backgrounds and motivations of these translators varied considerably between the two periods. Buddhist translators, whether foreign monks or Chinese scholars, were primarily motivated by religious piety and a desire to spread Buddhist teachings. Their work was often supported by monasteries and patronised by the ruling elite, who saw the promotion of Buddhism as a force for social stability. The translators were deeply rooted in the religious and philosophical traditions of Buddhism, which influenced their approach to translation, emphasising fidelity to the original text and maintaining doctrinal purity.

## 2.3. Differences in Content Selection

The content and selection criteria for Buddhist scripture translations focused primarily on Buddhist canonical texts. According to Liang Qichao, from the Later Han Dynasty to the twenty-second year of the Yuan Dynasty (67 AD to 1285 AD), 1,335 Buddhist scriptures were translated, comprising 5,396 volumes.<sup>[4]</sup> Initially, translation was passive and indiscriminate, whileas more monks learned Sanskrit, the process became more systematic and selective, guided by compiled catalogs. This shift from passive to selective translation reflects the growing sophistication and understanding of Buddhism among Chinese scholars and monks.

The scientific and technological translations of the late Ming and early Qing dynasties encompassed a broader range of subjects. According to the Biographies and Bibliographies of the Jesuits in China, 437 Western books were written in Chinese, including 251 religious books, 55 humanities texts, and 131 natural sciences works.<sup>[5]</sup> Missionaries primarily selected these works, but Chinese scholars also prioritized texts that benefited the national economy and people's livelihood.

This broad spectrum of translated works not only aimed to introduce advanced Western science and technology but also sought to improve various aspects of Chinese society, from agriculture to military technology.

Moreover, the nature of the texts translated during these two periods reflects the different objectives and cultural contexts of the translation activity. Translations of Buddhist texts were primarily religious and philosophical, aimed at spiritual enlightenment and moral guidance. These texts include sutras, commentaries, and treatises that were crucial to the practice and spread of Buddhism in China. The selection process has become more refined over time, focussing on texts that resonate with Chinese cultural and philosophical traditions, thereby facilitating the integration of Buddhism into Chinese society.

In contrast, scientific and technical translations are more practical and utilitarian, motivated by the need to enhance China's technological capabilities and improve social well-being. The subjects of these translations included astronomy, mathematics, medicine, engineering and other areas of the natural sciences. The Jesuits and Chinese scholars involved in these translations were motivated by the need to address specific practical problems and to promote technological advances that could enhance the nation. This pragmatic approach to content selection highlights the different priorities and goals of the two translation campaigns and reflects the changing needs and desires of Chinese society during both periods.

#### 2.4. Differences in Modes of Translation

Buddhist scripture translation received support from the ruling class, resulting in large-scale official translations with clearly defined roles and collective efforts. Sutra translation sites were established, which could accommodate many people simultaneously, and monks were clearly divided into their respective roles. Collective translation was the method used at that time, and this organized approach ensured the accuracy and consistency of the translated texts.<sup>[6]</sup> The involvement of the ruling class also meant that the translations were endorsed and disseminated widely, facilitating their acceptance and integration into Chinese culture.

In contrast, scientific and technical translations in the late Ming and early Qing dynasties involved cooperation between missionaries and Chinese scholars. Missionaries interpreted the contents, while Chinese scholars dictated, embellished, and recorded them. Although later official efforts like the Calendar Bureau facilitated some translations, missionaries and Chinese scholars did not have full interpretive authority.<sup>[7]</sup> This method, while collaborative, often led to translations that were influenced by the perspectives and biases of both the missionaries and the Chinese scholars involved.

Another notable difference in the mode of translation between these two periods lies in the resources and methods employed. During the era of Buddhist scripture translation, translators often relied on oral transmission and recitation due to the limited availability of written texts. Monks who had travelled to India would recite the scriptures from memory, which were then transcribed by Chinese scribes. The process was labour-intensive and error-prone, requiring meticulous cross-referencing and verification to maintain the integrity of the text. In contrast, scientific and technical translation in the late Ming and early Qing dynasties benefited from advances in printing technology. The availability of printed Western books made translation more accurate and systematic. In addition, missionaries brought not only texts, but also tools and practical knowledge to demonstrate scientific principles, which helped to accurately explain and translate complex technical terms. This hands-on approach helped bridge the gap between the theoretical knowledge in the book and its practical application, thus improving the overall quality and effectiveness of the translation.

On the other hand, the Jesuit missionaries who spearheaded scientific and technical translations were religiously and intellectually motivated. While their primary goal was to promote the spread of Catholicism, they also recognised the importance of demonstrating the practical benefits of Western scientific knowledge in order to gain the respect and cooperation of Chinese scholars and officials. Driven by a combination of curiosity, pragmatism, and patriotism, the Chinese collaborators sought to use Western technology to meet China's domestic challenges and to strengthen the country. This dual motivation led to a pragmatic approach to translation, focusing on the practical applicability and immediate benefits of the translated work. This pragmatic approach often required the adaptation and modification of the original text to better suit the Chinese context and meet the needs of local readers.

## **2.5. Differences in Impact**

The translation of Buddhist scriptures, lasting over 2,000 years, had a profound impact on Chinese society and culture. Buddhism became one of the three major religions in China, influencing politics, philosophy, language, literature and so forth. Politically, it served as a tool for maintaining feudal rule; philosophically, it contributed to Chinese idealism; and linguistically, it enriched the Chinese language and literature with Buddhist terms and themes.<sup>[4]</sup> The influence of Buddhist thought can be seen in many aspects of Chinese culture, including art, literature, and philosophy, where Buddhist themes and ideas became deeply interwoven with existing traditions.

Scientific and technological translations in the late Ming and early Qing dynasties introduced Western learning, expanded Chinese academic horizons, and challenged traditional centrism. They promoted pragmatism and logical thinking, although their impact was limited by the social and scientific environment of the time. Enlightened scholars used Western technology to strengthen the country, but the overall influence of these translations was less profound than that of Buddhist scriptures.<sup>[7]</sup>

These translations contributed to the early stages of China's modernisation. The introduction of Western scientific methods and technological advances provided Chinese scholars and practitioners with new tools and perspectives. For example, the translation of astronomical, mathematical, and medical works brought significant advances in these fields, promoting a more empirical approach to knowledge and problem-solving. Translation during this period also marked the beginning of an exchange of knowledge that would later influence the modernisation of China in the nineteenth and twentieth centuries. The influx of new ideas gradually eroded the narrow perspective of traditional Chinese scholarship and laid the groundwork for what would become wider exposure to Western science and technology during the Qing dynasty and beyond.

## **3. Similarities between the Two Translation Activities**

### **3.1. Products of Social Needs**

Both translation activities were products of social needs. When Buddhism was introduced to China, it was a time of social unrest and discontent. Buddhism preached endurance and looking forward to the afterlife, which appealed to the ruling class as a means to stabilize the country. Consequently, the translation of Buddhist scriptures was supported by the ruling class, lasting for over two thousand years. The rulers saw Buddhism as a way to promote social harmony and control, leveraging its teachings to maintain order.<sup>[1]</sup>

Similarly, the translation of science and technology in the late Ming and early Qing dynasties were also born out of social needs.<sup>[7]</sup> At the end of the Ming Dynasty, China faced internal and external problems, the country's development stagnated and was lagged far behind by western

countries. The scientific works brought by the Jesuits offered hope to enlightened scholars concerned about their country. They translated these works to promote societal development and address national issues. The desire to advance technologically and scientifically was motivated by the need to strengthen the nation and improve the well-being of people.

### 3.2. Target-text Oriented

Both the two translation waves adhered to the principle of "target-text oriented". By the time Buddhist scriptures were introduced to China, the Chinese ideological and cultural system has been developed. Therefore, to integrate Buddhism into Chinese culture, translators used Taoist ideas to express Buddhist concepts and adapted Buddhist ideas to align with Chinese thought through deletion and rewriting. Under the control of the ruling class, Buddhist concepts that did not conform to their ideology or were deemed detrimental to feudal unity were modified or omitted.<sup>[4]</sup> This approach ensured that Buddhism could be more easily accepted by the Chinese population and harmonized with existing beliefs.

During the translation of science and technology in the late Ming and early Qing dynasties, the Jesuits developed a 'scientific missionary approach' and a strategy of cultural adaptation. They respected Chinese traditions, wore Confucian clothes, learned the Chinese language, read ancient Chinese books, and used Confucianism to explain Christian doctrines, highlighting the similarities between the two.<sup>[8]</sup> This approach created favorable conditions for their missionary work in China. By adapting to Chinese culture, the Jesuits aimed to make their teachings more palatable and relatable, thereby increasing their acceptance.

In summary, despite several differences, both the two translation waves were products of social needs and had a significant influence on their respective societies. As important milestones in the history of Chinese translation, these translation activities have had far-reaching effects on the development of traditional Chinese translation theory. They demonstrate how translation can serve as a bridge between cultures, facilitating the exchange of ideas and fostering mutual understanding.

## 4. Conclusion

Comparing the translation of Buddhist scriptures and scientific and technological works in the late Ming and early Qing dynasties reveals that each translation wave was deeply influenced by its social context and had significant impacts on the ear and future generations. Although the science and technology translations were shorter in duration and less influential than the Buddhist scripture translations, they marked the first significant encounter with Western learning and deserve serious attention. Studying traditional Chinese translation activities is meaningful and valuable, and understanding these historical translation theories can positively contribute to modern translation studies.

By examining the intricate dynamics of these translation activities, we could gain insights into the broader cultural, philosophical, and scientific exchanges that have shaped Chinese history. Both translation waves reflect the adaptive and integrative capacity of Chinese civilization, demonstrating how external influences can be assimilated and transformed to enrich the native cultural landscape. This comparative study underscores the importance of translation as a vital tool for cross-cultural communication and highlights the enduring legacy of these historical translation efforts in shaping modern China.

In addition, these translation efforts provide lessons on the importance of cross-cultural understanding and the value of integrating diverse perspectives into a cohesive cultural framework. Translations of Buddhist scriptures have fostered a profound exchange between Indian and Chinese philosophy, leading to a unique synthesis that enriches both traditions. Similarly, scientific and

technological translations opened up a dialogue between Western and Eastern scientific paradigms, laying the groundwork for future cooperation and progress. These historical precedents demonstrate the transformative power of translation in fostering innovation, promoting mutual understanding and bridging cultural divides. As we continue to navigate an increasingly interconnected world, the lessons learned from these translation activities remain highly relevant, reminding us of the potential of translation to drive progress and enhance global cooperation.

## References

- [1] Ma Z. (1998). *A Brief History of Chinese Translation*. Beijing: China Translation and Publishing Corporation.
- [2] Qi Z. (2000). *Buddhism and Chinese Culture*. Shanghai: Xuelin Press.
- [3] Ji S. (1995). *A Preliminary Exploration of the Forest of Books*. Shanghai: Shanghai Joint Publishing Press.
- [4] Wang K. (1997). *A Cultural History of Translation*. Shanghai: Shanghai Foreign Language Education Press.
- [5] Hou W. (1980). *A General History of Chinese Thought (Volume IV)*. Beijing: People's Publishing House.
- [6] Chen F. (2000). *A Historical Manuscript of Chinese Translation Theory*. Shanghai: Shanghai Foreign Language Education Press.
- [7] He Z. (2001). *A Historical Discussion on Sino-Western Cultural Exchanges*. Beijing: China Youth Publishing House.
- [8] Bassnett, S., & Lefevere, A. (2001). *Constructing Cultures: Essays on Literary Translation*. Shanghai: Shanghai Foreign Language Education Press.