



A Study on the First English Translation of Taoist Classic *Zhouyi Cantong Qi* Published in the United States

Yong Liang*

School of Foreign Languages and Cultures, Xihua University,
610039 Chengdu, Sichuan, China

* Corresponding author: lukeliangnew@gmail.com

Abstract. *Zhouyi Cantong Qi* is one of the representative classics of Chinese Taoism, containing rich traditional Chinese cultural elements, which is included in the book list of “Library of Chinese Classics (Chinese-English)” in contemporary China. The book has many Chinese annotated versions throughout the ages, and its language features a distinct metaphorical style. While there has been considerable research on the book’s language and style in China, its history of overseas translation, especially in the United States, and its interpretation perspectives have yet to be systematically studied. Based on an analysis of the book’s language features, this article divides its history of overseas English translation into three stages, and points out that the joint translation by Chinese scholar Wu Luqiang (1904-1936) and American chemist Tenney L. Davis (1890-1949), published in the United States in 1932, was the first English complete translation of the book. The article focuses on exploring the translators’ cooperation, translation characteristics, dissemination media, shortcomings, and other aspects involved in the first translation, and accordingly discusses contemporary overseas spread of Chinese cultural classics.

Keywords: English Translation; *Zhouyi Cantong Qi*; United States

1 Introduction

Zhouyi Cantong Qi (hereinafter referred to as *Cantong Qi*) is known as the king of ancient alchemy classics. The content of this classic has a wide range of knowledge, including ancient technology (primarily in chemistry), medicine, astronomy, and other fields. Its unique metaphorical style has had a significant influence on later literary creations. The book *Cantong Qi* integrates technology and culture with humanistic factors, and has attracted the attention of numerous scholars and Taoists throughout history. In contemporary times, it has been included in the book list of translation project Library of Chinese Classics (Chinese-English) and has become one of the representative classics of Chinese traditional culture. However, scholars have paid little attention to the English translation of the *Cantong Qi*, and there are few related translation research results ^[1], especially its translation and spread in the United States. Exploring the translation characteristics of this classic overseas is of great

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significance for the “going out” work for Chinese culture and the translation research of classical Chinese literature.

Cantong Qi (The Unity of the Three) is generally believed to have been written by Wei Boyang, a native of Shangyu, Kuaiji (present-day Zhejiang Province) in the late Eastern Han Dynasty in the 2nd century AD in China. The text of *Cantong Qi* is over 6,000 words and mainly involves three aspects, including the ancient cosmology, Huang-Lao (Emperor Huangdi and Laozi) doctrine, and the study of furnace fire for refining elixir. The Chinese character Can could be interpreted as “Tian, Di, Ren” (meaning heaven, earth, and man) and Tong means “connecting”, while *Qi* means “unity”. As a “timeless masterpiece of ancient immortal knowledge” [2], this text contains rich traditional Chinese cultural elements, attracting numerous scholars from ancient and modern times to study and annotate it. There are nearly 40 annotated versions of it that exist today.

The stylistic features of *Cantong Qi* are reflected in its diverse mix of literary styles, including four-character, five-character, songs, ode, and irregular lyrics [3]. The book is predominantly composed of four-character and five-character sentences, and also includes prose. In the postscript and preface to *Investigation of Differences in Zhouyi Cantong Qi* by Zhu Xi in Song dynasty, he referred to it as “all the rhymes and phrases are ancient, too deep and difficult to understand” [4]. The text of the book is composed of a large number of metaphors, such as using yellow sprouts to refer to the alchemical head or lead, using river maiden to refer to mercury or quicksilver, and being written in the four-character rhyming style. The language used in *Cantong Qi* established a precedent for later Taoist classics, characterized by “mysterious and obscure, ancient and mystical” language, and formed a magnificent and brilliant language style [5].

2 International Sinology and the Translation History of *Zhouyi Cantong Qi*

Based on the data and analysis collected by the author, this article divides the translation of *Cantong Qi* into three stages - early, middle, and late - based on the order of its English translation.

(1) The early stage is before the 1940s, which includes the initial introduction of *Cantong Qi* overseas since the mid-19th century and the birth of the first complete translation in 1932. The first full English translation of *Cantong Qi* was completed by Chinese scholar Wu Luqiang, who analyzed and translated the text from the perspective of chemical changes.

(2) The middle stage of translation is from the 1940s to the 1990s, which includes the appearance of abridged and complete translations. The main scholars in this stage include British Sinologist Joseph Needham, American Sinologist Nathan Sivin, Chinese-American scholar Eva Wong, and the translator of the second complete translation, Zhou Shiyi. During this period, the second complete English translation of *Cantong Qi*, entirely done by Chinese scholar Zhou Shiyi, was published in China in 1988. During this time, the study of *Cantong Qi* underwent a change and expansion in

research perspectives, from the direction of the history of science and technology to the study of traditional Chinese medicine, internal alchemy and other related fields.

(3) The late stage of translation is from the 1990s to the present day. During this period, two foreign translators published complete English translations of *Cantong Qi* in 1994 and 2011 respectively. At the same time, *Cantong Qi* has been included as an entry in many contemporary overseas Sinological research works, and the exploration of Wei Boyang has also been valued by foreign scholars, continuously expanding the breadth and depth of the study and translation of *Cantong Qi* overseas. This involves multiple disciplinary backgrounds and also confirms the complexity of the *Cantong Qi* text itself. It is closely related to multiple disciplines, such as traditional Chinese medicine, science and technology, religion, and other aspects of traditional Chinese culture.

Overall, the history of the transmission and translation of *Cantong Qi* in the West has exceeded 150 years, from sporadic discussions in the mid-19th century to the publication of four complete English translations. It has undergone multidimensional interpretation and dissemination in different historical periods in the West. The following discussion will mainly focus on the first complete English translation of this classic text.

3 The first complete English translation of *Cantong Qi* and its characteristics

3.1 The publication of the first complete English translation of *Cantong Qi*

The translation was achieved through the collaboration of Chinese scholar and historian of chemistry Wu Luqiang and American chemist Tenney L. Davis. In 1932, the translation was published overseas for the first time, which translated *Cantong Qi* as “Ts'an T'ung Ch'i” [6]. The title also explained that *Cantong Qi* is a treatise on alchemy written in ancient China. The translation name retained the Chinese pronunciation and imagery of the original text, and the English title translated and introduced the essence of *Cantong Qi* well, meeting the expectations of the target readers and to some extent, reducing understanding difficulties and attracting readers' attention. The entire translation was not published as a book but was published in the format of a full-length paper in the history of science journal *Isis* in Volume 18, Issue 2. This marked a breakthrough in the overall translation and spread of *Cantong Qi* overseas.

3.2 The co-translators of the English translation of *Cantong Qi*

As mentioned in the introduction section, the full Chinese-English translation of the original text of *Cantong Qi* was independently completed by Wu Luqiang. Wu also wrote the Chinese annotations for the text, while Davis wrote the introduction and some other parts of the book. Wu and Davis had multiple discussions on the translation, and this is a collaborative academic research achievement. One of the major features of this joint translation by Wu and Davis is that they interpret the text from a

scientific and chemical perspective, using the external alchemy of Daoism for explanation. They also used their own scientific background to translate the original text, believing that *Cantong Qi* is a book on furnace fires and alchemy.

Wu Luqiang (1904-1936) was born in Kaiping County, Guangdong Province, China in the early 20th century. At just over 20 years old, Wu was selected to study abroad in the United States. Initially, he chose to study the humanities at Dartmouth College, but switched to the more urgently needed field of science in his second year and transferred to the Massachusetts Institute of Technology in the northeastern United States to major in chemistry. He studied at MIT from 1925 to 1931 and obtained a Ph.D. in chemistry at the age of 28, “reflecting his early maturity in academic research”^[7]. According to the information on Wu Luqiang recorded in the Dictionary of People of the Republic of China, Wu Luqiang obtained both a Bachelor’s degree and a Ph.D. in Chemistry from the Massachusetts Institute of Technology; In addition, Wu Luqiang was also one of the founders of the Chinese Chemical Society in the United States^[8].

The co-translator of the first complete English translation of *Cantong Qi*, Tenney Davis (1890-1949), was an honorary professor of organic chemistry at the Massachusetts Institute of Technology. He had a great interest in the early chemical knowledge contained in ancient Chinese texts. Wu and Davis co-authored several papers, including an introduction to Ge Hong’s *Baopuzi*^[9]. It is worth noting that the first English translation of *Cantong Qi* was published after Wu Luqiang returned to China.

3.3 The translation mode and transmission process of *Cantong Qi*

The preface of *Cantong Qi* English translation explains the specific division of work between the translators and matters related to the translation. The preface is jointly signed by Wu Luqiang and T. Davis, and the first sentence introduces that “this translation of *Cantong Qi* is believed to be the first full text translation of ancient Chinese alchemy into Western languages”^[8]. Wu Luqiang translated *Cantong Qi* and all other Chinese references in the text, including Chinese materials cited in the “Introduction” and “Annotations”. Davis was responsible for writing all content in the “Introduction” and “Annotations” apart from the Chinese language. Both collaborators read the translation and often made suggestions, corrections, and criticisms of each other’s work^[9]. As the two pointed out, the translation was intended to provide reference materials for scientific history research to Western scholars studying Eastern culture. At the same time, it can also work together with other alchemy research to clarify the evolution and development of alchemical thought and provide a reference for exploring its origins.

The introduction and dissemination of *Cantong Qi* in the West required the development and dissemination of carriers. The Chinese original text of over 6,000 characters was translated into English, which amounted to over 10,000 words. With the addition of prefaces, lengthy introductions, annotations, and indexes, the publication was as long as 80 pages. This article was published in the 18th volume and 2nd issue of the academic journal *Isis* in October 1932. The international journal *Isis* is named after the ancient Egyptian goddess of fertility and was founded in Belgium in 1912. It

was officially published in March 1913, marking the “maturity and independence of the history of science research”^[10].

Nearly 80 years after the publication of the first English translation of *Cantong Qi*, the English translation of *Zhou Yi Cantong Qi* in the Library of Chinese Classics (Chinese-English) series published by Yuelu Publishing House in Changsha, China in 2012, used Wu Luqiang and Davis’s translation. The vast majority of the content maintains the original translation structure and word choices. Only the Wade-Giles romanization used in some of the transliterated terms has been replaced with the current standard *Pinyin* romanization of modern Chinese. The original Chinese content of *Cantong Qi* was annotated and explained by contemporary Daoist scholar Xiao Hanming. The importance of the first translation of *Cantong Qi* is once again highlighted, visible and accessible in Chinese academia.

4 Research Discussion

4.1 Some drawbacks of the translation of *Cantong Qi*

Wu Luqiang’s translation is arranged into a total of 69 chapters, with each chapter being relatively short. There is no unified principle for the division of chapters, and the division is based on the translator’s subjective judgment. The length of each chapter has not been deliberately arranged to be consistent based on different themes or similar content. In addition, there are some regrettable aspects of the translation, including a single perspective in translation, deviations in understanding some of the original text, and problems with the form of the translation.

Firstly, Wu’s translation of *Cantong Qi* is carried out from the perspective of chemical research, and the interpretation of most of the core terms is also interpreted from the perspective of chemical science, without paying attention to the potential metaphorical meanings of *Cantong Qi* in internal alchemy. Secondly, some parts of the translation have deviations in understanding the original text. For example, Wu’s translation of the Chinese text “*Jusheng shang yannian, huandan ke rukou*” has an error. In fact, “*Jusheng*” is the alias of black sesame, also known as oil sesame or giant sesame, but the English translation mistakenly translates it as “great triumph”, which is a literal translation. The corrected translation in the *Library of Chinese Classics* (Chinese-English) version of *Zhou Yi Cantong Qi* by Xiao Hanming accurately translates “*Jusheng shang yannian*” as “Sesame is able to prolong life”^[11].

Furthermore, in some cases, it seems that the understanding of certain terms did not go deep enough and only left some unsolved mysteries presented to readers in a transliterated form, without the author making reasonable speculations. For example, the translation did not delve deeper into the term “九都” and only provided an explanation that the term was incomprehensible. In terms of language form, because the translation paid great attention to readability and the grammatical norms of the target language, it was difficult to fully retain the form of the original text. Usually, long sentences corresponded to the original four-character rhyming expressions, and there were some participle phrases inserted, causing some cultural elements of the Chinese source text to be lost. For example, the translation of the “*Ding Qi Ge*” written in

three-character verses appeared somewhat chaotic in terms of the form of the translation, with some sentences focusing on corresponding to the form of the original text, but many sentences were long and added interpretations in the form of main and subordinate clauses in the translation, reflecting the characteristic of Wu's translation as an interpretive translation with some shortcomings in the literary aspects of the original text.

4.2 Some Enlightenment for Chinese culture going abroad

(1) The model of Sino-foreign cooperation in translation and introduction is worthy of reference. Since ancient books such as *Cantong Qi* have difficult and obscure language, as well as numerous hidden meanings and names, translating classic texts is by no means an easy task. In addition, it is necessary to sort out and interpret a large number of terms. In addition to the accuracy of the language, it is also necessary to take into account the needs of target readers for readability and fluency. To achieve such high requirements, Wu Luqiang created the necessary conditions for this by cooperating with Davis.

Wu LuQiang acquired a solid foundation in classical literature during his youth, and his overseas studies rapidly improved his foreign language abilities, culminating in the completion of his doctoral degree in English. Davis specialized in chemistry, and was also very interested in ancient Chinese technology, especially alchemy related to chemistry, and was able to judge the accuracy and norms of the English expression of the translation. He could provide feedback on English reading from the perspective of Western readers, making the first complete translation a highly referable work. The identity of the two chemists added professionalism to the chemical perspective of this translation, but also to some extent constrained the interpretive horizon of this translation. It should be said that Wu Luqiang's serious study of Chinese ancient books, his professional academic background and bilingual abilities, as well as his serious and responsible attitude are the most important reasons for the smooth progress of this translation work. Wu Luqiang is also regarded as a "talented young chemist, historian of chemistry, and chemistry educator".^[7]

(2) The translator needs to make sufficient preparations before translating classic texts. Before the 1930s, there was a relative lack of modern Chinese chemistry talent. Among the scholars of Wu Luqiang's generation, there were both senior scholars who had deep research in the field of chemical history, and peers who had the same overseas study experience as him. They focused on different themes in the field of chemical history research, and worked together to promote the modernization process of Chinese chemical research and make contributions to the exploration of ancient Chinese chemical technology history. Before publishing the translation of *Cantong Qi*, Wu Luqiang had also published other translations related to Chinese culture overseas. In 1930, Wu Luqiang, who was studying at the Massachusetts Institute of Technology in the United States, co-authored an article with Davis titled "Chinese Alchemy"^[12]. According to the information available to the author, this was the first time that the two had jointly published an article, which also laid a solid foundation for the translation of *Cantong Qi* two years later. In the article, Wu Luqiang not only translated

Liang Qichao's article "The Origin of Yin and Yang and the Five Elements" into English at great length, but also sorted out the research results of alchemy in China and the West^[13]. Wu Luqiang's introduction of Chinese culture was based on sufficient academic preparation, pursuing excellence in translation on the basis of a profound understanding of the original text, and his research results entered the vision of Western researchers.

(3) The diverse channels for the dissemination of Chinese culture overseas need to be actively explored. In 1932, the academic journal *Isis* published two volumes (Volume 17 and 18) with a total of four issues. Wu Luqiang and Davis' translation of *Cantong Qi* was the first article in Volume 18, Issue 2. Due to the large amount of space occupied by the translation of *Cantong Qi*, only three research articles were published in this issue. The second English article was related to alchemy and discussed the authorship of the book "Ordinall of Alchimy", which was written in verse (recognized as the work of English writer and lawyer Thomas Norton). The third article was a German article, which studied the mysterious ancient Latin text "Sator Arepo" discovered in the early 20th century. It can be seen that the article arrangement of this issue was carefully designed, and the editor combined three articles with common themes for publication. In the 1930s, *Isis* was an internationally renowned journal for the study of the history of science and technology, and its publication of the English translation of the ancient Chinese alchemical work *Cantong Qi* provided reliable materials for Western researchers to use and explore, which had a positive effect on promoting the study of ancient Chinese technology in the West. This allowed this ancient book, originally written at the end of the Han Dynasty, to appear in English on a world-class academic platform overseas. In addition to the dissemination of Chinese culture through translated books, multi-modal channels such as journals, new media, newspapers, and audiovisual materials can all play an active role in cultural translation activities.

5 Conclusion

The text of *Cantong Qi* embodies the integration of science and humanities. Its overseas translation history has gone through three stages: early, middle, and late. One of the most important milestones was the publication of the first translated version jointly translated by Wu Luqiang and Davis. The two translators' perspectives on chemistry and scientific knowledge in *Cantong Qi* were integrated, which is the unique feature of this first translated version. Wu Luqiang's English translation of *Cantong Qi* is not only the first complete English translation of this classic in the Western world, but also the only Chinese ancient book that Wu Luqiang fully translated (others such as Ge Hong's *Baopuzi* were only partially translated).

This translation uses a combination of Chinese and foreign translators to provide English translations and annotations of the content and notes of *Cantong Qi*. It provided unprecedented research materials on early Chinese chemistry and alchemy theory for Western researchers in the 1930s, giving foreigners the opportunity to deepen their understanding of the original text of the King of Alchemy in Daoism. The entire

English translation of *Cantong Qi* was published in the internationally renowned journal of the history of science and technology, *Isis*, which has positive reference value for the overseas dissemination of Chinese culture.

Nevertheless, this article only discusses the early translation of *Cantong Qi*, and future in-depth case studies can be conducted on its other three subsequent English translations.

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