

Yu Shan, Wuqiu Fan. 2018. *Science and Technology Translation Research in the Big Data Era: Review and Prospect*. Beijing: China Social Sciences Press, pp.236, RMB ¥ 66. ISBN: 978-7-5203-2273-9.

Li Jiya^{[a],*}

^[a] School of Foreign Languages, Southwest Jiaotong University, Chengdu, China.

*Corresponding author.

Received 3 December 2019; accepted 26 February 2020
Published online 26 March 2020

Book review

Key words: Scientific and Technology Studies; Scientific and Technology Terms, Translation Studies

Li, J. Y. (2020). Yu Shan, Wuqiu Fan. 2018. *Science and Technology Translation Research in the Big Data Era: Review and Prospect*. Beijing: China Social Sciences Press, pp.236, RMB ¥ 66. ISBN: 978-7-5203-2273-9. *Higher Education of Social Science*, 18(1), 89-90. Available from: URL: <http://www.cscanada.net/index.php/hess/article/view/11638>
DOI: <http://dx.doi.org/10.3968/11638>

With the coming era of big data, great changes have taken place in all walks of life, including the science and technology translation (STT) area. However, in China, compared with literary translation studies, STT studies had not been paid much attention, take three highly influential domestic translation journals (1985-2015) as data samples, it is found that “The total amount of STT studies is 4.06% of the total amount of translation studies.” (shan Yu, Fan Wuqiu, 2018,37)

Since 2000, there are events showing that the research of STT and scientific and technical terms translation in China has entered a relatively stagnant period (Fan Wuqiu, 2012). Such as *Shanghai Science and technology translation* and *Learning of Science and Technology English*, two of China’s top science and technology English journals, have been renamed as *Shanghai Translation* and *contemporary foreign languages Studies* respectively. Meanwhile, some journals that once had science and technology translation research columns (such as *China translation*) have been cancelled. The monographs related to science and technology translation are also scarce in China.

Science and Technology Translation Research in the Big Data Era: Review and Prospect fills the gap; it systematically reviews the history, current situation and tries to explore the future trends of Chinese STT studies. Professor Fan, one of the authors in this book, had been studying in the field of scientific and technical terms translation for nearly 20 years. He has published many research papers related to the translation of scientific and technical terms from English to Chinese in the highly influential journals in Chinese translation field. He can be regarded as an expert in STT area in China. As for the chaos in the contemporary translation of scientific and technical terms, Professor Fan pointed out several reasons: the translator’s limited language ability, Poor cooperation between language skills and scientific and technical knowledge, and excessive dependence on translation tools etc. (Fan, 2012). The characteristics and criteria of scientific and technical terms put forward by him in the book pointed out directions for scientific and technical terms translation from English to Chinese, and the method of inspiration thinking combined with scientific and technical terms translation in the later part of the book partly answered the old dichotomous translation question: whether to translate phonemes or to translate meaning. It puts forward a new understanding and solution for scientific and technical terms translation, which is very enlightening.

Generally speaking, this book provides new directions, perspectives and suggestions for theory building, scientific and technical terms translation, teaching and translation practice in STT area.

The book is composed of 8 chapters. Chapter 1 gives a general overview of Chinese science and technology translation activities from 206 BC to 2016. The authors divide them into four periods: appendage period, formation period, development period and prosperity period. Generally speaking, the scale of STT translation has expanded and its content has gradually enriched.

Chapter 2 employs the statistics of 557 Master and PhD Thesis in China National Knowledge Infrastructure (CNKI) database from 1997 to 2014 to investigate the current situation of Chinese STT studies, 4 major weak points have been pointed out, then, suggestions are put forward for the sustainable development of this field. The author also generates a clustering map of burst terms by CiteSpace tool on statistics of 293 papers from three highly influential domestic translation journals (1985-2015).

Chapter 3 lists the corresponding extensions made by Chinese scholars to the western translation theory system and the characteristics of their own translation studies. It also compares and summarizes the differences of translation studies between China and western countries. It discusses the specific contents of STT studies from three aspects: theoretical research, historical research and applied theory. At last, the research prospect of STT has been put forward.

Chapter 4 presents the current research situation of STT teaching in China, and puts forward the concept of teaching mode of STT, including objectives, teaching content, class hour setting, content-based Instructions, especially the application of corpus in STT teaching.

Chapter 5 focuses on describing science and technology retrieval and translation tools, including database information retrieval, the use of Citespace application software, translation software, the rational use of network resources and corpus.

Chapter 6 makes a systematic discussion on the translation of scientific and technical terms. A large number of examples are given and assorted into four major difficult types, such as the technical meaning of common words, the diversity of plural meaning of English terms, the semantic change of -ing structure and the synthetic terms. Then it provides basic criteria and methods to regulate the English to Chinese translation of scientific and technical terms.

Chapter 7 mainly deals with the long sentences in STT translation, explaining the structure of long sentences in STT translation, and putting forward specific translation methods and strategies.

Chapter 8 makes discussions on translation cases. It introduces the definition and function of inspiration thinking, and explains how does it help STT translation, especially how does inspiration thinking help scientific and technical terms translation. In this chapter, it gives some successful term translation cases with inspiration thinking cooperation such as laser, Viagra, hacker, Legalon, Ronstar and Benz, etc., then it concludes the important role of inspiration thinking in scientific and technical terms translation.

This book makes a comprehensive analysis and summary on Chinese STT history, current study and the contributions of Chinese scholars, it also provides effective methods and guidelines for tackling differences and difficulties in STT practices. In the first part, with the

overview of Chinese science and technology translation activities(206 BC-2016), the authors conclude the overall trend of Chinese science and technology translation activities from mainly 4 aspects: translators, translation content, publishing organization and translation forms, which provide us a new approach to STT history study.

It used a more pragmatic oriented research method by applying quantitative techniques and utilizes Chinese online publication database. The visual clustering map in the second chapter shows frontier topics and hot issues of Chinese STT research area. It finds that the study of STT in China has undergone remarkable changes in the past 30 years in some aspects like study perspective, method, content and subject selection. The authors also point out major problems and study gaps, which will be particularly useful to scholars and students in this area.

It summarizes the difficulties and problems in English to Chinese translation of scientific and technical terms by giving a large number of examples, which covers a wide range of fields including medicine, biology, rail transit, maglev train, mechanical numerical control, etc. The scientific and technical terms translation strategy combined with inspiration thinking given by professor Fan breaks the deadlock of traditional Chinese terminology translation discussions such as foreignization vs. domestication translation strategies, or literal vs. free translation strategies. In this book, he also challenged some of the widely used scientific and technical terms that translated from English to Chinese, such as organ donors, hormone and combine, etc. we can see how much insight and effort that Professor Fan has put to regulate the translation of scientific terms from English to Chinese. His 6 criteria and 4 difficulties on English to Chinese scientific and technical terms translation provide new perspectives for experts and scholars in scientific and technical terms translation filed.

However, there are some flaws need to be raised. In the second chapter, the author take master, PhD thesis and three highly influential domestic journal papers as data sources, however, the scholarly monographs have been neglected. Moreover, besides *China Translation*, *Shanghai Translation* and *China Science and technology Translation*, there are also many core foreign language journals in China that are worth referring to in this field. The narrowness of author's research scope may easily lead to a less subjective conclusion. Besides, there are 3 obvious data calculation errors in the proportion statistics chart on page 37.

In short, this book is rich and rewarding read; it is quite useful for scholars, students and translators in STT area, experts and scholars on terminology area.

REFERENCE

- Fan, W. Q. (2012). An analysis of the reasons for the relative stagnation of scientific and technological translation research in recent years. *Shanghai Translation*, (1), 34-38.