

## BOOK REVIEW

### *New Advances in Translation Technology: Applications and Pedagogy*

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The field of translation has undergone a significant transformation with the advent of advanced translation technologies. These technologies have not only expanded the scope of translation but also introduced new challenges and opportunities for practitioners. Peng Yuhong, Huang Huihui, and Li Defeng have compiled a collection of scholarly perspectives in "New Advances in Translation Technology: Applications and Pedagogy", offering a comprehensive overview of recent developments in translation technology and their implications for practice, the profession, and education. The anthology provides a rigorous examination of the state-of-the-art in translation technology and its potential impact on the industry. As we navigate the complexities of this evolving landscape, "New Advances in Translation Technology" offers a scholarly perspective on the changes that are shaping the future of translation.

The book is structured into twelve chapters, divided into two distinct sections. The first section including the initial seven chapters, focuses on the emergence and utilization of translation technology. Each chapter within this section offers precious insights into particular aspects of translation technology. The initial two chapters of the first section, focus on the historical development and the practical application of translation technology. Mustafa in the first chapter explores the ideological drivers behind the early development of machine translation in the United States and emphasizes the ongoing symbiotic relationship between translation technology and the pursuit of ideological power. In chapter two, Siu leads us in an in-depth exploration of the core technologies of neural machine translation (NMT) and large language models (LLMs), thoroughly analyzing their impressive capabilities as well as the obstacles that have yet to be overcome.

In the third and fourth chapters, Alejandro and Sandrelli focus on introducing a prominent development in the field of translation technology: cloud-based technologies in media localization programs. Alejandro introduces a variety of mainstream subtitle translation platforms in the third chapter, providing excellent references for professionals in related fields. Sandrelli on the other hand, highlights two international pilot projects carried out at the UNINT (University of International



Studies of Rome) in Italy, comparing subtitle translation practice projects conducted on the OOONA cloud subtitle platform (<https://www.oona.net/>) with three different levels of automation in their workflows. This research offers valuable insights for scholars, experts, and professionals in the same field, and is well worth learning and reference.

Chapters five and six focus on industry research. In chapter five, Roser conducts a series of publication surveys on the current state of the language service industry on eighteen leading publishing institutions and provides many valuable suggestions for the training of language service talents in the new era. In chapter six, Nune employs data from the ONET database (the United States Department of Labor's Occupational Information Network) to analyze which translation skills are most likely to be affected by artificial intelligence. He also offers valuable advice and suggestions for the future development of translators and the training of translation talents.

Chapter seven introduces the concept of computational terminology to readers, and demonstrates important methods for monolingual and bilingual term extraction, as well as how to embed domain-specific vocabulary into NMT systems, highlighting both their remarkable advancements and current limitations. Furthermore, the chapter introduces many leading industry terminology tools, which are excellent recommendations for language learners, practitioners, and trainers.

The second section of the book primarily focuses on pedagogical approaches and students' feedback on translation technology. In chapter eight, Lynne Bowker advocates for the use of plain language for both writing and translation. Her comparative study reveals that there is a significant overlap between the guidelines for plain language and those for NMT. Lynne Bowker proposes consolidating these into a unified strategy that fosters content that is both accessible to readers and optimized for machine translation. Chapters nine and ten are dedicated to sharing teaching experiences. In chapter nine, Gloria designed a corpus-based gamified teaching method to enhance the accuracy of students' translations of specialized terminology. She also employs teaching experiments and questionnaire surveys to verify the effectiveness of this method. The study of translation technology has always been a tedious and challenging process. Gloria's ability to integrate gamification into terminology learning is commendable, allowing students to master these skills in a relaxed and enjoyable atmosphere, which is quite rare and worthy of reference by teachers of similar courses. Nune, Yu Hao and Anthony in chapter ten, draw from their own teaching experiences to share eighteen classroom activities that validate the significant impact of generative artificial intelligence on translation courses and the training of translators. This chapter advocates for the creation of dynamic, exploratory learning activities that encourage students to engage proactively with the material rather than passively absorbing information.

Chapters eleven and twelve are both empirical studies. In chapter eleven, Joke compares the significant role of machine translation systems in students' translation practice through surveys and translation reports submitted by the students. The rich insights into the effectiveness and impact of translation technology in educational settings provide practical guidance for educators and administrators seeking to enhance their translation programs. Yu Hao, in the last chapter, explores the significant role of pure human translation in the process of translating literary texts by documenting the translation process and reflections of student translators under different translation modes. He



concludes that human translation still has an irreplaceable special position in the process of translating literary texts.

The book provides an exhaustive exploration of the latest advancements in translation technology, including topics such as NMT, cloud computing, automatic speech recognition, and the integration of machine translation tools. It presents a comprehensive view for readers to grasp the technological transformations currently occurring in the field of translation. The book is commendable for several reasons. First and foremost, this book is highly practical. Not only does the book delve into the historical context and theoretical foundations of the development of translation technology, but it also offers numerous practical cases and project practices (e.g., chapters four and eleven). Additionally, chapters two and twelve present many translation practice cases, detailing the comparison between pure machine translation, human-edited machine translation, and pure human translation. These practical cases are highly valuable to both academic researchers and industry practitioners.

Second, the book combines insights from linguistics, computer science, education, and other disciplines to provide an in-depth analysis of the multifaceted applications of translation technology. This interdisciplinary perspective helps readers understand translation technology from different angles. Third, the book predicts and discusses the upcoming trends in translation technology. This includes examining the influence of automation on the translation industry as detailed in chapter two, the future development trends of cloud technology covered in chapter five, and the guidance offered for nurturing language service professionals in the contemporary era as outlined in chapter six. It provides valuable recommendations for the future advancement of translation professionals and the cultivation of talent.

Overall, the book "New Advances in Translation Technology: Applications and Pedagogy" provides a comprehensive overview of the current state of translation technologies. However, there are a few areas where the book could be further enhanced. For instance, the scope of the case studies could be broadened to encompass a wider range of language pairs and text types, which would enhance their relevance to a more diverse readership. Additionally, while the book offers several analyses comparing machine and human translation, these could benefit from a more in-depth exploration of the underlying reasons for the observed phenomena. Also, the book could delve deeper into the ethical challenges of translation technology, such as data privacy and job displacement. A more detailed analysis would help readers grasp their responsibilities when using these tools professionally.

Despite these minor imperfections, "New Advances in Translation Technology" remains a well-structured and informative resource. It presents a multifaceted view of the current translation technologies and encourages critical thought, making it a valuable asset for students, researchers, and professionals in the field, as well as for anyone interested in gaining a deeper understanding of translation technology.



## Declarations and Acknowledgment:

The author declares that there is no conflict of interest.

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Dr. Xuan Chen is a faculty member of the School of Foreign Languages of Chongqing University of Posts and Telecommunications (China). She has authored articles published in *Translation Research and Teaching*, *Technology Innovation and Application*, *Teaching and Research of Translation*, and published four translated books by China Renmin University Press, Zhejiang People's Publishing House etc. Her research interests include translation cognitive analysis, machine translation and post-editing, corpus assisted translation teaching, and technical communication.

