

Machine Translation Post-editing Studies in China: A Research Review (1995-2025)

Shenghua Luo^{1*}

¹ School of Foreign Studies, Yangtze University, Jingzhou, China

Email Address

501087@yangtzeu.edu.cn (Shenghua Luo)

*Correspondence: 501087@yangtzeu.edu.cn

Received: 2 May 2025; Accepted: 25 May 2025; Published: 9 June 2025

Abstract:

This paper systematically reviews the research on Machine Translation Post-editing in China over the past three decades. It examines the characteristics, themes, and trends of MTPE research, and discusses its implications for translation practice and education. The study employs a mixed-methods approach, combining quantitative data analysis with qualitative thematic analysis. The results highlight the rapid growth of MTPE research in China and its increasing importance in the translation industry and education.

Keywords:

Machine Translation Post-editing, China, Research Review

1. Introduction

What is the Machine Translation Post-editing? Post-editing involves the correction and refinement of machine-translated output to meet specific quality standards. [1] From International Organization for Standardization, post-editing is the process of reviewing and correcting machine-translated output to ensure it meets the agreed requirements. [2] Therefore, it can be asserted that Machine Translation Post-editing (hereinafter referred to as MTPE) refers to the process of manually revising and optimizing machine-translated text to improve its quality and make it acceptable for use. This process combines the efficiency of machine translation with the high quality of human editing and is widely applied in fields such as the translation industry, localization services, and cross-lingual content generation.

The formal inception of machine translation in the 1950s, however until 1995, the research paper on MTPE in core periodical catalogue was initially published in China. Meanwhile, the year 1995 marked the initial phase of the transition from rule-based machine translation (RBMT) to statistical machine translation (SMT), during which machine translation research in China began shifting from theoretical exploration to practical application, and the concept of post-editing gradually emerged. Around the same time, specifically during the mid-to-late 1990s, the Chinese translation studies community shifted its attention to the practical difficulties posed by machine translation, with post-editing steadily becoming recognized as a vital tool for improving machine-generated translations and entering the scholarly discourse.

The rise of machine translation post-editing is closely tied to the development of machine translation technology. From 1995, both machine translation technology and research on post-editing have undergone multiple technological transformations and paradigm shifts in China. From 1990s to 2010s, it was statistical machine translation (SMT). Trained on large corpora, SMT improved translation quality but still contained many errors, making post-editing a necessary step. From 2010s to present, it was the period of neural machine translation (NMT). NMT, based on deep learning, significantly enhanced translation fluency and accuracy, but issues such as cultural differences and terminology consistency remain, further highlighting the importance of post-editing. Since the neural network machine translation model was proposed in 2014, the quality of machine translation has significantly improved. Later the neural network machine translation software had been launched and quickly widely used in the Internet like Baidu and Google. In recent years, the emergence of large language models, alongside advancements in intelligent translation tools, has not only enhanced the efficiency of post-editing but also placed greater emphasis on the need for elevated editor competencies. Particularly, ChatGPT and DeepSeek have recently aroused hot discussion and attention on the whole network, which have brought great impact on the translation market and translation education in China.

In 2016, the China Language Service Industry Development Report introduced machine translation post-editing as a key subject, underscoring its potential to boost efficiency and reduce expenses in translation workflows. The service model of “machine translation + post editing” has been widely recognized by the market in its 2022 edition. According to its report of 2024, 52.9% of translation projects utilized machine translation. Among them, 30.4% of the projects adopted the “Machine Translation + Post-editing” model in 2023. More than 70% of relevant academic institutions have introduced courses related to machine translation. These data suggest that machine translation and post-editing are gradually becoming an important translation model in China’s translation industry, attracting increasing attention and application from more companies. In light of these observations, we propose that a thorough review and synthesis of MTPE-related research in China is essential.

2. Research Design

2.1. Research Questions

This paper seeks to systematically organize and critically analyze the body of research on Machine Translation Post-editing (MTPE) conducted in China over the past three decades. Furthermore, it endeavors to address the following three key questions:

- (1) What are the overarching characteristics that define MTPE research in China during this 30-year period?
- (2) What are the predominant research themes that have emerged within the field of MTPE in China over the same time-frame?
- (3) How can the developmental trajectory of this field be delineated and interpreted based on its overall characteristics and thematic focus?

2.2. Data Sources

The paper systematically gathered and utilized scholarly literature sourced from the China National Knowledge Infrastructure (CNKI) as the foundational basis for data

statistics. This methodological choice was primarily motivated by the fact that research pertaining to machine translation post-editing studies in China is predominantly conducted by Chinese scholars, whose findings and academic contributions are extensively documented and disseminated through the CNKI platform within China. Consequently, CNKI serves as the most comprehensive and authoritative repository for accessing and analyzing the relevant body of work in this field.

To initiate the research process, an advanced search was conducted within the CNKI database, specifically targeting journal articles. The search parameters were set to include the Chinese terms “机器翻译” (machine translation) and “译后编辑” (post-editing) as the primary topics, with a temporal scope spanning the past three decades. This initial search yielded a total of 986 papers identified as relevant to the subject matter. Subsequently, the search was refined by restricting the language of the literature to Chinese, which reduced the number of pertinent papers to 776. Further analysis of the publication distribution revealed that, of these 776 papers, 210 were published in academic journals, while 526 were theses. Moreover, upon analyzing the distribution of publications across various journals, it was noted that 41 papers appeared in journals included in the core periodical catalogue in China, a prestigious catalogue that not only signifies the advancement and scholarly rigor of the field but also attracts considerable recognition and engagement from researchers and readers deeply invested in the discipline.

These 41 papers were selected as the primary source materials for deeper investigation in this study, thereby forming the core corpus of Chinese literature available for analysis. It is posited that through a comprehensive examination of these 41 Chinese papers, an objective and thorough description and analysis of the current research landscape surrounding MTPE can be achieved, providing valuable insights into the field’s development and trends.

3. Results and Discussions

3.1. Quantity and Chronological Distribution of Papers on MTPE

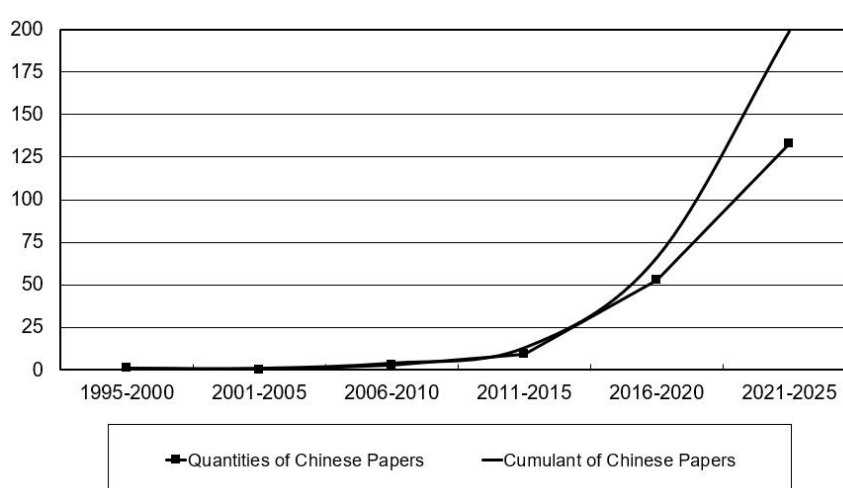


Figure 1. *Quantity and Chronological Distribution of Papers on MTPE From 1995 to 2025.*

From Figure 1, in terms of the number of papers published every five years from 1995 to 2025, there was few research in the early stage in China. In fact, the earliest

research paper on MTPE was published in China in 1995, and then it seems to stop studying on MTPE from 2000 to 2004. But the research in this field began to increase year by year. By 2010, the amount of papers in this research direction of MTPE showed a state of exponential growth. Especially, nearly 95% papers on the topic were published during the past twenty years (2015-2025) and more than 75% papers on the topic were published during the past five years (2020-2025).

In terms of the volume of journal articles, the top 5 journals with the most publications from 1995 to 2025 are *Overseas English* (33 篇), *English Square* (19 篇), *Chinese Science & Technology Translators Journal* (13 篇), *Chinese Translators Journal* (5 篇), *Modern Business Trade Industry* (5 篇).

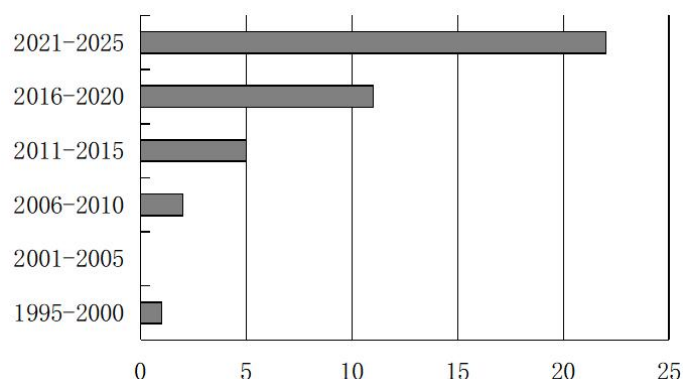


Figure 2. Quantity and Chronological Distribution of Core Journals on MTPE From 1995 to 2025.

From Figure 2, it is clear that the tendency of the quantity and chronological distribution of Core Journals on the topic from 1995 to 2025 is similar to the total quantity and chronological distribution of papers in Figure 1.

In terms of the volume of journal articles, the top 5 journals with the most publications from 1995 to 2025 are “中国科技翻译(*Chinese Science & Technology Translators Journal*)” (6 篇), “中国翻译(*Chinese Translators Journal*)” (5 篇), “外语电化教学(*Technology Enhanced Foreign Language Education*)” (4 篇), “上海翻译(*Shanghai Journal of Translators*)” (4 篇), “外语教学(*Foreign Language Education*)” (3 篇).

3.2. Research Hot Spots of Papers on MTPE

Based on the aforementioned 41 core journal articles, especially the themes and keywords, research on MTPE in China has predominantly focused on several key areas to date, including an introduction and overview of MTPE, evaluation studies of MTPE, the identification of machine translation errors and the development of post-editing tools, the cultivation of post-editing competencies and the training of post-editors, as well as the industry-oriented perspectives in MTPE research. [3]

3.2.1. Introduction and Overview of MTPE

The introduction and overview of MTPE fall under the category of macro-level research, characterized by their broad inclusiveness and universal applicability, making them the most frequently occurring topic among the corpus of papers collected for this study.

For example, Wei and Zhang [4] concentrated on the general conception, the necessity errors to be corrected approaches and post-editing. Cui [5] explored the concept of post-editing, analyzed the current applications and research status of post-editing, summarized the driving forces behind its development, investigated the types of texts suitable for post-editing, and proposed practical guidelines for improving the quality and efficiency of post-editing. Feng and Cui [3] introduced the current post-editing research both at home and abroad, centering on the research hot spots on MTPE and the development trends of post-editing research. Wang and Jia [6] provided a detailed analysis of the research progress and methodologies employed within these domains through an in-depth and comprehensive examination of four key research focal points.

The recent years, Hou [7] presented the latest advancements in translation technology tools, research perspectives, industry impacts, and the interdisciplinary development trends that encompass a wide range of fields through interviews with domain experts. Zhao [8] investigated the current state and challenges of machine translation post-editing. Wang et al. [9] provided a comprehensive review and synthesis of international research on post-editing cognition from 2011 to 2021. They outlined a roadmap for post-editing cognitive research, covering three major themes: cognitive processing in post-editing, measurement and evaluation, and competency development.

3.2.2. Evaluation Studies of MTPE

Research on the evaluation of machine translation post-editing refers to studies that assess various dimensions such as the quality, efficiency, value, significance, time consumption, and cognitive load associated with post-editing, with empirical and comparative methodologies being the most prevalent approaches. This category of research also ranks among the most frequently encountered topics within the corpus of papers collected for this study.

Yang and Fan [10] conducted a comparative analysis of machine-translated and human-translated texts in the field of scientific and technological discourse from the perspectives of semantics, pragmatics, and syntax, identifying several unique linguistic phenomena that require particular attention during the post-editing of scientific and technical texts. Li [11] investigated the impact of the source text on the time and quality of translators' post-editing. The research findings indicated that the source text has a minimal influence on the time required for post-editing and an insignificant impact on the quality of post-editing. Geng et al. [12] evaluated the post-editing performance of the chatbot ChatGPT in English-Chinese and Chinese-English translation tasks. Wang and Wang [13] carried out an exploratory study on the feasibility and effectiveness of the theoretical model. Wang and Wang [14] discussed the definition of post-editing cognitive effort and its four commonly used measurement methods, reviewed and commented on the main empirical research results, and reflected on the existing problems. Wang et al. [15] pointed that translators made more cognitive effort in post-editing compared with translation revision (i.e., revising human translations). Jia [16] conducted an experiment to analyze the task process characteristics, speed, task difficulty experience, and translation quality during human translation and post-editing.

3.2.3. Cultivation of Post-editing Competencies and Training of Post-editors

The research on the post-editing capabilities of machine translation is typically aimed at facilitating the development of post-editing professionals, a process that is intrinsically linked to the educational practices associated with post-editing. It is regrettably that within the broader context of academia in China, research endeavors in this specific area remain relatively uncommon.

Feng et al. [17] explored the training pathways for post-editors from aspects such as the industry demand for post-editing, post-editing capabilities, course settings for post-editing, post-editing teaching, and the selection of post-editing tools. Then, Feng et al. [18] constructed a three-dimensional model of post-editing capabilities, including cognitive, knowledge, and skill dimensions, and elaborated on the specific composition and manifestations of each dimension. Zhong et al. [19] constructed a post-editing capability structure oriented towards teaching, dividing it into: (1) pre-editing text processing capabilities; (2) post-editing text processing capabilities; (3) basic general capabilities. Yang et al. [20] deeply explored the category flow between post-editing capability elements and translation capability, as well as translation revision capability elements, and further generated a post-editing capability structure model. Fan et al. [21] pointed out that for translations with high-quality requirements, the post-editing stage after machine translation requires translators to have a solid bilingual foundation, excellent logical thinking, and keen aesthetic awareness, and to strive to produce creative or classic translations.

3.2.4. Identification of Machine Translation Errors and Post-editing Tools

The identification of machine translation errors can serve as a foundation for the development of specialized post-editing tools. However, within the research in China, a greater emphasis has been placed on the identification of machine translation errors themselves, while the development of post-editing tools remains relatively rare and is often only incidentally discussed in the literature.

Li et al. [22] proposed a secondary processing of machine translation for typical errors that are regular and frequently occurring, that is, to automate post-editing to filter out these typical errors, thereby speeding up machine translation and improving its quality. Cui et al. [23] introduced the working principle of post-editing, discussed the error types of machine translation through examples, and analyzed the characteristics of post-editing work. Yang [24] took the English-Chinese translation of the book *Submarine Hydrodynamics* as an example to study the error types and distribution of different neural machine translations. Qian et al. [25] examined how the error types of English-to-Chinese neural network machine translation affect the allocation of translators' attention resources in the post-editing and human translation processes. Qiu et al. [26] combined human post-editing with error analysis, annotated post-editing operations with errors, and used a combination of automatic and manual annotation methods to build a fine-grained English-Chinese machine translation error analysis corpus.

3.2.5. Industry-oriented Perspectives in MTPE Research

This type of research primarily examines post-editing from the perspective of the language services industry, with the majority of authors being practitioners within the field. In contrast, academic research on this topic within scholarly community in China remains relatively fragmented and less cohesive.

From the research of intelligent machine translation, Huang [27] proposed the design principles and implementation algorithms for an intelligent post-editing editor. For collaborative translation technology, Ye et al. [28] analyzed the main problems faced by collaborative translation technology, and introduced the solutions provided by existing research. From the perspective of news industry, Feng et al. [29] explored the application of post-editing in news translation and concluded that adopting a post-editing model can significantly improve the translator's work efficiency and facilitate the rapid dissemination of news translations. Meng et al. [30] discussed the three technical issues involved in post-editing: automatic post-editing, automatic machine translation quality assessment, and measurement of post-editing workload. Xia et al. [31] differentiated the types of post-editing of machine-translated English abstracts performed by authors and editors, elaborated on the task decomposition process of post-editing at the editorial level. Wang [32] argued that copyright holders and translators should make more detailed agreements on matters involving machine translation. Yao [33] discussed the typical problems and post-editing priorities that arise when applying machine translation systems to the English-Chinese translation of United Nations documents.

3.3. Development Trends in Machine Translation Post-editing

Drawing upon the comprehensive characteristics and thematic delineations outlined above, the evolving trajectory of this research encompasses the following trends:

3.3.1. Intensification of Cognitive Processing Involved in MTPE

In the future, the field of MTPE will increasingly emphasize the integration of globalization and localization, while simultaneously strengthening cognitive research. As the process of globalization accelerates, the demand for cross-linguistic and cross-cultural content will continue to grow. MTPE will not only need to address diverse linguistic and cultural contexts to enhance the accuracy and adaptability of translations but also require localization adjustments based on the cultural and social backgrounds of target markets to improve the acceptance and effectiveness of translations. Concurrently, research will focus more on the cognitive processes involved in post-editing, including the cognitive mechanisms at different stages, the roles of automatic and controlled processing.

3.3.2. Refinement of Evaluation Research for MTPE

In the future, post-editing evaluation will become increasingly refined, employing a multidimensional approach to assess translation quality. This comprehensive evaluation will consider various aspects such as grammar, semantics, style, and consistency. By doing so, it will provide a more comprehensive understanding of translation quality and offer more precise feedback for post-editors. With the advancement of technology, real-time evaluation and feedback will become feasible. Post-editing tools will be capable of providing instantaneous assessments of translation quality, enabling editors to promptly identify and correct errors, thereby enhancing their work efficiency.

3.3.3. Professional Training and Interdisciplinary Talent Development for MTPE

Given the increasing demand for high-quality translations within the industry, it is anticipated that post-editors will necessitate more specialized training and certification in the future. The training content is expected to encompass a wide range of areas,

including machine translation technology, industry-specific knowledge, and advanced editing skills. Considering the multifaceted nature of modern translation tasks, post-editors are required to possess a multidisciplinary knowledge base, which includes, but is not limited to, linguistics, computer science, and industry-specific expertise. Consequently, universities and training institutions are likely to place greater emphasis on cultivating interdisciplinary talents in the future and how to enhance translators' higher-order thinking skills, self-regulatory abilities, and related capabilities, thereby supplying the field of post-editing with a steady stream of high-quality professionals who are well-equipped to address the complex demands of contemporary translation tasks.

3.3.4. Continuous Optimization of Technologies and Tools for MTPE

With the continuous advancement of technology, neural network machine translation (NMT) is poised to achieve even greater progress, while post-editing tools, in parallel, are evolving towards higher levels of intelligence, thereby significantly enhancing the efficiency and accuracy of the translation process. Neural Machine Translation, having already emerged as the mainstream technology in the field of machine translation, is poised to undergo continuous optimization in the future, which will be aimed at enhancing the accuracy and fluency of translations. The focus of research will be directed toward the challenge of better handling low-resource languages and complex syntactic structures. Meanwhile, future post-editing tools are anticipated to evolve to the point where they are capable of automatically identifying and correcting a broader spectrum of errors, thereby significantly reducing the workload of post-editors. For instance, deep learning algorithms, with their increasing sophistication, will be able to achieve a deeper understanding of context, enabling them to more accurately detect semantic and logical errors.

3.3.5. Deepening of Industry Perspectives for MTPE

Industry-specific post-editing standards, which are tailored to meet the unique linguistic and terminological requirements of different sectors, are becoming increasingly important in the translation industry. As translation quality requirements vary significantly across different industries, future research is likely to place increased emphasis on the development of industry-specific post-editing standards and norms. For instance, industries such as medical, legal, and financial, which are highly specialized and sensitive, will inevitably enforce stricter translation standards to ensure accuracy, reliability, and compliance with regulatory requirements.

Industry collaboration and data sharing are emerging as essential strategies to enhance translation quality and efficiency through the pooling of resources and expertise. Given the growing importance of translation quality in various industries, the collaboration between enterprises and research institutions is set to become more intimate and strategic. Through data sharing and collaborative research initiatives, the post-editing process can be more effectively optimized, thereby enhancing translation efficiency and quality.

4. Conclusions

As a core component of human-machine collaborative translation, machine translation post-editing is both a product of technological advancement and a response to industry needs. By employing a combination of literature analysis and qualitative-

quantitative methods, this paper examines the characteristics, themes, and future directions of MTPE research in China over the last 30 years.

From a broader perspective, the development of the machine translation post-editing field is poised to advance in multiple interconnected directions, including the integration of globalization and localization, the intensification of cognitive research, the refinement of evaluation methodologies, the ongoing optimization of post-editing technologies and tools, professional training and interdisciplinary talent development, as well as the deepening of industry-specific insights. These converging trends will collectively drive the field forward, with research not only fostering innovation in translation theory and interdisciplinary collaboration but also enhancing the efficiency of the translation industry and supporting global development. As technological advancements continue and industry demands grow, post-editing research is poised to assume an even more critical role in the future.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

Funding

This work was supported by the Teaching Research Project of Yangtze University, Jingzhou, Hubei, P. R. China (Grant No.JY2023048) and the Humanities and Social Sciences Research Project of Hubei Provincial Department of Education, P. R. China (Grant No.24Q030).

References

- [1] Koehn, P.; Germann, U. The Impact of Machine Translation on Post-editing and Translation Productivity. *Translation Spaces*, 2014, 3(1), 5-24.
- [2] ISO 18587:2017- Translation Services - Post-editing of Machine Translation Output - Requirements. Available online: <https://www.iso.org/standard/62970.html> (accessed on 22 May 2025).
- [3] Feng, Q.; Cui, Q. Research Focuses and Trends in Post-editing of Machine Translation. *Shanghai Journal of Translators*, 2016, (6), 67-74+89+94.
- [4] Wei, C.H.; Zhang, C.B. Post-editing of Machine Translation. *Chinese Science & Technology Translators Journal*, 2007, (3), 22-24+9.
- [5] Cui, Q.L. On Machine Translation Post-editing. *Chinese Translators Journal*, 2014, 35(6), 68-73.
- [6] Wang, X.L.; Jia, Y.F. Research Focus and Trends of Machine Translation Post-editing. *Journal of Hunan University (Social Sciences)*, 2018, 32(2), 82-87.
- [7] Hou, Q. Translation Technology Converging to the Cloud: An Interview with Professor Tiina Tuominen. *Chinese Translators Journal*, 2021, 42(3), 111-116+192.
- [8] Zhao, T. Current situation and problems of machine translation post-editing. *Foreign Language Education*, 2021, 42(4), 100-104.

- [9] Wang, X.L.; Chen, G.J.; Zhou, X.Y. Mapping the Structure of Cognitive Machine Translation Post-Editing Studies (2011-2021). *Journal of Foreign Languages*, 2023, 46(5), 90-100.
- [10] Yang, W.D.; Fang, Z.R. Case Studies of Postediting in Machine Translation of Scientific and Technological Texts. *Shanghai Journal of Translators*, 2021, 6, 54-59.
- [11] Li, M., Impact of source texts on translators in machine translation post-editing output. *Foreign Language Education*, 2021, 42(4), 93-99.
- [12] Geng, F.; Hu, J. New Direction for Post-Editing by Artificial Intelligence Translation: A Case Study of ChatGPT Translation. *Foreign Languages in China*, 2023, 20(3), 41-47.
- [13] Wang, L.; Wang, X.L. The Study on the Training Model of Machine Translation Post-Editing Competence in the Era of ChatGPT. *Technology Enhanced Foreign Language Education*, 2023, 4, 16-23+115.
- [14] Wang, J.Y.; Wang, L.Y. Research progress of cognitive effort of post-editing in machine translation. *Journal of Xi'an International Studies University*, 2024, 32(2), 81+86.
- [15] Wang, X.L.; Li, X.Y.; Chen, G.J. Comparing translation revision and machine translation post-editing: Evidence from keylogging, retrospection and questionnaire. *Foreign Language Learning Theory and Practice*, 2024, 5, 88-97.
- [16] Jia, Y.F. Integrating translation project management platforms with generative AI technologies: An investigation into the translation process through human-machine interaction. *Foreign Language Teaching and Research*, 2024, 56(6), 937-949+961.
- [17] Feng, Q.G.; Zhang, H.Y. To train post-editors in the background of the global language services industry. *Foreign Language World*, 2015, 1, 65-72.
- [18] Feng, Q.G.; Liu, M. Towards the construction of a three-dimension model of post-editing competence. *Foreign Language World*, 2018, 3, 55-61.
- [19] Zhong, W.; Shu, C. Competence Structure and Course Design of Post-Editing—A Frontier Analysis Based on Foreign Post-Editing Courses. *Technology Enhanced Foreign Language Education*, 2020, 6, 86-91+7.
- [20] Yang, Y.X.; Wei, X.Q. An analysis on machine translation post-editing competence and its cultivation from the perspective of categorization theory. *Foreign Language Education*, 2023, 44(1), 90-96.
- [21] Fan, Z.R.; Yang, W.D. Principles and Strategies of Post-editing in the Human-machine Coupling Era. *Shanghai Journal of Translators*, 2024, 4, 29-34.
- [22] Li, M.; Zhu, X.M. New Exploration in Post-Editing Automation for English - Chinese Machine Translation. *Chinese Translators Journal*, 2013, 34(4), 83-87.
- [23] Cui, Q.L.; Li, W. The Character of Error Types of Post-editing: Perspective of Machine Translation Based on Scientific and Technological Materials. *Chinese Science & Technology Translators Journal*, 2015, 28(4), 19-22.
- [24] Yang, Y.W. Post-editing of Neural Machine Translation—Taking “Submarine Hydrodynamics” as An Example. *Chinese Science & Technology Translators Journal*, 2020, 33(4), 21-23+42.

- [25] Qian, J.J.; Xiao, W.Q.; Li, Y.; Xiang, X. Impact of neural machine translation error types on translators' allocation of attentional resources: Evidence from eye-movement data. *Foreign Language Teaching and Research*, 2022, 54(5), 750-761+800-801.
- [26] Qiu, B.L.; Wang, M.W.; Li, M.X.; Chen C. Xu, F. Construction of Fine-Grained Error Analysis Corpus of English-Chinese Machine Translation. *Journal of Chinese Information Processing*, 2022, 36(1), 47-55.
- [27] Huang, H.Y.; Chen, Z.X. Design and Implementation of An Intelligent Post-editor. *Journal of Software*, 1995, 3, 129-135.
- [28] Ye, N.; Zhang, G.P.; Han, Y.D.; Cai, D.F. From Computer-assisted Translation to Collaborative Translation. *Journal of Chinese Information Processing*, 2012, 26(6), 1-10.
- [29] Feng, Q.G.; Li, J.W. Investigation on the Post-editing of Machine-translated News. *Technology Enhanced Foreign Language Education*, 2016, (6), 74-79.
- [30] Meng, F.Y.; Tang, X.R. Efficiency First: Reviewing Technologies of Machine Translation Post-Editing. *Computer Engineering and Applications*, 2020, 56(22), 25-32.
- [31] Xia, L.; Li, Y.M.; Li, H.W. Machine translation and post editing of English abstracts in the context of artificial intelligence. *Acta Editologica*, 2022, 34(4), 396-401+406.
- [32] Wang, G.Z. Re-interpretation of the Translation Right System in the Scene of Artificial Intelligence Machine Translation. *Journal of Political Science and Law*, 2023, 3, 79-89.
- [33] Yao, B. Exploration into Problems in Machine Translation and Post - Editing of United Nations Documents. *Chinese Translators Journal*, 2024, 45(04), 144-151.



© 2025 by the author(s); licensee International Technology and Science Publications (ITS), this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (<http://creativecommons.org/licenses/by/4.0/>)