A Literature Review of Interpreting Studies on Culture-Loaded Terms Based on Cognitive Translation Theory

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Abstract

This paper revolves around the framework of Cognitive Translation Theory, exploring translation as a cognitive process. The Theory regards translation as a cognitive activity, encompassing three levels of cognitive processes: conceptual level, content level, and formal level. In Western academia, cognitive translation studies have become a research hotspot, involving fields such as psychology and cognitive linguistics, bringing new perspectives and methods to translation studies. However, in China, research on this field is still in its early stages and requires more scholars' dedication and exploration. Meanwhile, research on cultural-loaded words in interpreting is gradually gaining attention, but its integration with Cognitive Translation Theory remains relatively weak and requires further exploration and research. Therefore, future research should focus on integrating Cognitive Translation Theory with the study of cultural-loaded words in interpreting to promote the development of translation theory and practice.

Keywords: Cognitive Translation Theory, culture-loaded terms

1. Introduction

With the acceleration of globalization and the deepening of cross-cultural communication, translation plays an increasingly important role in today's world as a bridge connecting different languages and cultures. Traditional translation studies have primarily focused on the quality and effectiveness of translations. However, with the development of cognitive science, Cognitive Translation Theory has gradually emerged, viewing translation as a cognitive activity and exploring it from the perspective of translators' psychological processes and cognitive mechanisms. The introduction of this theoretical framework has provided new perspectives and methodologies for translation studies, facilitating the advancement of translation theory.

Internationally, cognitive translation studies have become a research hotspot, involving multiple disciplines such as psychology and linguistics, and have garnered widespread attention and discussion in Western translation studies. Nevertheless, research on Cognitive Translation Theory in China is still at a preliminary stage, with relatively few academic

achievements. There is an urgent need for more scholars to engage in this field. This paper aims to provide a systematic review of cognitive translation theory, offering a comprehensive understanding of the current state of development and research trends in cognitive translation studies from both international and domestic perspectives, with the hope of providing new insights and inspirations for translation research in China.

2. The Theoretical Framework of Cognitive Translation

With advancements in technology, a series of cognitive revolutions have occurred, leading to significant progress in cognitive science regarding the exploration of brain activity and the mechanisms of mental processes. This development has intertwined with other disciplines, fostering mutual growth. In the late 20th century, a noticeable shift occurred in Western translation studies, moving from a focus on translated texts to a focus on translators, and from an emphasis on outcomes to a greater emphasis on processes. During this time, a cognitive shift also took place, with the translation field beginning to incorporate elements and methods from cognitive science to study the psychological processes of interpreters and translators.

Cognitive Translation Theory posits that translation is a cognitive activity, specifically a cognitive operation that involves a series of mental processes. This cognitive process can be viewed as a schema characterized by "semantic features." This schema consists of three levels: 1) the conceptual level; 2) the content level; and 3) the formal level. The conceptual level pertains to specific content, primarily including linguistic knowledge and language competence. The content level refers to specific linguistic components within discourse. The formal level encompasses the linguistic forms found in discourse, such as words and phrases.

Current directions in cognitive research mainly include psychology or cognitive psychology, cognitive linguistics, and cognitive neuroscience. Of these cognitive research areas, cognitive neuroscience is more aligned with psychological research domains and requires sophisticated research equipment and instruments. Consequently, the intersecting disciplines that have a profound impact on translation studies are translation psychology (cognitive translation

psychology) and translation cognitive linguistics. Specifically, research and work in translation psychology primarily involve a combination of quantitative and qualitative studies, utilizing methods such as statistical analysis, TAPS auditory analysis, eye-tracking, questionnaires, and interviews, with a focus on aspects like translators' allocation of attention and translation memory. Translation cognitive linguistics posits that translation fundamentally involves cognitive processing of information, emphasizing the exploration of translators' brain mechanisms and their influencing factors. Cognitive linguistics considers users' everyday experiences as a premise for language use, highlighting the close relationship between language itself and cognitive capacities. Thus, Cognitive Translation Theory views the translator's living environment, life experiences, translation experiences, and translation competence as part of the foundational aspects of translation. It also pays attention to both the physical and mental states of translators, thereby elucidating how translations are produced, and which factors affect the quality or speed of translation outputs.

3. Overview of Research in Cognitive Translation Studies

3.1 International Research on Cognitive Translation Studies

Cognitive translation studies originated in the West, where their early development and interdisciplinary research are notably more advanced than in the East. Bell (1991) proposed a study of translation psychological models based on psycholinguistics and artificial intelligence, contributing valuable explorations to translation research. Chesterman (1998) was the first to introduce a discourse-centered cognitive study, categorizing it into three types: comparative models, processing models, and causal models. Kussmaul (1971) developed an interest in cognitive research through the study of translation strategies and applied cognitive linguistics to the field of translation. Subsequently, he integrated Fillmore's scene and frame theory, Lakoff's schemata of embodied cognition and formal spaces, Langacker's figure-ground connection, and Schank's notion of thematic organization to investigate creative problems in translation from the perspective of cognitive processes of creative thinking. Italian scholar Riccardo Martano first proposed the concept of "cognitive translation studies,"

advocating for the establishment of a field that combines scientific rigor with humanistic considerations. This approach entails the examination of brain processing mechanisms alongside humanistic thought, rendering traditional translation studies more objective. In 2010, John Benjamins Publishing Company released the book *Translation and Cognition*, which specifically collected papers on cognitive translation studies, providing a comprehensive overview of the topic and offering references and space for related discussions in the translation field. In 2017, *The Handbook of Translation and Cognition* was published by Wiley in the United States, marking the first integrative handbook that included 30 papers on cognitive translation research. This book not only emphasizes the value of cognitive science in translation but also highlights future challenges and trends within the field.

3.2 Research on Cognitive Translation Studies in China

In the context of interdisciplinary integration and research, China has introduced the concept of cognitive translation from the West and has implemented practical studies in this field, reaching new heights today. Based on the classification by Meng Zhigang and Wen Ting (2014), discussions on Cognitive Translation Theory and practice are primarily reflected in five dimensions.

3.2.1 Relevance Theory

Lin Kannan (1994) was the first to introduce Gutt's Relevance Theory, which posits that the foundation of translation is a reasoning process. To achieve optimal relevance, translators should align the intentions of the source language with the expectations of the target language audience. Rui Min (2000) indicated that understanding discourse should rely on context to seek information relevance, reasoning based on the relationship between discourse and context to achieve contextual effects. A recent search of nearly 200 journal articles on translation research guided by relevance theory from the past decade in China National Knowledge Infrastructure (CNKI) reveals that highly cited studies mainly focus on the selection of translation strategies. According to this theory, interpreters must improve the speed and quality of discourse comprehension by establishing or seeking contextual assumptions closely related to the discourse information. The quality of the

translation is closely linked to high and low relevance.

3.2.2 Adaptation Theory

Jef Verschueren (2000) proposed Adaptation Theory as early as 1987, providing a clear explanation in his work, *Understanding Pragmatics*. Adaptation Theory refers to the dynamic adaptation in language context and structure. This theory asserts that language possesses three characteristics: variability, negotiability, and adaptability, leading to mutual adaptability in language. Language users can make a series of linguistic choices applicable to translation. Due to internal or external reasons, people may consciously or unconsciously make these language selections when using language. This theory was first applied to the context of translating scientific and technological texts, later extending to the translation of brand names. Furthermore, studies in advertising translation, the translation of the novel *Water Margin*, and dialogue translation have demonstrated the guiding role of this theory in translation, providing new insights and broader research scopes for subsequent scholars.

3.2.3 Cognitive Pragmatics

Translation involves communication and information transfer between two languages and serves as a means of cross-cultural communication. However, translation is constrained by the translator's cognitive psychology, knowledge structure, and thinking patterns. Therefore, the optimal relevance of the target language and source language context must arise from the cognitive similarities between the translator and the source text author. Yu Jianping combined Lakoff and Johnson's views on linguistic experience and empirically studied how Chinese-to-English translations influence translators' cognitive abilities. However, data indicates that the number of journals focusing on cognitive pragmatics has been comparatively sparse over the past two decades. Consequently, engaging in research within this dimension lacks strong theoretical support.

3.2.4 Metaphor

Metaphor refers to the hidden meanings behind language. Language serves as a carrier of culture, with both being interdependent and mutually influential, which makes translation a means of conveying cultural significance. Cognitive linguistics asserts that metaphors

arise from people's bodily experiences and life experiences, representing a unidirectional projection from the source language to the target language, and gain influence in reality when widely accepted. This provides a revelation for translation: cultural output needs metaphors, and translating metaphors effectively is crucial for promoting Chinese voices and culture while enhancing their recognition and influence. Given its close relationship with culture, the feasibility of researching metaphors offers a relatively broad scope, making it the dimension with the most available literature. As such, there is a wealth of research on metaphors in master's and doctoral theses indexed in CNKI, often centered around the translation of Chinese classics. For example, Zhuang Huaqin (2023) explored narrative metaphors in the translation of *Dream of the Red Chamber*, and Deng Yan and Xu Xiangyu (2023) focused on metaphoric translation in *To Live*.

3.2.5 Metonymy

Metonymy is a rhetorical device that substitutes a part for the whole. Dong Chengru (2004) argued that, from the perspective of cognitive linguistics, metonymy is essential to language, human thought, and behavior, permeating various aspects of daily communication. Lu Weizhong demonstrated the feasibility of metonymy translation, advocating for the use of different translation strategies based on specific contexts, thereby providing strong evidence for practical metonymic translation. Currently, similar to metaphors, most translation studies on metonymy primarily focus on literary subjects, with rhetoric as a major direction, although the volume of research on metonymy is comparatively lower than that of metaphors.

3.3 Research Trends and Existing Issues

Cognitive Translation Studies have demonstrated the cognitive attributes of translation and have developed an empirical model for translation research that transitions from description to explanation. This field combines various psychological testing tools to discover and validate the nature of translation behavior, enabling translation research to advance further along the path of scientific empiricism. In professional training, the role of cognitive translation continues to be significant, delving into various aspects of the translation process. Wang Yin (2014) discussed methods of cognitive translation, recommending a "mixed

method" strategy for translation. Similarly, Hu Kaibao and Li Xiaoqian (2016) noted that, in the current technological context, corpus-based translation studies can integrate with cognitive translation research, thus broadening the research scope of both fields.

First, from a macro perspective, translation is a social communicative phenomenon; from a micro perspective, it is a psychological depiction of the individual translator. Scholars need to combine both aspects to conduct empirical research on cognitive translation. Second, cognitive translation studies themselves are a result of interdisciplinary convergence. When exploring interpreting or written translation practices, researchers can introduce various dimensions, making interdisciplinary research essential. Finally, the practical research of contemporary cognitive translation studies must be based on the national context and research environment. Meng Zhigang proposed that future translation research in China must establish its own paradigm. This suggests that the translation community should foster cultural confidence to promote Chinese culture globally and spread the "good voice" of China, relying on the efforts of Chinese scholars to create a research paradigm with distinctive Chinese characteristics. This is particularly crucial for emerging translation theories, which need to establish a scholarly presence and pave the way for future domestic researchers.

Cognitive Translation Studies have posed a series of challenges to traditional translation research, driving the transformation of research paradigms. However, despite significant progress, practical applications of Cognitive Translation Theory still face numerous issues that need urgent attention. For instance, cognitive translation studies are relatively new within the field and have yet to form a coherent system; further development into a unified and reliable theoretical framework will require time and investment. Within such a disciplinary framework, research outcomes are relatively less abundant compared to other theoretical approaches. Additionally, the connections with traditional disciplines such as linguistics and psychology are not sufficiently strong, lacking an interdisciplinary research platform. Within China, the study of Cognitive Translation Theory still relies heavily on foundational work from abroad, and the traditional comparative framework between "Eastern" and "Western"

thought is in fact a comparison among multiple nations rather than a simple dichotomy. Therefore, Chinese scholars should focus on developing a localized theoretical system.

4. Current State of Research on Culture-Loaded Words in Interpreting

4.1 Current Research Status

Culture-loaded words refer to vocabulary that carries specific cultural connotations or backgrounds within a language and culture. These words may encapsulate information related to specific cultures, traditions, values, customs, and historical events, and their meanings and usages can be influenced by particular cultural contexts. Culture-loaded words are of significant importance in cross-cultural communication and translation, as they may lead to misunderstandings or even conflicts among audiences in different cultural environments. Therefore, understanding and accurately handling culture-loaded words in interpreting work is crucial. As Johnson (2017) pointed out, interpreting involves not only the conversion of language but also the transmission and interpretation of culture, indicating that cultural factors play a vital role in the interpreting process.

A search in CNKI for "culture-loaded words" and "interpreting" reveals a total of 41 articles in Chinese journals. Chen Feihu (2007) was the first to introduce schema theory in the study of culture-loaded words in Chinese-English interpreting. He summarized four handling methods and proposed three interpreting strategies: introduction, adjustment, and zero introduction, thus pioneering research from the perspective of cultural schemata. Subsequently, domestic scholars have approached the study of challenging cultural vocabulary in interpreting from other perspectives, such as functional equivalence, relevance theory, and interpretive theory, typically focusing on Chinese conferences, such as political events like press conferences. Zhao Yutong (2013) identified three methods for translating culture-loaded phrases in conference interpreting: literal translation, free translation, and adaptation. Progress in the practice of interpreting culture-loaded words has also been made in other fields, including the cultural connotations embedded in minority languages, speeches by President Xi Jinping, and culturally specific vocabulary in his addresses. Wang Hai (2016) conducted a simulated

consecutive interpretation of President Xi Jinping's speech during his visit to Russia, exploring and summarizing strategies for interpreting culture-loaded words, providing references for future researchers.

Overall, in the decade following 2015, the volume of research on culture-loaded words in interpreting within graduate theses has significantly increased, constituting nearly eighty percent of the total. Moreover, due to the development and dissemination of mass media, the interpreting materials accessible to interpreters and scholars have also expanded, leading to a diversification in material types. Additionally, the influence of corpora and computer-assisted translation has diversified the research methodologies employed.

The study of culture-loaded words has a long history, and in response to the need to promote Chinese culture and the "Chinese voice," both the quantity and quality of relevant research have shown marked improvement. For example, Li Xiaoying et al. (2024) investigated the connotative meanings of the Chinese words "阴" and "阳" from a cognitive perspective. Research on interpreting from the viewpoint of cognitive translation is also gradually gaining prominence. Yu Cuihong (2023) remarked that "cultural schemata can assist interpreters in selectively adopting corresponding cognitive translation strategies, balancing translation accuracy with readability." Furthermore, Chen Anqi (2023), in her interpreting practice report, found that when issues arise during the interpretation of culture-loaded words, cognitive supplementation is necessary to "evoke the same communicative effect as that in the source language," resulting in high-quality translations. Qu Xinrong (2017) used the cognitive load model as a theoretical basis and empirically examined the effects of culture-loaded words on Chinese-English simultaneous interpreting and corresponding translation methods, concluding that the appropriate use of explanation, literal translation, adaptation, and omission can effectively and accurately convey the meanings of culture-loaded words. Zhou Dan (2013), guided by Cognitive Translation Theory, analyzed the role of this theory in the interpreting of culture-loaded words during Wen Jiabao's press conference, asserting that to achieve optimal correlation between the source and target languages, it is essential to maintain

the cultural connotations of Chinese as much as possible while fully considering the cognitive context of the target audience.

4.2 Strategy Analysis

First, enhancing interpreting skills and professionalism while flexibly employing translation strategies is essential. Baker (1992) advocated for the professionalization and standardization of translation early on. He emphasized that interpreters should possess specialized knowledge and skills and recommended the establishment of industry standards and norms to improve translation quality and efficiency. This notion has been reiterated in interpreting research over the past thirty years.

Second, increasing cultural sensitivity and awareness of cross-cultural communication is crucial. Angelelli (2004) highlighted that, under the influence of globalization, patients and medical staff in healthcare settings may come from diverse cultural backgrounds, presenting challenges for cross-cultural communication. It is imperative to enhance cultural sensitivity and professionalism. Interpreters not only need to have linguistic abilities but also must understand the backgrounds, values, and traditions of different cultures to ensure accurate information transmission and to avoid cultural conflicts.

Third, employing corpus-based strategies is recommended. Zhang Congran (2024), integrating cross-cultural studies with contradiction analysis methods, pointed out that translators can use corpora to investigate the translation methods of culture-loaded words, thus addressing and resolving cultural contradictions. Liu Xiaodong et al. (2023) proposed the creation of a cognitive-oriented translation corpus, providing new methods for the study of translation strategies.

Overall, research on culture-loaded words in interpreting shows a continually increasing trend, yet it remains comparatively underexplored compared to other fields, indicating significant potential for further research advancements. Scholars, both domestic and international, have offered numerous recommendations across four dimensions: professional competence, strategy selection, cultural sensitivity, and cultural background differences, which can greatly assist in addressing the challenges of translating culture-loaded words in interpreting contexts.

5. Summary

Cognitive Translation Theory emphasizes the cognitive activities involved in the translation process, focusing on the translator's comprehension and reproduction capabilities. By integrating the study of culturally loaded terms, translators can enhance their understanding of cultural contexts, improving the accuracy and fluency of their interpretations. The Theory provides psychological models and cognitive processing principles that help researchers explore the cognitive processes of information handling during interpreting. Such insights enable interpreters to develop more effective strategies for negotiating culture-loaded terms, minimizing potential misunderstandings. In today's globalized world, accurate translation of these expressions is essential for fostering understanding across diverse cultures. By combining the theory with practical strategies, scholars can investigate how interpreters adapt to different cultural contexts, deepening comprehension of the interpreting process and enhancing cultural resonance. Moreover, this integration enriches interpreter training by improving cultural awareness and cognitive skills, guiding students in translation and interpreting (MTI) programs.

In summary, merging Cognitive Translation Theory with research on culturally loaded terms enhances interpretation quality and efficiency, fosters cultural exchange, and supports the development of interpreters, thus holding significant theoretical and practical value.

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