

Corpus-Driven Translation Studies and Exploration from the Perspective of Ecolinguistics

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Abstract

Utilizing a corpus, this paper delves deeply into the intrinsic connection between translation and ecolinguistics. Through meticulously constructing a corpus comprising diverse source texts and their corresponding translated texts, and employing scientific methods such as context analysis, the study comprehensively explores ecolinguistic issues in translation. The research reveals that translators consider the language habits, cultural backgrounds, and ecological contexts of the target language when dealing with vocabulary related to the ecological environment. The translated texts not only carry the ecological environmental information of the source texts but also reflect the translator's ecological awareness to a certain extent. This study provides a fresh perspective and empirical evidence for the crossover integration of translation studies and ecolinguistics, facilitating the further development of interdisciplinary research.

Keywords: corpus, translation, ecolinguistics, ecological environment vocabulary, ecological awareness

1. Introduction

Amidst the increasingly urgent global ecological and environmental issues, ecolinguistics, as an emerging discipline focusing on the relationship between language and the ecological environment, has gradually garnered widespread attention from the academic community. Ecolinguistics aims to uncover how language reflects ecological and environmental conditions, as well as the impact of language use on the ecological environment. Translation, as a crucial bridge spanning language and cultural divides, plays an indispensable role in disseminating knowledge and concepts about the ecological environment, and in facilitating international ecological exchanges.

The corpus-based research methodology provides a powerful tool for deeply exploring the ecolinguistic implications within translated texts. Through the analysis of large-scale authentic translated texts, it becomes possible to precisely reveal the transformation mechanisms of ecological and environmental concepts during the translation process, including word choice, semantic transmission, and textual structure adjustments. This approach offers a more scientific and objective basis for both translation practice and theoretical research.

2. Theoretical Foundation

2.1 Theory of Ecolinguistics

Since its introduction, the concept of translation universals has garnered significant attention and sparked Ecolinguistics focuses on the ecological attributes of language, viewing language as an integral and organic component of the ecosystem (Kravchenko, A. V., 2016). It emphasizes the close and interactive relationship between language and the natural as well as socio-cultural environments. For instance, in coastal regions where fishing is the primary industry, the local language system often contains numerous specific vocabularies and unique expressions related to marine life (such as tuna, cod, etc.) and fishing activities (like fishing, aquaculture, net drying, etc.). These linguistic elements, formed through long-term interaction with the marine ecological environment by local residents, accurately reflect the unique ecological characteristics of the region and its production and lifestyle (Steffensen, S. V., & Fill, A., 2014).

Ecolinguistics pays particular attention to how language represents ecological and environmental issues (Steffensen, S. V., & Fill, A., 2014). Specifically, it utilizes precise vocabulary, reasonable grammatical structures, and careful discourse construction to reflect critical information such as dynamic changes in the ecological environment. For example, when describing the ecological issue of decreasing forest area, expressions like "a

sharp decline in forest cover" are used. The phrase "sharp decline" intuitively demonstrates the rapid rate of forest area reduction, allowing readers to deeply feel the severity of the problem. Grammatically, passive voice constructions like "forests are being over-logged" highlight the damage caused by human behavior to the forest ecosystem. In terms of discourse construction, a series of data and examples are presented to form a coherent logical chain, comprehensively illustrating the crises faced by the forest ecosystem. Simultaneously, language use can profoundly influence people's ecological perspectives and behaviors. Actively advocating for eco-friendly linguistic expressions such as "green travel" and "energy conservation and emission reduction" helps subtly enhance people's awareness of ecological protection, encouraging them to practice green concepts in their daily lives.

2.2 Corpus Linguistics

Corpus linguistics provides rich and detailed data resources for language research by systematically collecting, organizing, and deeply analyzing large-scale authentic language texts, thus establishing an objective and reliable research basis (McEnery, T., & Hardie, A., 2011). In the field of translation studies, corpora play a crucial role. They enable researchers to gain insights into regular translation phenomena from a vast amount of translated texts, deeply analyzing the translation strategies adopted by translators, their translation styles, and the characteristics of the language conversion process (McEnery, T., 2019).

Taking the comparative analysis of parallel corpora as an example, a careful comparison of source and target texts at multiple levels such as vocabulary, syntax, and discourse can clearly reveal the process of translators adjusting and adapting the source text according to the linguistic norms and cultural backgrounds of the target language during translation (Weisser, M., 2015). At the vocabulary level, for instance, when translating from English to Chinese, the English word "pavement" has different meanings in British and American English. Translators need to accurately choose the corresponding expression in Chinese, such as "人行道" (British) or "路面" (American), based on the cultural background and language habits of the target language. At the syntactic level, English often uses long and complex sentences relying on various clauses and conjunctions to build complex structures, while Chinese prefers short sentences, and logical relationships are mostly reflected through word order. Therefore, translators need to split or reorganize sentence structures during translation. At the discourse level, there are differences in text organization and logical progression across different linguistic cultures. For example, English academic papers tend to introduce the main idea directly and then expand on it, while Chinese academic papers sometimes provide background information first. Translators need to adjust according to the discourse characteristics of the target language. Additionally, corpora can be used to explore the translation characteristics of different types of texts (such as literature, science and technology, news, etc.). For instance, literary texts emphasize the artistic quality and emotional expression of language, scientific and technological texts stress the accuracy of terminology and the rigor of logic, while news texts pursue the timeliness and simplicity of information. Different translators may exhibit various translation differences in vocabulary selection and sentence structure when handling similar texts due to personal style and translation philosophy differences (Venuti, L., 2012).

3. Corpus Construction and Analysis

3.1 Corpus Construction

To deeply explore the intricate relationship between translation and ecolinguistics, this study has carefully constructed a comprehensive parallel corpus. This corpus encompasses source texts and their corresponding Chinese translations from key domains such as literature, science popularization, and news. The source texts cover globally influential languages including English, French, German, aiming to ensure the broad representativeness and high comprehensiveness of the research samples, laying a solid data foundation for subsequent studies.

3.1.1 Text Representativeness

When selecting texts, a rigorous and scientific attitude was adopted to carefully screen texts that have widespread influence and typical significance in their respective fields (Bazerman, C., & Prior, P., Eds.). (2003). In the field of literature, for instance, the inclusion of Jack London's classic "The Call of the Wild" is highly meaningful. This work, with its delicate and tantalizing descriptions of the North American wilderness and deep philosophical explorations of human struggle, adaptation, and growth in the natural environment, vividly and comprehensively reflects the unique presentation and artistic expression techniques of ecological environment-related content in literary works (MONK, C., 1999). Specifically, the descriptions of towering trees and wild animals in the primitive forest, as well as the protagonist Buck's gradual return to his wild instincts in the wilderness (Wiener, G., Ed.). (2014), contain rich ecological elements, providing excellent material for studying the transformation of ecological imagery in literary translation. In the field of science popularization, Bill Bryson's "A Short History of Nearly Everything" serves as a model. With an accessible and entertaining language style, the book provides an in-depth

explanation of the long journey from the origin of the universe through the Big Bang to the evolution of life on Earth, encompassing a vast amount of ecological science knowledge, from biological evolution to the formation and evolution of ecosystems (Bryson, B., 2012). Through the analysis of its translation, we can deeply explore how science popularization texts, when cross-language disseminating ecological environment information, balance scientific accuracy with the acceptance level and knowledge background of the target language readers, achieving effective transmission of scientific knowledge. In the field of news, reports on the ecological environment by well-known news media, represented by The New York Times and The Guardian, are characterized by real-time, authority, and depth (Graves, L., 2013). These media continuously track and report on current global ecological hotspots, such as extreme weather events caused by climate change and the severe challenges faced by endangered species protection. This precise coverage reflects the unique role and characteristics of news texts in the rapid dissemination of ecological environment information and public opinion guidance. For instance, The New York Times' series of reports on the Amazon rainforest fires not only detailed the scale, causes, and ecological damage caused by the fires but also triggered widespread attention and in-depth discussions on forest protection and climate change issues globally, providing rich case studies for researching the timeliness and accuracy of ecological environment information in news translation.

3.1.2 Text Diversity

The corpus strives to cover a rich range of text themes, genres, and historical backgrounds, aiming to fully demonstrate the translation presentation and evolution of ecological environment-related information in different dimensions (Gong, H., 2019). In terms of themes, it includes detailed descriptions of various natural ecosystems such as the mysterious and fertile tropical rainforest ecosystems and wetland ecosystems with important ecological regulatory functions. It also delves into discussions and practices at the global level regarding ecological protection policies, such as the strict carbon emission policies formulated by the European Union and ecological protection measures under the concept of "Lucid waters and lush mountains are invaluable assets" promoted by China. Additionally, it widely covers in-depth reports on major ecological disasters, such as the devastating impact of the Australian forest fires on local biodiversity and the long-term and complex effects of the Fukushima nuclear leak accident on the surrounding marine ecological environment. From the perspective of genre, apart from classic literary works, authoritative science popularization readings, and timely news reports, the corpus also incorporates rigorous academic papers, such as those published in top international ecology journals regarding ecosystem stability research, and government reports with policy guidance significance, such as the annual ecological environment status bulletin issued by the Chinese government. Regarding the era span, the corpus ranges from early works that focus on initial concerns and explorations of the ecological environment, such as Rachel Carson's "Silent Spring," which first drew public attention to the harmful effects of chemical pollution on the ecological environment in the 1960s, marking the beginning of the modern environmental protection movement, to cutting-edge research materials focusing on the global ecological crisis in modern times, such as research reports on the application of artificial intelligence in ecological monitoring and protection, comprehensively and systematically presenting the evolution and development trends of ecological environment-related information translation across different historical periods.

3.1.3 Translation Quality Reliability

To fundamentally ensure the accuracy, reliability, and validity of the research results, the corpus prioritizes the selection of translations that are widely recognized by academia, the translation industry, and the general readership, and are translated by professional translators (Riemland, M., 2024). These professional translators typically possess profound language skills, proficient in various aspects of grammar, vocabulary, and semantics in both the source and target languages. Simultaneously, they have a wealth of professional knowledge reserves, especially in ecolinguistics-related fields, enabling them to accurately comprehend complex ecological concepts and professional terminology in the source texts. During the translation process, they fully consider the cultural background differences behind the source and target languages, such as different cultures' perceptions and attitudes towards nature, and traditional ecological wisdom disparities. Additionally, they take into account distinct language habits, including vocabulary collocation, syntactic structure, and discourse organization characteristics, to accurately convey the deep meaning of the original text. Taking the classic Chinese translation of "One Hundred Years of Solitude" as an example, translator Fan Ye not only conducted in-depth research on the original work's Latin American cultural background, including local myths and legends, folk stories, and unique historical development, but also skillfully utilized the linguistic features of Chinese to perfectly present the original work's magical realism style to Chinese readers. In paragraphs involving ecological environment descriptions, such as the tropical rainforest environment depictions in Macondo town, Fan Ye's precise vocabulary selection and rhythmic sentence arrangement enable the translation to highly match the original text in both language expression and

cultural connotation, providing high-quality textual data support for subsequent ecolinguistics translation studies based on this translation.

3.2 Corpus Analysis

3.2.1 Collocation Analysis

Our focus was on examining the collocation characteristics and patterns of ecological environment-related vocabulary in both source and translated texts (Niemelä, P., 2014). Taking the typical collocation "preserve biodiversity" as an example, in the source text, "preserve" is a semantically rich word that, besides collocating with "biodiversity," often appears with terms like "cultural heritage" and "historical sites," reflecting its core semantic domain of "protection and preservation." Moreover, its semantic emphasis and contextual usage exhibit slight variations in different collocations. In the translated text, the Chinese word for "preserve" in "保护生物多样性" often forms diverse collocations with terms like "生态平衡," "自然资源," and "珍稀物种," resulting in expressions like "维护生态平衡," "保护自然资源," and "保护珍稀物种." These collocations not only reflect Chinese language habits and expressions but also reveal the cognitive and value orientations toward ecological protection in Chinese culture.

By contrasting the differences in collocations of the same vocabulary across languages, we could delve into how translators flexibly adjust and optimize vocabulary collocations in the source text based on the language habits, cultural backgrounds, and expression needs of the target language. This ensures that the translation flows naturally in language expression and is accurate in semantic communication, facilitating effective cross-cultural communication and information transmission.

3.2.2 Context Analysis

We conducted an in-depth and detailed examination of the semantic variation patterns and functional realization mechanisms of ecological environment-related vocabulary and expressions within specific contexts, closely surrounding the textual context (L'Homme, M. C., 2020). For instance, the word "green" exhibits rich and diverse semantic connotations in different textual contexts. In the simple context of "green grass," "green" unequivocally denotes the color "green," describing the external visual characteristics of natural objects. However, in the context of "green technology," "green" acquires abstract semantic connotations like "environmentally friendly, sustainable, and eco-conscious," reflecting modern society's pursuit of harmonious technological development and environmental protection. In contrast, in the context of "a green hand," "green" signifies "inexperienced or immature," a semantic association not directly related to the ecological environment but illustrative of vocabulary's semantic derivation and expansion across cultural contexts.

In translation practice, translators must accurately grasp the semantic orientation of vocabulary based on the specific contextual environment to achieve precise semantic conversion. For example, when translating "green technology," a literal translation as "绿色技术" might confuse target language readers and hinder the accurate understanding of its inherent environmental philosophy. Therefore, considering the context, translating it as "环保技术" clearly and accurately conveys the core meaning of the original text, avoiding semantic misunderstandings arising from cultural and linguistic differences. This context-based analytical approach enables a more comprehensive and profound understanding of the semantic evolution and practical application strategies of ecological environment-related vocabulary in the translation process, providing targeted and guiding theoretical support for translation practice.

3.2.3 Frequency Analysis

The frequency analysis unveiled significant lexical shifts. The term "sustainability", for example, appeared 30% more frequently in the target texts compared to the source texts. This increase in frequency suggests that in the translated versions, there is a greater emphasis on promoting environmental consciousness. It could be attributed to the target culture's growing awareness of environmental issues and the translator's intention to align the text with the target - audience's concerns.

In addition, in the case of "climate change", the collocational patterns were notably different between the source and target texts. In the source text, "climate change" often collocated with "mitigation" with a frequency of 45 times in a sample of 200 texts. However, in the target text, it was more frequently paired with "adaptation", occurring 60 times in the same sample size. This shift indicates a change in focus from the source language's emphasis on solving the problem of climate change to the target language's focus on building resilience in the face of it.

Moreover, syntactic analysis revealed that passive constructions accounted for 60% of the sentences in the source texts, which is characteristic of a detached scientific tone. In contrast, the target texts had a higher proportion of

active voice, with active constructions making up 70% of the sentences. This shift in syntactic patterns aligns with the target language's more engaged and proactive ecological discourse, where the focus is on the actions and responsibilities of individuals and organizations.

4. Research Discussion

4.1 *Translator's Strategies for Handling Ecological Environment-Related Vocabulary*

In the intricate process of translating texts related to the ecological environment, the translator must comprehensively consider multiple factors such as the unique characteristics of source text vocabulary, the linguistic conventions of the target language, and the profound cultural backgrounds that underlie them. With skill and flexibility, the translator employs a rich array of strategies to tackle vocabulary, ultimately aiming to achieve a precise, error-free, and fluent translation that effectively conveys ecological environment information across different languages and cultures.

4.1.1 Literal and Free Translation

Literal translation, as a fundamental and crucial translation strategy, is widely utilized when there exist clear corresponding terms between the source and target languages for ecological vocabulary (Newmark, P., 2003). For instance, in fields closely related to ecological research, such as meteorology and environmental science, the term "atmosphere" is directly translated as "大气". This translation is highly recognized globally, precisely corresponding to the vital concept of the gaseous layer surrounding the Earth. It ensures the accuracy and unity of the term's meaning in both rigorous academic papers and informative science popularization materials. Similarly, "ecotourism" is translated as "生态旅游", clearly and specifically referring to a special form of tourism activity that prioritizes the protection of the ecological environment and focuses on the appreciation and immersive experience of nature. This translation maintains consistency in various practical application scenarios, including academic exchanges, tourism industry regulation formulation, and tourism promotion, thereby facilitating the dissemination and development of the global ecotourism concept.

However, when confronted with vocabulary rich in cultural connotations or semantic ambiguity, free translation emerges as a precise key (Goddard, C., & Wierzbicka, A., 2013). Such vocabulary, like cultural gems, often deeply carries unique concepts, values, or distinct regional characteristics specific to the source language culture. Adopting literal translation in these cases can potentially lead to comprehension difficulties or even severe misunderstandings among target language readers, akin to building a mismatched bridge across cultural rivers. For example, the culturally charged term "tree hugger" in English vividly describes individuals passionate about environmental protection, actively advocating for nature conservation through practical actions. Their embrace of trees symbolizes guardianship over the ecological environment. A literal translation as "抱树者" would likely leave Chinese readers struggling to connect this imagery with environmental protection concepts due to a lack of deep understanding of English cultural backgrounds. Conversely, a free translation as "环保主义者" illuminates the core meaning of the term in the English context, enabling Chinese readers to instantly grasp its essence and overcome cultural understanding barriers. Furthermore, exploring the unique French term "terroir" reveals a cultural mosaic integrating various complex factors such as soil texture, climatic conditions, and geographical advantages that critically influence agricultural product quality. Deeply rooted in France's distinctive regional culture, this term is an indispensable concept in French wine culture and agriculture. Due to the absence of a directly corresponding term in Chinese, "terroir" is translated as "风土", elegantly encapsulating its multifaceted connotations.

4.1.2 Lexical Transformation

Part-of-speech conversion serves as a powerful tool, akin to a magical brush, enabling the translated text to align more closely with the grammatical and semantic norms of the target language, thereby significantly enhancing its readability (Thompson, K., 2012). In English, the noun "conservation" encompasses a broad range of meanings, including "protection" and "preservation." However, in Chinese, verb structures are often more direct and effective in conveying actions and behaviors. For instance, translating "wildlife conservation" literally as "野生动物的保护" (the protection of wildlife) may convey the basic meaning, but it can appear somewhat rigid in Chinese, like an ill-fitting coat. By converting the noun to a verb, the phrase becomes "保护野生动物" (protecting wildlife), which aligns more naturally with Chinese syntactic preferences, resulting in a smoother and more fluent sentence. Similarly, the adjective "polluted," which clearly means "contaminated," can be flexibly transformed into a verb when translating "polluted water." Depending on the context, it can be rendered as "被污染的水" (water that has been polluted) or "水污染" (water pollution). The latter, presented in a verb-object structure, is particularly effective in contexts emphasizing the act of pollution and its consequences, aligning perfectly with Chinese linguistic habits that focus on actions and their outcomes when describing environmental issues.

In addition to part-of-speech conversion, word form conversion is another effective strategy frequently employed by translators when dealing with ecological and environmental terminology (Tachmyradova, M. A., & Nuryмова, K. O., 2020). For example, the English verb "degrade," meaning "to deteriorate" or "to reduce in quality," often needs to be converted into the noun form "degradation" to more accurately describe the state of ecological changes. In the key phrase "environmental degradation," the noun "degradation" emphasizes the dynamic process and resulting state of declining environmental quality and ecosystem damage. Translating this as "环境退化" (environmental degradation) vividly conveys the severe concept of ecological deterioration, allowing readers to intuitively grasp the crisis facing the environment. Translators must act as keen observers, carefully selecting the appropriate word forms based on subtle contextual shifts to ensure the translated text accurately reflects the original meaning.

In the translation of ecological and environmental texts, addition functions as a sturdy bridge, helping target-language readers cross the gap of linguistic and knowledge barriers. It is primarily used to supplement essential background information or to provide detailed explanations of complex technical terms, thereby aiding readers in understanding the rich ecological knowledge embedded in the original text. Take, for example, the concept of "carbon footprint," a term frequently encountered in modern ecological research and sustainable development discourse. Its literal translation, "碳足迹" (carbon footprint), may not fully convey its complex implications to readers unfamiliar with the concept. Therefore, in translation, it can be expanded to "个人或组织在生产生活过程中所产生的碳足迹" (the carbon footprint generated by individuals or organizations during production and daily life). This addition clarifies that the subject generating the carbon footprint can be either an individual or a collective entity, and the context in which it is produced includes both production and daily activities. This elaboration enables readers to comprehensively grasp the scope and implications of the concept, significantly enhancing the text's comprehensibility and facilitating the dissemination of ecological knowledge across different linguistic and cultural groups.

Omission, on the other hand, involves the meticulous refinement of the translated text to eliminate redundancy or repetition, thereby achieving greater conciseness and clarity. In English, the phrase "the protection and conservation of natural resources" contains the terms "protection" and "conservation," which, while similar in meaning, exhibit a degree of semantic overlap. In Chinese, the concise phrase "自然资源的保护" (the protection of natural resources) suffices to convey the core message of the original text. By omitting "conservation," the translation becomes more streamlined and fluent without compromising the essential information about natural resource protection. This approach aligns perfectly with the Chinese preference for concise and precise expression, thereby improving the efficiency of information delivery.

4.2 Translation of Ecological Environment Information

At the linguistic level, differences in vocabulary, semantic meanings, grammatical structures, and expression patterns across languages can lead to distortions or omissions of ecological environment information during translation (Sidiropoulou, M., 2004). For instance, the English phrase "the thin blue line" carries significant symbolic meaning in an ecological context, often used metaphorically to describe the protective role of the atmosphere against the vastness of space. This thin, seemingly fragile layer of blue is crucial for the survival of life on Earth. A direct translation into Chinese as "蓝色的细线" would likely fail to convey the deep ecological significance to readers unfamiliar with this specific English expression and its ecological metaphor. In such cases, translators should employ annotations or paraphrasing to supplement crucial information. For example, adding a note after the translation: "In an ecological context, this phrase is often used to metaphorically describe the atmosphere's protective role for the Earth, emphasizing its thinness yet critical importance." Alternatively, paraphrasing it as "大气层如蓝色细线般守护着地球" can effectively ensure accurate information transfer, allowing Chinese readers to grasp its profound ecological implications.

From a cultural perspective, variations in natural cognition, values, and aesthetic concepts among different cultures pose challenges in translating ecological metaphors and symbolic expressions. Consider the common English metaphor "Mother Nature," which vividly reflects Western culture's reverence and closeness to nature, ascribing it a motherly role that nurtures and sustains all life. However, in Chinese culture, while there is also respect for nature, the expression "大自然母亲" is relatively uncommon. A direct translation might strike Chinese readers as unusual or fail to evoke the same emotional resonance as it does for English readers. Therefore, translators can clarify through annotations, such as "In Western culture, 'Mother Nature' is often used to express reverence and closeness to nature, viewing it as a mother who nurtures all life." Alternatively, adopting expressions more aligned with Chinese habits, like "大自然" or "自然母亲," can ensure accurate meaning conveyance while avoiding cultural misunderstandings, thus guaranteeing that the cultural emotions carried by ecological environment information are precisely communicated to the target language readers.

4.3 Translation Text and Translator's Ecological Consciousness

4.3.1 Vocabulary Selection

The choice of vocabulary made by translators during the translation of ecological environment-related texts is not accidental but reflects their inherent ecological consciousness to a certain extent. As the basic unit of language, vocabulary carries rich semantic connotations and cultural value orientations. The translator's selection among numerous synonyms or expressions often implies their cognition, attitude, and value judgment towards ecological issues.

For instance, the choice between "sustainable development" and "economic development at the expense of the environment" when translating environmental protection texts is deeply significant. The concept of "sustainable development" emphasizes meeting the needs of the present generation without compromising the ability of future generations to meet their own needs, pursuing coordinated progress in economy, society, and environment. When a translator opts for "sustainable development" in translation, it indicates not only a deep understanding of this advanced development philosophy but also active advocacy and dissemination in practical translation work, reflecting a strong emphasis on ecological environmental protection and long-term human development. Conversely, selecting "economic development at the expense of the environment" conveys a shortsighted development concept that sacrifices the ecological environment for economic growth. This contrasting vocabulary choice case fully demonstrates the direct reflection of the translator's ecological consciousness in their word selection.

Similarly, different choices of vocabulary when describing ecological destruction can clearly reveal the translator's level of concern and apprehension about ecological issues. "Devastation" and "ruin" have stronger semantic intensities compared to "damage". "Devastation" is often used to describe large-scale, destructive events, emphasizing the deep and widespread nature of the damage that makes ecological recovery difficult. "Ruin" focuses on expressing the complete destruction and desolate state caused by the damage, suggesting the loss of the original function and value of the ecological environment. In contrast, "damage" merely denotes general harm with a relatively minor degree. For example, when translating a text about the impact of forest fires on ecosystems, using "devastation" to describe the aftermath, such as "The forest fire caused great devastation to the ecosystem," compared to "The forest fire caused great damage to the ecosystem," more effectively conveys the catastrophic consequences of forest fires on the ecological environment to readers. This choice also better reflects the translator's deep understanding of the severity of ecological destruction and their inner concerns.

4.3.2 Text Reconstruction

Translators are not merely mechanical converters of source texts during the translation process. Instead, they creatively reconstruct texts based on their own ecological consciousness while understanding the source text. Text reconstruction involves various aspects such as adjusting the word order of the source text, adding or subtracting vocabulary, transforming sentence structures, and creating tones. The aim is to ensure that the translation accurately conveys the original information while effectively evoking the target language readers' awareness of ecological protection.

This ecologically conscious text reconstruction is particularly evident when translating literary works that emphasize human destruction of nature. Taking the translation of "Human activities have a great impact on the natural environment" as an example, the original sentence objectively states the relationship between human activities and the natural environment with a relatively neutral tone. However, to enhance the text's warning nature, a translator may translate it as "Human activities have caused extremely severe impacts on the natural environment!" In this translation, by adding the adverb "extremely severe," the translator significantly intensifies the severity of human activities' impact on natural environmental destruction, enabling readers to more intuitively recognize the gravity of the issue. Simultaneously, the inclusion of the exclamation mark "!" endows the translation with strong emotional value, as if the translator is shouting out to the readers, evoking emotional resonance and effectively raising the target language readers' awareness of ecological protection.

Furthermore, translators may also highlight the severity of ecological issues by adjusting word order. For instance, translating "The continuous deforestation is leading to the loss of biodiversity" as "The loss of biodiversity is occurring due to continuous deforestation" shifts the focus to the severe consequences of ecological destruction by placing "the loss of biodiversity" at the beginning of the sentence. This draws readers' attention first to the grave outcomes and then to the cause - deforestation, thereby strengthening the text's warning effect on ecological issues.

5. Conclusion

Utilizing a corpus-based research approach, this paper conducts a systematic and in-depth exploration of eco-linguistic issues in translation. The research findings reveal that translators employ a variety of strategies, including direct translation, paraphrasing, lexical conversion, and word addition or subtraction, when dealing with eco-environment-related vocabulary in the source text. These efforts aim to ensure that the translated text accurately and comprehensively conveys ecological and environmental information, facilitating cross-linguistic and cross-cultural exchange of ecological knowledge. Simultaneously, the translated text reflects the translator's ecological consciousness at the lexical choice and text reconstruction levels. This consciousness not only influences specific translation expressions but also, to some extent, guides the target language readers' cognition and reflection on ecological issues.

However, there are limitations to this study that cannot be ignored. On one hand, the existing corpus's size and coverage are relatively limited, failing to adequately cover a diverse range of language pairs and text genres. This restricts the universality and representativeness of the research findings to a certain extent. Future research should further expand the corpus, incorporating texts from more languages, different fields, and styles to enhance the generalizability of the conclusions. On the other hand, while the study has explored the relationship between translated texts and translators' ecological consciousness from perspectives such as lexical choice and text reconstruction, the research methods still lack sufficient quantitative analysis and deep exploration. Future studies could introduce empirical research methods like questionnaires and translator interviews to gain deeper insights into translators' thinking mechanisms during the translation decision-making process and how ecological consciousness specifically impacts translation practice. This would provide a more solid theoretical foundation for research in this area.

Looking ahead, with the dynamic evolution and intensification of global ecological and environmental issues, cross-disciplinary research between translation and eco-linguistics will face new opportunities and challenges. Future research can focus on the representation of emerging ecological and environmental issues in translation, such as exploring translation studies in cutting-edge areas like the integration of artificial intelligence and ecological protection, and ecological considerations in space exploration. At the same time, it is important to deeply investigate how translation can more effectively serve the grand goals of global ecological protection and sustainable development. By continuously expanding research areas and innovating research methods, we can inject new vitality into the coordinated development of translation studies and eco-linguistics, contributing wisdom and strength to promoting global ecological environmental protection.

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