

Metaphorical translation strategies of the white paper "China's Green Development in the New Era"

Wenting Liu, Zhonggen Yu*

Faculty of International Studies, Beijing Language and Culture University, Beijing 100083, China

* Corresponding author: Zhonggen Yu, yuzhonggen@blcu.edu.cn

ARTICLE INFO

Received: 26 June 2023 Accepted: 20 July 2023

Available online: 19 September 2023

http://dx.doi.org/10.59400/fls.v5i2.1858

Copyright © 2023 Author(s).

Forum for Linguistic Studies is published by Academic Publishing Pte. Ltd. This article is licensed under the Creative Commons Attribution 4.0 International License (CC BY 4.0).

https://creativecommons.org/licenses/by/4.0/

ABSTRACT: In recent years, the use of metaphor in white papers has proliferated as it plays a significant role in cognitive processing. In order to shed light on the intricate relationship between humans and the natural environment, this study focuses on the analysis of metaphor usage in a particular white paper titled "China's Green Development in the New Era" within the field of ecopolitics. A combination of qualitative and quantitative methods, namely the utilization of a self-built corpus and case studies, is employed to categorize the translation strategies of metaphors. The findings of this study demonstrate that the metaphors utilized in the white paper effectively capture elements of social cognition and ideology. Moreover, with the assistance of part-of-speech tagging tools, it is observed that most translated metaphors strive to maintain the salient features of the source text, aiming to achieve equivalence in both form and meaning.

KEYWORDS: metaphorical translation; self-built corpus; ecopolitics; "China's Green Development in the New Era"

1. Introduction

Modern metaphor studies have argued that metaphor is not only a linguistic phenomenon, but also a cognitive phenomenon conveying implicit meaning (Lakoff and Johnson, 1980). This perspective exerts a far-reaching influence on the study of political discourse. Although a relatively comprehensive theoretical framework for modern metaphor has been developed over 40 years, there is still room for further exploration regarding the depth and extent of metaphorical translation. "Metaphorical translation is a microcosm of all language translation" (Newmark, 1981). It is a complex cognitive process of mapping and decoding from the source to the target language discourse (Rojo and Ibarretxe-Antuñano, 2013).

In recent years, there has been a growing interest in the research of construction, translation, and dissemination of Chinese political discourse (T. Li and Pan, 2021; T. Li and Zhu, 2020). Within this body of research, metaphor, and metaphorical translation have emerged as prominent discussion topics. In 2001, Halliday (2001) demonstrates how linguistic analysis is crucial in finding "the key" to solving environmental problems. Since then, there has been a growing interest in ecolinguistics. Amidst the deep integration of environmental and development issues and the unprecedented global changes brought about by COVID-19, ecological elements in political discourse and the concept of green development have begun to take root in the public consciousness. Consequently, the accurate translation of metaphors has become increasingly essential in conveying textual meaning and reflecting ideologies. While some progress has been made in studying metaphorical translation strategies, most existing approaches are limited in scope, primarily drawing from linguistic theories and focusing on qualitative analyses of

metaphors within specific cases. Furthermore, studies that combine corpus methods are relatively scarce. It is worth noting that most metaphor studies are centered around literary works rather than political discourse, with even fewer studies examining ecopolitical corpora related to green development.

This paper aims to investigate the roles and functions of metaphor and strategies of metaphorical translation by using corpus as a research tool. Specifically, the research material is the white paper "China's Green Development in the New Era". The objective is to explore the social cognition and ideology reflected by metaphors through the analysis of this specific corpus and to propose strategies for metaphorical translation. To begin, we conduct a comprehensive review of existing literature on corpus-based metaphorical translation. We then detail the methods employed for material selection, which involves building a parallel corpus based on the official version of the white paper, and outline the procedure used for metaphor identification. Subsequently, we analyze metaphorical sentences in the self-built corpus and categorize the analysis based on the word conversions observed during the process of metaphorical translation. We proceed to discuss the roles and functions of these conversions. In conclusion, we draw implications for future research based on the findings of this study.

2. Literature review

The field of metaphorical translation has witnessed significant advancements in recent years. Newmark (1981) laid the primary foundation by proposing seven approaches to metaphorical translation. Yan (2002) further contributed by introducing a dynamic translation method for poetry's metaphorical co-items based on linguistic metafunctional theory. Stefanowitsch (2005) investigated the function of metaphor from a corpus-based perspective and proved that metaphorical language had a cognitive function. Dickins (2005) proposed complete and simplified models for the textual analysis of metaphorical translation. McEntee-Atalianis (2011) explored the role of metaphor in international diplomacy, highlighting its ability to shape a common "imagination" among nations and legitimize the identity of international organizations. He (2021) investigated the interdependent connection between two influential theories on cognitive metaphors. He discovered that associating metaphor characteristics with translation strategies offered valuable insights for exploring metaphors in different cultural contexts.

Several research studies have yielded fruitful results in the field of metaphorical translation. For instance, Chilton and Ilyin (1993) demonstrated the utility of a cognitive-interactive model of metaphor in analyzing trans-linguistic/transnational political discourse and obtained an understanding of how the metaphor passed between linguistic and political cultures. Shao and Yu (2021) examined the English translation of *Chen'ai Luoding*, analyzing the causes and effects of metaphors from cognitive and stylistic perspectives while proposing three translation paths. Another study focused on the Spanish translation of metaphors for women in the modern Chinese novel *Wei Cheng*, revealing that employing the discourse dynamics framework could elucidate how cognitive, semantic, affective, and socio-cultural-historical factors influence metaphor translation and convey ideas, attitudes, and values in the target text (H. Li et al., 2023). Additionally, Feng and Yuan (2022) explored the metaphorical translation of *Xi Jinping: The Governance of China* and found that preserving the imagery of the source language and avoiding ambiguity were the primary goals of such translation. Given the above research background, we would identify the features and functions of metaphor in the context of politics and the strategies of the metaphorical translation based on the selected ecopolitical material by the following research questions (RQs):

RQ1: Do metaphors utilized in the ecopolitical white paper and their translated version convey social cognition and ideology well?

RQ2: What metaphorical translation strategies are utilized in the ecopolitical white paper?

3. Methodology

3.1. Material selection

The white paper titled "China's Green Development in the New Era" was unveiled during a press conference organized by The State Council Information Office of the People's Republic of China (2023) on 19 January 2023. This official government document provided a comprehensive overview of China's concepts, actions, and contributions in the global realm of ecological and environmental governance. Notably, the white paper incorporated plentiful metaphors and employed various strategies for metaphorical translation during the translation process. The selected translation version for this study was translated by the Translation Institute of China Foreign Language Bureau and Foreign Language Publishing House. In its official version, the Chinese version consisted of 15,261 tokens, while the English version comprised 11,557 tokens.

3.2. Process and intentions

This study utilized a combination of quantitative analysis employing a corpus-based approach and qualitative analysis using a case study methodology to examine the strategies employed in translating metaphorical expressions within the selected materials. To facilitate metaphor identification, we adopted the methodology that Group (2007) proposed, which comprised the following steps. Firstly, thoroughly read and comprehend the text or discourse under investigation to grasp its intended meaning. Secondly, identify the specific lexical unit within the text or discourse. Thirdly, compare the contextual meaning of the lexical unit with its basic meaning. If two conditions were satisfied—the presence of a contrast between the contextual and basic meanings, and the comprehensibility of the lexical unit after this comparison—the lexical unit was classified as a metaphor.

The study commenced by thoroughly analyzing the frequency and proportion of metaphors used in the marked text. Subsequently, all instances of metaphorical sentences in both the Chinese and English languages were imported into the corpus individually. This allowed for an initial comparison of linguistic characteristics between the metaphors present in the official translations and the original text, taking into account average sentence length, word length, and type-token ratio. Moving forward, a comprehensive examination of the metaphorical sentences was performed. Additionally, the lexical properties of the translations were determined using the part-of-speech tagging tool, CLAWS, in conjunction with CorpusWordParser. The subsequent step involved categorizing the translation strategies based on modifications made to the part of speech. This classification had the potential to serve as a valuable resource for future translations of ecopolitical texts. Additional case analyses were provided to further support the classification mentioned above criteria. These corroborative analyses offered further insights into the translation strategies used.

4. Results and discussion (RQ1 and RQ2)

The white paper contains 46 metaphorical sentences, representing approximately 17.1% of the original text (see **Table 1**). It is observed that, in the original Chinese version, nouns constituted 41.2% of the metaphorical sentences, whereas verbs accounted for 31.5% of the total. In contrast, the official English translation decreased the proportion of nouns (28.7%) and verbs (14.3%). Such data suggests that conversion occurs during translation. As a micro-level translation shift phenomenon, conversion emerges due to disparities in noun/verb dominance between English and Chinese, or variations in

abstract/concrete thinking between English and Chinese expressions (Tang and Qu, 2022). Nouns, verbs, and adjectives are the three types of part of speech that play an essential role in metaphorical expressions. This study primarily concentrates on two types of conversions: nominalization and verbalization. Additionally, the study also places emphasis on lexical correspondence. Within each category, metaphor rewriting and metaphor retention emerge as the principal strategies deployed during translation. Metaphor rewriting involves transforming and eliminating metaphors from the original language to convey their intended meaning in the translated language; whereas metaphor retention ensures that metaphors employed in the source language retain in the target language, allowing readers to experience the original text's artistry and refinement.

Table 1. Main language features of the original Chinese and the official translation			
1	Original Chinese version	Official English version	
	1 2456	1501	

Item	Original Chinese version	Official English version
Characters or words	2456	1581
Type/token ration	27.1%	36.1%
Noun's ratio	41.2%	28.7%
Verb's ratio	31.5%	14.3%

4.1. Nominalization

Nominalization is the act of transforming non-noun terms into nouns, thus facilitating the more effective expression of concepts and ideas. Because of the rich form of English nominalization and its concise, formal, and objective stylistic function, non-nominalized expressions in Chinese are commonly translated into their nominalized counterparts in English. The utilization of nominalization techniques can augment the precision, conciseness, and fluency of translated texts.

4.1.1. Metaphor rewriting

In the translation process, the incorporation of nominalization techniques often necessitates metaphorical rewriting. Specifically, metaphorical rewriting involves the unpacking of metaphoricallypacked information present in the source text, thereby enabling the translator's reinterpretation to reduce the abstract meaning to its essentials. As demonstrated in example [1] (see Appendix, which includes all the examples mentioned below), the five instances showcased reflect metaphorical expressions that serve as vital tools within political discourse, enhancing its vividness, intelligibility, and overall impact. However, through the implementation of metaphorical rewriting during the translation process and the subsequent nominalization of verbs and adjectives, the source domain featured in the original text is discarded, and substituted with an explanation about the target domain. Consequently, while the resultant language may lose its flavor, it remarkably preserves the salient information embedded within the original discourse to the utmost degree.

As depicted in **Table 2**, the official translation exhibits a decrease in the count of nouns (see example [1]a). Interestingly, the proportion of verbs to nouns also decreases, thus indicating the utilization of nominalization within the translation process. In the original text, verbs such as "促进 (promote)" and "建设 (build)" are employed to accentuate the imperative for positive action and endeavor in the context of environmental preservation. However, the translation veers away from a direct translation of these verbs, instead opting for the nouns "development" and "progress". This choice emphasizes that environmental protection signifies an ongoing course necessitating continuous advancement and growth. This metaphorical representation is achieved through the use of the term "事业 (course)", underscoring the long-term and arduous nature of environmental protection and ecological construction, as well as the requirement for the collective efforts of nations and individuals to achieve sustainable development of the global ecological environment. Therefore, the term " $\# \underline{\mathscr{U}}$ (course)" is aptly rendered as "responsibility", effectively unraveling the metaphor and accurately conveying the intended meaning of the original text.

Table 2. The proportion changes of nouns and verbs between the original and target versions.

	Noun (number)	Verb (number)	Noun (proportion in the sentence)	Verb (proportion i the sentence)	n Verb/noun ratio
Original text	5	3	45.5%	27.3%	60%
Official translation	4	1	36.4%	9.1%	25%

In the second instance (see example [1]b), the author employs a war metaphor to underscore the significance of environmental protection, comparing the guarding of blue sky, clear water, and clean land to war. Nevertheless, in the official English translation, the subject is represented as "effective measures", and the sentence structure adopts the passive voice to organize the whole sentence. The phrase "打好保 \mathbb{Z} 战 (fight a good defense war)" is translated into "Effective measures have been taken", which achieves metaphorical rewriting in the process of nominalization for heightened clarity of expression.

Example [1]c exhibits a metaphor imbued with cultural attributes. In the literal rendition, this metaphor signifies that "GDP is the only way to judge a hero". In contrast to the Hollywood depiction of superheroes, the term "hero" in this context carries a distinct connotation, pertaining to individuals or entities that have attained exceptional accomplishments in a specific domain. The translation of "沧英雄 (judge a hero)" as "the sole criterion" not only employs nominalization as a linguistic strategy but also unveils the metaphor to illustrate that the evaluation of regional development will not hinge entirely upon GDP expansion.

In example [1]d, the phrase "高起点规划、高标准建设 (use high starting point to plan and high standard to construct)" is rendered as "forward-looking plans and high standards" in the translation. It is important to note that while the lexical nature of "建设 (build)" remains unchanged, "规划 (plan)" has been nominalized as a noun. This process of nominalization unpacks the metaphorical expression and avoid potential misinterpretation if directly translated as "high starting point". This approach caters to the English language's tendency to avoid repetition and ensures a more accurate and nuanced understanding of the original meaning.

In example [1]e, the metaphor "摆在压倒性位置 (put in an overwhelming position)" is equivalently rendered as "top priority". This nominalization appropriately elucidates that the restoration of the ecological environment of the Yangtze River represents a paramount and urgent task in contemporary China. As such, it requires preferential treatment and immediate implementation. Although the metaphorical element has been expunged from the translated version, the nominalization effectively underscores the Chinese government's steadfast dedication to environmental safeguarding, illustrating its resolute commitment and unwavering determination in this domain.

4.1.2. Metaphor retaining

However, not all metaphors are discarded in translation. In external publicity, retaining metaphors is adopted to introduce governance ideas for some characteristic metaphors with profound meanings, vivid expressions, and universal values. In the process of nominalization, many such metaphors are also preserved. In example [2]a, the metaphor " $\not\equiv$ $\not\succeq$ $\not\cong$ (taking ... path)" is accurately rendered as "a path of". This nominalization effectively preserves the metaphorical nature while maintaining its

coherence. The journey metaphor is a powerful prefiguration of future developmental directions, and the source domain "path" has consistent connotations in both Chinese and English. Hence, retaining the metaphor in this sentence aptly conveys China's strong emphasis on the judicious utilization of water resources in the pursuit of sustainable development.

4.2. Verbalization

Verbalization encompasses the linguistic transformation of nouns, adjectives, and other word classes into verbs during the translational endeavor. This conversion from static constructs to dynamic ones serves as a fundamental aspect of verbalization. Its implementation enriches language, granting it both sophistication and vibrancy. Besides, it encapsulates potent emotional expressions and intensifies the informational density. Within metaphorical translation, verbalization emerges as a prevalent strategy to convey the intended meaning effectively.

4.2.1. Metaphor rewriting

Four examples in example [3] are metaphorical expressions and are metaphorically rewritten in the process of verbalization. Example [3]a serves as an exemplary illustration of verbalization in tandem with metaphorical rewriting. In this instance, the original "就是 (is)" is aptly transmuted into more dynamic verbs such as "has", "display", and "bring", thereby instilling the translation with heightened vividness and evocative qualities, rendering it indelible and impactful. Notably, the phrase "has a significant impact" accentuates the pivotal role of the environment in shaping individuals' existence. Furthermore, the utilization of "display" and "bring" in reference to verdant mountains and cerulean skies, respectively, effectively communicates the notion that these elements actively participate in creating beauty and felicity. The employed verbalization technique efficaciously underscores the paramountcy of safeguarding the environment.

In example [3]b, we can observe the phenomenon of verbalization in this context. This is evident from the higher ratio of verbs in the translated sentence, as shown in **Table 3**. Within this metaphorical framework, the terms "行动派 (activists)" and "实于家 (doers)" effectively encapsulate China's resolute determination and unwavering commitment to the cause at hand. "行动派 (activists)" has been appropriately rendered as "committed to", while "实于家 (doers)" has been translated as "taking solid actions", accomplishing the objective of verbalization. Compared with a literal translation approach, the verbalized translation process not only accurately elucidates the metaphor and mitigates potential confusion but also accentuates China's robust standpoint on the issue and its steadfast resolve to undertake tangible measures in combatting climate change.

Table 3. The proportion changes of nouns and verbs between original and target versions.

	Noun (number)	Verb (number)	Noun (proportion in the sentence)	Verb (proportion in the sentence)	n Verb/noun ratio
Original text	7	3	41.2%	17.6%	16.7%
Official translation	7	6	36.8%	31.6%	85.7%

In example [3]c, the translation of the phrase "*持续打好……战* (keep fighting for…)" as "taking further steps to …" effectively portrays the war metaphor in a manner that emphasizes China's unwavering commitment to its environmentally friendly development agenda. Additionally, the phrase "prevent and control pollution" adeptly conveys the essence of "*污染防治*" (pollution prevention)" by

transforming the nouns into verbs. This process achieves the desired effect of verbalization and concurrently demonstrates the underlying metaphor.

In example [3]d, the metaphorical comparison of "绿色发展 (green development)" to a "变革 (revolution)" effectively emphasizes the significance attributed to green development. Rendering "变革 (revolution)" as "change" is an accurate interpretation of the metaphor. Equally significant, the translation of "生产方式、生活方式、思维方式 (the way of production, way of life, and way of thinking)" as "how we work, live, and think" exemplifies a process of verbalization. This translation highlights the different aspects of our lives that need to be transformed, and makes the whole sentence have more dynamic characteristics.

4.2.2. Metaphor retaining

In example [4]a, there has been an increase in the verb ratio, as indicated by **Table 4**. The phrase " \pm \pm (the main force)" refers to the predominant force that assumes the central role. A literal translation as "the main force" will necessitate additional clarifications in this specific context. Hence, the translator adopts the verb "lead" to convey the intended meaning, thereby fostering clarity and conciseness. Additionally, this choice of translation maintains the metaphorical essence during the process of verbalization. The expression "led the world in greening the planet" metaphorically compares China's efforts in increasing green areas to leading a team or army.

Table 4. The proportion changes of nouns and verbs between the original and official versions.

	Noun (number)	Verb (number)	Noun (proportion in the sentence)	Verb (proportion i the sentence)	n Verb/noun ratio
Original text	6	2	46.2%	15.4%	66.7%
Official translation	5	3	33.3%	27.3%	60%

In example [4]b, the phrase "保护修复攻坚战 (A protective and restoring battle)" has been translated as "A tough battle has been launched to protect and restore". Within the original text, "保护修复 (protective and restoring)" functions as an adjective modifying the noun "战 (battle)". However, the translation process has transformed it into the verb phrase "protect and restore". This metaphorical translation captures the notion of determined and resolute efforts to address the ecological restoration and conservation within the Yangtze River Basin. Furthermore, the remaining metaphor, "battle", emphasizes the urgency and seriousness of the situation, and the verb "launched" suggests a purposeful and strategic endeavor to confront the issue. Overall, this metaphorical translation effectively conveys the idea of a concerted effort to address a challenging environmental issue.

4.3. Adjectivization

Adjectivization pertains to the transformation of a noun, verb, or phrase into an adjective. Adjectives possess pronounced modifying capacities and exhibit succinctness in describing various attributes, qualities, conditions, and circumstances, among other aspects, of nouns or pronouns. It is often the case that adjectivization is accompanied by metaphorical rewriting, and no metaphor-preserving adjectivization has been found in the selected corpus of this study.

Metaphor rewriting

Within the metaphorical context in example [5]a, the term "底色 (background color)" signifies foundation and keynote, demonstrating that green development is the fundamental principle upheld by the Belt and Road Initiative. The translation "making it a green initiative" is concise and appropriate, as

it effectively transforms "green" from a noun into an adjective, thereby serving as a modifier for "initiative" and succinctly elucidating the metaphor's target domain.

4.4. Correspondence

Correspondence in translation differentiates itself from a word-for-word approach, albeit the lexical composition of the sentence's main components remains unaltered throughout the translation process. Correspondence preserves the structure and meaning of the original text as much as possible, which is more in line with the characteristic of "faithfulness" in translation. Correspondence aids in incorporating the cultural connotations embedded within the original text into the translated rendition, while preserving its semantic significance, thus endowing the translation with fluidity, vibrancy, and persuasiveness. The practice of correspondence can also be further classified into two distinct facets: rewriting metaphors and preserving metaphors.

4.4.1. Metaphor rewriting

Examples [6]a, [6]b, and [6]c, are all typical correspondences with the metaphor rewriting. By translating "时尚 (fashion)" into "prevailing ethos", "核心栽体 (core carrier)" into "major platform", and "战 (war)" into "management", the connotation becomes more clarified. Example [6]d exemplifies a specific form of metaphorical rewriting, wherein the metaphor itself is retained but the source domain undergoes a slight transformation. The phrase "invaluable assets" serves as a concrete interpretation of the metaphorical expression "金山根山 (golds)", rendering it more accessible for comprehension. Except for adding the adverb "firmly", the overall lexical composition remains unchanged and maintains correspondence. The translation accurately captures the idea that the Chinese people value their natural environment, and that the resources found in nature are just as valuable as those found in invaluable assets.

Examples [6]e, [6]f, and [6]g all use the image of the same meaning, "图 (map)" and "画卷 (painting)". "一张图 (a map)" in example [6]e is translated into "an overall master plan", while "蓝图 (blueprint)" in [6]f is translated into "strategic plans". The metaphor of "画卷 (painting)" is taken out in example [6]f with a direct description, while "画卷 (painting)" in [6]g is translated into "view". By unpacking the metaphor in a corresponding way, the translation of "map" into "plan" is a good illustration of China's green development project. Both [6]f and [6]g have detailed descriptions of beautiful scenes which convey the sense of the picture and can support the image of "画卷 (painting)", so it is an excellent choice to directly remove it or change it into another expression.

4.4.2. Metaphor retaining

Preserving metaphors is a common translation rule in correspondence. On the one hand, maintaining the word class provides convenience for metaphor retention, and on the other hand, the preservation of metaphors ensures fidelity to the original text. Among the preserving metaphors in correspondence, metaphors are classified into the following categories referring to the classification type proposed by Lakoff and Johnson (1980): travel metaphors, home metaphors, machine metaphors, life metaphors, and other types.

As defined by Lakoff and Johnson (1980), the travel metaphor conceptualizes travel as a purposeful archetype involving spatial movement from a starting point to an endpoint or destination. In the source domain, the traveler's objective is to reach a specified destination, while in the ecopolitical domain, the purpose of the politician's actions can be likened to the traveler's intention. This is because the politician

is concerned with the ecological developmental behavior that will achieve the given purpose. "Road", "path", and "journey" are the images commonly used in the translation of the journey metaphor. For instance, both examples [7]a and [7]b accentuate China's commitment to green development and its promising future by using travel metaphors and corresponding translations, which demonstrate distinctive political discourse characteristics through phrases like "走……之路 (keep to the path of …)" and "迈上新征程 (embarking on a new journey)".

The home metaphor often compares an abstract concept, such as an individual, organization, community, or nation, to a home to highlight its characteristics of intimacy, security, warmth, and sense of belonging. In this metaphor, the concept of home represents not only the physical space where individuals or groups reside, work, or subsist, but also encompasses the environment and cultural background in which they exist (Davies, 2014). Moreover, the home metaphor extends to expressing sentiments and allegiance towards places like one's homeland and motherland (Holy, 2021), as well as the care and support offered to family members, friends, colleagues, and other associates. Such employment of the home metaphor frequently elicits sentiments of attachment and responsibility, prompting individuals to cherish, care about, and love their surroundings more profoundly. Consequently, the home metaphor finds common application within ecopolitical texts. Illustrated by examples [8]a, [8]b, and [8]c, the metaphorical comparison between the earth and home, along with corresponding translations and retaining metaphors, effectively evokes readers' emotions of fondness and regard for the earth, ultimately fostering more vital public support for its preservation and the pursuit of green development.

The machine metaphor expresses the importance of efficiency, collaboration, and automation by comparing the target domain to a part or function of a machine (Glebkin, 2013). Notably, examples [9]a, [9]b, [9]c, and [9]d all employ machine metaphors, likening the "长江 (Yangtze River)" and "新兴技术 (emerging technology)" to a "重要支撑 (powerhouse or prop)" and a "绿色发展 (green development)" to a "新引擎 (new driver)", while equating "战略性新兴产业 (strategic emerging industries)" to a "重要引擎 (key driver)", highlighting their importance to the respective subjects. By characterizing them as essential components enabling the proper functioning of a machine, the machine metaphor effectively conveys the indispensable roles played by the ecological environment and technology in China's social and economic development.

The life metaphor operates by conceptualizing life as an organism and drawing parallels between human life and natural ecosystems and biomes. Its purpose is to communicate the significance and worth of life, while also highlighting the imperative for humans to safeguard and show reverence for nature to achieve a harmonious coexistence. This is exemplified in [10]a, where "山水林田湖草沙 (mountains, water, forests, lakes, grasses, and sands)" symbolize distinct natural ecosystems and biomes. The metaphor presents these different elements of nature as an interconnected and interdependent "生命共同体 (community of life)", underscoring that every organism possesses a unique role and value, and emphasizing the necessity of preserving nature to ensure the survival and flourishing of humanity. By using corresponding translation and the retention of metaphors, the idea of nature conservation and ecological equilibrium is effectively conveyed, emphasizing the imperative for humans to live in harmony with nature rather than merely exploiting and consuming natural resources. In example [10]b, a comparison is drawn between the "生态保护红线 (ecological protection red line)" and the "底线 (bottom line)" and "生命线 (lifeline)" of national ecological security. To avoid repetition and emphasize

the significance of ecological protection in national security and development, the "底线 (bottom line)" and "生命线 (lifeline)" are translated collectively as a singular "lifeline".

In addition to the above metaphors, further illustrative instances of corresponding translation while preserving metaphors exist. For instance, as depicted in example [11]a, the phrase "千秋大计 (a plan for a thousand years)" is translated into "long-term strategy", exhibiting China's foresighted approach to environmental protection. Example [11]b uses four metaphors in succession, including not only the life metaphor mentioned above, but also source domains like "底色 (background color)", "基础 (foundation)", and "期盼 (expectation)". This superposition of metaphors emphasizes the importance of the ecological environment and green development. Furthermore, example [11]c uses the metaphor to compare the "生态环境 (ecological environment)" to both "公共产品 (public goods)" and "民生福祉 (public benefit)". By utilizing the metaphor of business, it highlights the value and efficacy of the ecological environment. These examples serve as compelling demonstrations of how a corresponding translation that preserves metaphors without altering their lexical nature can effectively restore the original text.

5. Conclusion

5.1. Major findings

This study provides an overview of metaphorical translation strategies and the functions of metaphors, and emphasizes the inherent characteristics and applications of lexical transformation by utilizing a self-built parallel corpus consisting of the white paper "China's Green Development in the New Era". The research findings demonstrate that correspondence is the prevailing strategy in ecopolitical translation. Furthermore, the study suggests that nominalization and verbalization serve as viable alternatives for achieving effective translation. While nominalization, verbalization, and adjectivization may result in more concise and metaphorical translations, corresponding translations are better suited for maintaining the original meaning. Despite the general perception of English as a static language primarily reliant on nouns, this study identifies that verbalization is a more frequently utilized technique in the translation of ecopolitical texts.

5.2. Implications and limitations

The metaphors employed in the white paper reflect prevailing social perceptions and ideologies. The accurate translation of these metaphors necessitates not only linguistic precision, but also the faithful interpretation and communication of the ecopolitical concepts they embody. In order to accomplish this, translators must possess a comprehensive comprehension of the cultural contexts within which both the source and target languages operate, as well as the ever-evolving domestic policies and global affairs that influence the translation process. Equipped with this knowledge, translators can select appropriate strategies and produce well-informed translations judiciously. This study significantly enhances people's understanding of the importance, methods, and challenges associated with the metaphorical translation of upcoming ecopolitical discourse. However, certain limitations persist. In order to strengthen the robustness of the findings, future research should consider selecting additional samples to determine the universality of metaphoric translation strategies in the realm of ecopolitical documents.

Availability of data and material

We make sure that all data and materials support our published claims and comply with field

standards.

Ethics approval statement

The study was approved by the institutional review board of Beijing Language and Culture University. All researchers can provide written informed consents.

Author contributions

Conceptualization, WL and ZY; methodology, WL; software, WL; validation, WL; formal analysis, WL; investigation, WL; resources, WL; data curation, WL; writing—original draft preparation, WL; writing—review and editing, WL; visualization, WL; project administration, WL; funding acquisition, ZY. All authors have read and agreed to the published version of the manuscript.

Acknowledgments

The authors would like to extend sincere gratitude to their funders, journal editors, anonymous reviewers, and all other participants who offered help to review and publish this paper. The first author would like to express her special gratitude to her teacher: Zhonggen Yu. This work is supported by Key Research and Application Project of the Key Laboratory of Key Technologies for Localization Language Services of the State Administration of Press and Publication, "Research on Localization and Intelligent Language Education Technology for the Belt and Road Initiative" (Project Number: CSLS 20230012), and Special fund of Beijing Co-construction Project-Research and reform of the "Undergraduate Teaching Reform and Innovation Project" of Beijing higher education in 2020-innovative "multilingual +" excellent talent training system (202010032003).

Conflict of interest

We have no conflicts of interest to declare that are relevant to the content of this article.

References

- Chilton P, Ilyin M (1993). Metaphor in political discourse: The case of the 'common European house'. *Discourse & Society* 4(1): 7–31. doi: 10.1177/0957926593004001002
- Davies M (2014). Home and state: Reflections on metaphor and practice. *Griffith Law Review* 23(2): 153–175. doi: 10.1080/10383441.2014.962447
- Dickins J (2005). Two models for metaphor translation. *Target: International Journal on Translation Studies* 17(2): 227–273. doi: 10.1075/target.17.2.03dic
- Feng Z, Yuan M (2022). Translation of conceptual metaphors in 'Xi Jinping: The Governance of China': Taking the topic "A Community of Shared Future" as an example. *Journal of Luoyang Normal University* 41(10): 76–81. doi: 10.16594/j.cnki.41-1302/g4.2022.10.022
- Glebkin V (2013). A socio-cultural history of the machine metaphor. *Review of Cognitive Linguistics* 11(1): 145–162. doi: 10.1075/rcl.11.1.04gle
- Group P (2007). MIP: A method for identifying metaphorically used words in discourse. *Metaphor and Symbol* 22(1): 1–39.
- Halliday MAK (2001). New ways of meaning: The challenge to applied linguistics. In: Fill A, Mühlhäusler P (editors). *The Ecolinguistics Reader. Language, Ecology, and Environment*. Continuum. pp. 175–202.
- He S (2021). Cognitive metaphor theories in translation studies: Toward a dual-model parametric approach. *Intercultural Pragmatics* 18(1): 25–52. doi: 10.1515/ip-2021-0002
- Holy L (2021). The metaphor of "home" in Czech nationalist discourse. In: *Migrants of Identity*. Routledge. pp. 111–137.
- Lakoff G, Johnson M (1980). Metaphors We Live by. University of Chicago Press.
- Li H, Bisiada M, Xu Y (2023). Applying the discourse dynamics approach to metaphors for women in the Spanish translation of the Chinese novel Wei Cheng. *Perspectives*. doi: 10.1080/0907676X.2022.2164735
- Li T, Pan F (2021). Reshaping China's image: A corpus-based analysis of the English translation of Chinese

- political discourse. Perspectives 29(3): 354-370. doi: 10.1080/0907676X.2020.1727540
- Li T, Zhu Y (2020). How does China appraise self and others? A corpus-based analysis of Chinese political discourse. *Discourse & Society* 31(2): 153–171. doi: 10.1177/0957926519880036
- McEntee-Atalianis LJ (2011). The role of metaphor in shaping the identity and agenda of the United Nations: The imagining of an international community and international threat. *Discourse & Communication* 5(4): 393–412. doi: 10.1177/1750481311418099
- Newmark P (1981). Approaches to Translation. Pergamon Press.
- Rojo A, Ibarretxe-Antuñano I (2013). Cognitive linguistics and translation studies: Past, present and future. In: Rojo A, Ibarretxe-Antuñano I (editors). *Cognitive Linguistics and Translation*. De Gruyter Mouton. pp. 3–30.
- Shao L, Yu Y (2021). A cognitive stylistic analysis of the classification and translation of metaphor: Illustrated with examples from the English translation of Chen'ai Luoding. *Foreign Language Research* 219(2): 90–96. doi: 10.1080/23306343.2023.2191468
- Stefanowitsch A (2005). The function of metaphor: Developing a corpus-based perspective. *International Journal of Corpus Linguistics* 10(2): 161–198. doi: 10.1075/ijcl.10.2.03ste
- Tang G, Qu Y (2022). Translation-related shift of nominalizations in C-E translation of official documents (Chinese). *Chinese Translators Journal* 43(1): 158–165, 189.
- The State Council Information Office of the People's Republic of China (2023). *China's Green Development in the New Era*. Available online: https://english.news.cn/20230119/b9b902af9308417db57bf08ca7a74a9e/20230119b9b902af9308417db57bf 08ca7a74a9e_XxjwshE007008_20230119_CBMFN0A001.pdf (accessed on 7 August 2023).
- Yan M (2002). On metaphorical universal in poetry and the translation of poetry. *Foreign Language and Their Teaching* 163(10): 43–46. doi: 10.13458/j. cnki. flatt. 002393

Appendix

The example sentences

E.g. [1] a. 促进绿色发展、建设生态文明是全人类的共同事业。

Green development and eco-environmental progress are the responsibility of all humanity.

b. 持续打好蓝天、碧水、净土保卫战。

Effective measures have been taken to keep skies blue, waters clear, and land pollution-free.

c. 摒弃"唯 GDP 论英雄"的发展观、政绩观。

GDP growth is no longer the sole criterion for the assessment of the development of regions or the performance of officials.

d. 高起点规划、高标准建设雄安新区,围绕打造北京非首都功能集中承载地,构建布局合理、蓝绿交织、清新明亮、水城共融的生态城市,打造绿色高质量发展"样板之城"。

In this region, Xiongan New Area is being built according to forward-looking plans and high standards, with a focus on developing it into a destination for entities relocated from Beijing as their functions are non-essential to Beijing's role as the capital. Xiongan will be built into an eco-friendly exemplar city of high-quality green development with a rational layout, a good balance of blue water, green areas, clean air, clear skies and urban facilities.

e. 中国坚持把修复长江生态环境摆在压倒性位置。

The restoration of the Yangtze River's eco-environment is a top priority.

E.g. [2] a. 走水安全有效保障、水资源高效利用、水生态明显改善的集约节约发展之路。

A path of intensive water-conservation has been followed so that water security has been effectively ensured, water resources are used efficiently, and the ecology has improved.

E.g. [3] a. 环境就是民生,青山就是美丽,蓝天也是幸福。

The environment has a significant impact on quality of life. Green mountains display beauty, and blue skies bring happiness.

b. 应对气候变化合作会遇到各种波折和困难,但中国始终是全球气候治理的行动派和实干家。

International cooperation on climate change may encounter difficulties and setbacks, but China will remain committed to improving global climate governance and taking solid actions.

c. 持续打好污染防治攻坚战。

Taking further steps to prevent and control pollution.

d. 绿色发展是对生产方式、生活方式、思维方式和价值观念的全方位、革命性变革。

Green development is an all-round revolutionary change in our values, and in how we work, live, and think.

E.g. [4] a. 自 2000 年以来,中国始终是全球"增绿"的主力军,全球新增绿化面积中约 1/4 来自中国。

Since 2000, China has led the world in greening the planet, contributing around one fourth of the newly added green areas in the world.

b. 大力推进长江保护修复攻坚战。

A tough battle has been launched to protect and restore the eco-environment in the Yangtze River Basin.

E.g. [5] a. 中国始终致力于推进共建"一带一路"绿色发展,让绿色切实成为共建"一带一路"的底色。

China is committed to working with other countries on promoting green development under the Belt and Road Initiative (BRI), making it a green initiative.

E.g. [6] a. 绿色生活方式渐成时尚。

Eco-friendly living becomes the prevailing ethos.

b. 自然保护地是生态建设的核心载体。

Pas are major platforms for eco-environmental conservation.

c. 渤海综合治理攻坚战。

The comprehensive management of the Bohai Seawater environment.

d. 中国坚持绿水青山就是金山银山的理念。

China has firmly upheld the belief that lucid waters and lush mountains are invaluable assets.

e. 逐步形成全国国土空间开发保护"一张图"。

An overall master plan will eventually be drawn up for the development and protection of territorial space.

f. 中共二十大擘画了中国未来发展蓝图,描绘了青山常在、绿水长流、空气常新的美丽中国画卷。

The just-concluded 20th CPC National Congress has made strategic plans for China's future development which will help to create a better environment with greener mountains, cleaner water, and clearer air.

g. 广大农村生态美起来、环境靓起来,丛林掩映、果菜满园、满眼锦绣,呈现山清水秀、天蓝地绿、村美人和的美丽画卷。

Lush groves, orchards, and gardens of flowers and vegetables set each other off, and the splendid pastoral scene is a treat for the eyes. A beautiful countryside where the skies are blue, the lands are green, and the waters are clear brings people delight with its scenic view.

E.g. [7] a. 中国将坚定不移走绿色发展之路。

China will keep to the path of green development.

b. 中国已迈上全面建设社会主义现代化国家、全面推进中华民族伟大复兴新征程。

China has embarked on a new journey to build itself into a modern socialist country in all respects and advance the rejuvenation of the Chinese nation.

E.g. [8] a. 携手共建美丽地球家园。

Building the Earth into a beautiful home.

b. 只有世界各国团结合作、共同努力,携手推进绿色可持续发展,才能维持地球生态整体平衡,守护好全人类赖以生存的唯一家园。

Only when all countries unite and work together to promote green and sustainable development can we maintain the overall balance in the earth's ecology and protect humanity's one and only home.

c. 地球是全人类赖以生存的唯一家园, 人与自然是生命共同体。

The earth is our one and only home, and humanity and nature form a community of life.

E.g. [9] a. 长江是中华民族的母亲河, 也是中华民族发展的重要支撑。

The Yangtze River is the mother river of the Chinese nation, and a powerhouse for China's development.

b. 中国将绿色发展作为推进乡村振兴的新引擎,探索乡村绿色发展新路径。

Green development is a new driver of rural revitalization, and China is exploring new paths for green development in rural areas.

c. 把科技创新作为调整产业结构、促进经济社会绿色低碳转型的动力和保障, 战略性新兴产业成为经济发展的重要引擎, 经济发展的含金量和含绿量显著提升。

It takes scientific and technological innovation as the driving force and guarantee for adjustment of industrial structure and green and low-carbon transition of the economy and society and regards strategic emerging industries as a key driver for economic development, reaping remarkable economic and social benefits as a result.

d. 新兴技术成为经济发展重要支撑。

Emerging technologies have become the main props of China's economic development.

E.g. [10] a. 山水林田湖草沙是生命共同体。

Mountains, rivers, forests, farmland, lakes, grasslands and deserts are communities of life.

b. 生态保护红线是国家生态安全的底线和生命线。

ECRLs are the lifeline of national eco-environmental security.

E.g. [11] a. 把保护黄河作为中华民族发展的千秋大计。

Protecting the Yellow River is a long-term strategy of fundamental importance to the Chinese nation.

b. 绿色是生命的象征、大自然的底色,良好生态环境是美好生活的基础、人民共同的期盼。

Green is the color of nature and the symbol of life. A sound eco-environment is the basic foundation for a better life, and the common aspiration of the people.

c. 以人民为中心是中国共产党的执政理念,良好生态环境是最公平的公共产品、最普惠的民生福祉。

The people-centered philosophy is a governing principle of the Communist Party of China, and a sound eco-environment is the fairest public product and the most inclusive public benefit.