A Study on the Conceptual Metaphor Construction of China's Environmental Image in the British Media: An Analysis of The Guardian's Reports

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Abstract. With environmental issues emerging as a new domain for interest bargaining and power competition among China and United Kingdom, the exploration of how the Brith media build the China's environmental image is of significant importance. This study uses 114 commentary articles from The Guardian as its corpus, examining the metaphors used in them and the resulting constructed image of China. The findings reveal that the British media portrays China's environmental image through three dimensions: a negative image of environmental pollution, two positive images of environmental development and governance. By uncovering the ways in which the British media constructs China's environmental image, this paper contributes to understanding the opportunities, resistances, and breakthroughs in the dissemination of China's environmental image, which could be helpful to mitigate misunderstandings and defenses in international communication, thereby promoting cooperation in environmental governance between China and other countries to jointly address global environmental challenges.

Keywords: political communication; conceptual metaphor; China's ecological environment image

1 Introduction

On a global scale, environmental issues have become a mediating topic[1]. In the context of the global environmental crisis, China has innovatively proposed ecological civilization construction and is constantly improving its domestic environmental quality, adhering to the value pursuit of building a "community of life on Earth," which contribute constructively to global environmental governance. Media discourse plays a vital role in shaping the ecological environment image, which from Western countries, such as the United Kingdom, dominate and control mainstream discourse globally due to their strong economic power and language advantages. Conceptual metaphor, as an

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essential means of discourse construction, is often used by media discourse to conceptualize the world and construct the self and the other. The British media's reports on China's ecological environment employ various conceptual metaphors, revealing its ideological views and attitudes, thereby constructing a specific image of China's ecological environment intended by the news producers.

Taking reports from The Guardian on China's ecological environment as the corpus, the paper employs conceptual metaphor analysis and corpus linguistics methods to analyze and interpret its frequently occurring metaphors. The study aims to explore the construction of China's ecological environment image and provide some useful insights for improving China's ecological environment image and understanding the logic behind the construction of China's national image.

2   Theoretical Basis and Research Methods

2.1   Theoretical Basis

Conceptual metaphor theory posits that the conceptual system underpinning our everyday thoughts and actions is fundamentally metaphorical in nature[2]. The cognitive process of metaphor involves cross-domain mapping within the conceptual system, specifically mapping from the source domain to the target domain[3]. The mechanism of metaphor functions through cognitive mappings between different entities, where the source domain typically refers to direct experiences or concrete objects, while the target domain is more complex, abstract, and difficult to describe.

Environmental communication has the function of constructing environmental issues and solving practical environmental problems[4]. In "The Politics of the Earth: Environmental Discourses", John S. Dryzek[5] illustrates how metaphors like "spaceship" and "virus" are employed to construct specific environmental discourses. Lu and Chen[6] have noted the role of national metaphors in shaping national values, constructing national policies, and pursuing global goals, revealing their functions in national and global governance.

This paper analyzes the characteristics of conceptual metaphor construction in British media's discourse of China's ecological environment image, exploring the types of conceptual metaphors and the constructed image of China. The research questions are: (1) What are the main types of metaphors in British media's discourse of China's ecological environment? (2) How do British media use specific metaphors to construct the image of China in the discourse of ecological civilization?

2.2   Research Methods

Corpus analysis is the main method of cognitive linguistics research[7] which has become a commonly used research method to explore the characteristics of discourse construction. The Guardian is one of the three major newspapers in the UK, the textual evidence presented by which is helpful to understand the construction of China's ecological environment image in British society. So, the sample data used in this paper are sourced from the world-renowned comprehensive academic database LexisNexis

from 2008 to 2023, with the sources set to "The Guardian (London)" and the search keywords being "China" and "Ecological environment". To enhance the accuracy and reliability of the samples, this paper has excluded irrelevant opinion articles. After multiple rounds of manual screening and analysis to remove duplicate and invalid articles, a total of 114 valid samples commenting on China's ecological environment were obtained, amounting to 247,128 tokens in total.

3   Results and Discussion

3.1   Identification and Classification of Conceptual Metaphors in British Media's Ecological Environment Discourse

Guided by conceptual metaphor theory, this paper first identified metaphors within the corpus with NVivo11 for text coding, combined with MIPVU for manual identification, extracting 7 main types of metaphors (Table 1). The study focuses on the metaphorical symbols and the meaning construction process presented in "China's ecological environment reports" in The Guardian, explaining the metaphorical mapping relationship between the source and target domain, thereby clarifying the conceptual metaphors and the constructed image of China's ecological environment.

Table 1. Types of metaphors in The Guardian's critical discourse on China's ecological and environmental issues

Metaphor Type	Number of Keywords	Subject headings
Building Metaphors	64	open the door, ecological room, build an ecological civilisation, establish a Maritime Silk Road, consolidate its position, construct a truly better sustainable, longer lasting and peaceful world, an ecological wall, building an ecological security shield, building a beautiful China, etc.
Emotional Metaphors	98	growing energy demands, massive dependency, threaten, dubious, confident China, a dire impact, an obsession with GDP expansion, bullied by China, harmony with nature, reliance, benevolent authority, stupid infrastructure, etc.
War Metaphors	96	defender of the environment, conquer the world, the fight against the overuse of fertilisers, combat climate change, an attack, pockets of resistance, expansion, assault, unyielding all the way, on the fight against global warming, triumph, etc.
Economic Metaphors	37	do business with developed countries, paying the price, an excessive ecological toll, benefit the world, not waste the opportunity, saving, high ecological price, more expensive, resource poor, green mountains and clear water are as good as mountains of gold and silver, at great cost to nature, the good of the planet, etc.

Body Metaphors	53	One foot, embrace environmental sustainability, cooperate on climate change, collaborate to save that world, work together, establishing a strategic bilateral partnership, cooperation on climate, closer collaboration, etc.
Road Metaphors	71	ecological footprint, moving too slowly, along the trail towards a low-carbon economy, a long way, steps forward, a path to death, provide a new path, in a difficult position, etc.
Color Metaphors	38	green revolution, green businesses, China's green transformation, China's green growth, a green GDP, first green superpower, green economy, an ecological "red line", "Great Green Wall", etc.
Total	457	

3.2   The Constructed Image of China's Ecological Environment in British Media's Discourse

Using AntConc 3.5.9 for text analysis, this paper first set up a stop word list to remove function words and other terms lacking substantive meaning and then filtered and analyzed the high-frequency keywords to generate a co-occurrence list. Through summarization and induction of it, three thematic groups were identified: environment development, environment pollution and environment governance. For ease of analysis, these themes were categorized into two main groups: environment development and environment pollution and governance.

3.2.1 Metaphorical Representations of Ecological Environment Development.

In constructing the image of China's ecological environment development, The Guardian frequently uses conceptual metaphors such as building metaphors, road metaphors, body metaphors, and color metaphors to emphasize China's path to green development, primarily explaining the actions China has taken to address ecological environment development issues.

A good ecological environment is the fundamental foundation for sustainable development of human beings and society[8]. Ecological civilization construction is a national strategy for China's environmental governance and social development. The building metaphor runs through The Guardian's evaluative articles on China's environment development. As shown in Table 2, the practices in China's ecological environment development process are described as "open the door", which has "a constructive role". The establishment and improvement of the environment development systems are mapped as a "security shield", an "ecological room" and an "ecological wall", indicating China's determination and measures to protect ecological security. In building metaphors, The Guardian portrays China as an active participant and builder in global environmental governance, highlighting its contributions and leadership.

Table 2. Cross-domain mapping patterns of building metaphors

The Target Domain	The Source Domain
the Process of Environment Development	open the door, a constructive role, construct a truly better sustainable, longer lasting and peaceful world, etc.
the System of Environment Development	ecological room, build an ecological civilisation, an ecological wall, an ecological security shield, a beautiful China, etc.

Table 3 demonstrates the mapping relationship between China's civilization development and road systems under the road metaphor. Each step in China's environmental development and its impact is seen as an "ecological footprint," moving "along the trail towards a low-carbon economy". Guided by low-carbon policies, it takes "steps forward" to a "new path", However, the road metaphor "moving too slowly" reflects the slow implementation progress of certain environmental policies in China, indicating that the construction of ecological civilization still requiring "a long way" to go. The road metaphor highlights the process and constructiveness of China's ecological environment development, emphasizing the long-term efforts and gradual progress in China's environmental actions.

Table 3. Cross-domain mapping patterns of road metaphors

The Target Domain	The Source Domain
the Process of Environment Development	open the door, a constructive role, construct a truly better sustainable, longer lasting and peaceful world, etc.
the System of Environment Development	ecological room, build an ecological civilisation, an ecological wall, an ecological security shield, a beautiful China, etc.

The cross-domain mapping mechanism of body metaphors unfolds mainly in two aspects. First, it advocates for a collective response to environmental crises (Table 4). For example, terms such as "cooperate" "collaborate" "work together" and "establish a partnership" reflect China's encouragement for global participation in environmental actions to foster a cohesive force for global environmental governance. Second, body metaphors highlight the value of the ecological environment. For instance, "embracing environmental sustainability" like embracing a good friend emphasizes China's appreciation for the environment. By advocating for international cooperation, The Guardian portrays China as a responsible and leading figure in global environmental governance, and by describing China's practical efforts in environmental actions, it presents an image of a nation actively promoting environmental protection and committed to achieving sustainable development.

Table 4. Cross-domain mapping patterns of body metaphors

The Target Domain	The Source Domain
the Process of Environment Development	cooperate on climate change, collaborate to save that world, work together, establishing a strategic bilateral partnership, etc.

| the State of Environment Development | one foot, it still has another dragging behind, embrace environmental sustainability, etc. |

Colors, as direct sensory experiences describing everyday objects, often become metaphorical representations of abstract concepts. "green" is a primary metaphorical concept used in China's discourse on ecological civilization (Table 5), such as "a green GDP" "green economy" and "Great Green Wall", which explain the abstract process of environmental governance through the cognitive system of color, embodying the ecological values pursued by China's ecological civilization concept. And delineating an ecological "red line" indicates that China has taken strict measures to protect the environment. Through color metaphors, the image of China is shaped as a nation that emphasizes ecological values and sustainable development in its ecological environment development process.

Table 5. Cross-domain mapping patterns of color metaphors

The Target Domain	The Source Domain
the Process of Environment Development	the green revolution, green businesses, green growth, a green GDP, committed to green, Great Green Wall, etc.
the Problem of Environment Development	an ecological "red line"

3.2.2 Metaphorical Representations of Ecological Environment Pollution and Governance.

The negative portrayal of China's ecological environment has always been central in Western media. However, British media have also acknowledged that Chinese government is aware of the severity of environmental issues. The Guardian's commentary on China's environmental pollution and governance is mainly conveyed through emotional metaphors, war metaphors and economic metaphors.

For one thing, British media repeatedly emphasize the severity of China's pollution problems, linking environmental degradation to China's rapid economic development and accusing China of prioritizing economic growth over environmental responsibility. Influenced by preconceived notions and ideologies, keywords directly describing severe consequences are used as metaphors for the process of ecological destruction (Table 6), such as "threaten" "dubious" "GDP expansion" and "stupid". In contrast, positive emotional keywords such as "harmony," "reliance," and "benevolent" are used to highlight China's efforts to seek a healthy development model that harmonizes with nature.

Table 6. Cross-domain mapping patterns of Emotional metaphors

The Target Domain	The Source Domain
the Process of Environment Pollution	growing energy demands, threaten, dubious, a dire impact, an obsession, bullied by China, stupid infrastructure, etc.
the Process of Environment Governance	harmony with nature, reliance, benevolent authority, etc.

War metaphors are one of the fundamental metaphorical expressions in human language. As shown in Table 7, The Guardian uses war scenarios from real-life experiences to describe China's environmental problems and the environmental governance process surrounding ecological civilization construction. Under the metaphorical model of "environmental protection as war", The Guardian points out that the environmental crisis is an "assault" on ecology caused by China's one-sided pursuit of economic development. Meanwhile, China's environmental governance is depicted as a defense of ecological civilization, with the Chinese government calling for collaborative efforts from all parties to achieve a "triumph" over pollution.

Table 7. Cross-domain mapping patterns of War Metaphors

The Target Domain	The Source Domain
the Process of Environment Pollution	conquer the world, an attack, expansion, assault, etc.
the Process of Environment Governance	defender of the environment, combat climate change, pockets of resistance, unyielding all the way, on the fight against global warming, triumph, etc.

The economic conceptual system is a common domain in global environmental cognition. Brian Coffey[9] identified typical economic metaphors such as "natural capital" and "ecological debt". Similarly, multiple economic metaphors are also used in the commentary on China's ecological environment. As shown in Table 8, China's environmental issues are viewed as "paying the price" and "at great cost", while the environmental governance process is metaphorically described as "benefiting the world" and "saving the resources." The Guardian also employs economic metaphors in China's ecological discourse, likening a beautiful ecological environment to "mountains of gold and silver," thereby clearly conveying China's concept of ecological civilization. The economic metaphor discourse reflects China's re-evaluation of the relationship between economic development and environmental protection, choosing a path of ecological civilization that integrates economic and ecological values.

Table 8. Cross-domain mapping patterns of Economic Metaphors

The Target Domain	The Source Domain
the Process of Environment Pollution	paying the price, an excessive ecological toll, high ecological price, more expensive, resource poor, at great cost to nature, etc.
the Process of Environment Governance	benefit the world, saving, green mountains and clear water are as good as mountains of gold and silver, the good of the planet, etc.

4   Conclusions

Metaphors are a crucial means of shaping our perception of reality and shared conceptual systems，which is rich in the Guardian's evaluative discourse on China's

ecological environment. The study reveals that the conceptual metaphors used mainly fall into two categories: metaphors representing China's environment development (building metaphors, road metaphors, body metaphors, and color metaphors) and metaphors representing China's environment pollution and governance (emotional metaphors, war metaphors and economic metaphors).

National image as the combination of self-awareness and otherness, is the result of a series of information inputs and outputs[10]. As a key element in the Western media's image-building of China, conceptual metaphors are essential discourse strategies that reinforce existing power relations. Even though The Guardian reports objectively on China's positive contributions to global ecological development and governance, the pressure of news values and intense competition often leads them to highlight social issues and the negative impact of specific events in China. This approach emphasizes conflict, presenting an image of China as filled with conflicts and crises to foreign readers.

Given the negative evaluations and misunderstandings of China's ecological environment situation by Western media, it is essential to understand the reporting strategies of mainstream Western media, which is helpful to address misconceptions and counter international stereotypes about China. Therefore, Chinese media should prioritize and enhance the external communication of China's environmental issues, improving strategies for constructing international discourse power on environmental issues and establishing a positive ecological environment image in the international community.

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