# **Original Paper**

# Ecological Discourse Analysis and Ecological Diplomacy Analysis of Coverage about Beijing Winter Olympics Based on

# Transitivity System

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# Abstract

This study aims to interpret the ecological meaning of discourse from system-functional linguistics perspective and analyses the ecological diplomacy ideas embedded in reporting, and to guide people to develop an ecological consciousness of living in harmony with nature through the analysis of ecological orientations. The study explores the ecological factors participants, processes and circumstantial elements. The results show that in terms of participant role distribution, material process participants and relational process participants account for the largest proportion. In terms of transitivity processes, the focus is on the use of material and relational processes. In terms of the distribution of circumstantial element, there are significant differences in the use of ecological discourse in coverage. The idea of ecological diplomacy is also implicitly reflected in the coverage.

# Keywords

Ecological discourse, Transitivity system, Beijing Winter Olympics, Ecological diplomacy

#### **1. Introduction**

The influence of ecological diplomacy in national diplomacy is becoming more and more important. Since the convening of the Stockholm Conference on the Human Environment in 1972, which marked the beginning of ecological and environmental diplomacy, to the negotiation of the *Convention on Climate Change* by various countries today, ecological diplomacy has continued to develop and plays an important role in international relations and policy. With the development of ecological diplomacy, the idea of ecological diplomacy is not only reflected in national policies, but also in media coverage of ecological construction, especially in the official media in various countries, whose coverage has a corresponding influence on the discourse of ecological diplomacy and international ecological relations.

#### 2. Background of the Study

Ecological discourse analysis aims to use the theories and methods of discourse analysis to answer a central question in ecological linguistics: do language patterns affect the survival and health of humans and other species on Earth? (Steffensen & Fill, 2014). Ecological discourse analysis is often based on a certain eco-philosophical perspective to measure whether discourse is conducive to ecological conservation. An "eco-philosophical view" is a philosophical view of ecological harmony, including philosophical principles, values, standards, laws, and assumptions related to ecology (Naess, 1995). It is always rooted in people's inherent ideology and influences their daily behaviour. Based on the Confucian tradition, Guowen Huang (2017) proposed a basic assumption and three principles to guide ecological discourse and behavioural analysis. The principle of conscience refers to the care of nature; the principle of proximity refers to the closeness of human beings to other forms of nature; and the principle of regulation is mainly regulated by individual conscience, custom and the rule of law.

Studying the former researches, at the theoretical, applied and practical levels of ecological discourse analysis, they mainly focused on teaching practice research and language ecological protection, while less research has been conducted on the construction of social ecological civilization and ecological diplomacy. This study analyses the ecological diplomacy ideas embodied in Chinese and foreign media reports on the international Winter Olympic Games.

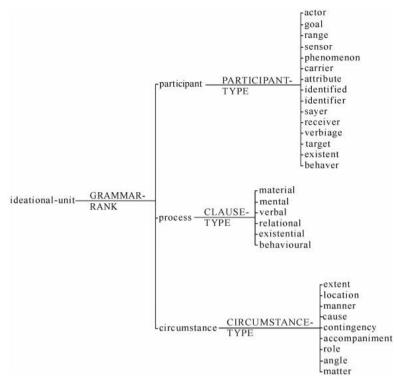
#### 3. Research Methodology

## 3.1 Collection of Corpus

The corpus for this study comes from the People's Daily, Beijing Daily, Science and Technology Daily, Reuters and the official website of the International Olympic Games, which, as the official state media and local official media, have a certain authority and are suitable for the corpus of this study.

#### 3.2 Labelling Method

The UAM Corpus Tool 3.3 software was used to annotate the corpus with the materiality, and the annotation scheme is shown in Figure 1. Other grammatical functions were annotated with reference to the systematic framework of the second edition of Systematic Functional Grammar as the standard.



# Figure 1. Labelling Scheme

# 4. Research Results

4.1 Ecological Discourse and Transitivity Characteristics

Table 1. Distribution of Process	s Participant Components
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Distribution of process participant components		
Process participant composition	Rate	
Material process participants	45.72%	
Relational process participants	38.69%	
Verbal process participants	8.73%	
Mental process participants	5.76%	
Existential process participants	1.10%	
Behavioural process participants	0.00%	

The statistics in Table 1 show the following distribution of participants. It can be seen that the Winter Olympics coverage focused on the use of material process participants and relational process participants.

Process components distribution	
Process components	Rate
Material processes	52.49%
Relationship process	32.13%
Verbal processes	7.26%
Mental Processes	5.38%
Existential process	2.34%
Behavioural processes	0.40%

#### **Table 2. Distribution of Process Components**

The statistics in Table 2 show that the process component appears a total of 1042 times, with material processes accounting for 52.49%, relational processes for 32.13%, verbal processes for 7.26%, mental processes for 5.38%, existential processes for 2.34% and behavioural processes for 0.40%.

In summary, among the distribution of participant components in the coverage of the Winter Olympics, material process participants and relational process participants accounted for a larger proportion; among the six processes, material processes and relational processes accounted for the largest proportion. It was found that the role played by the actors was valued under the ecosystem of the Winter Olympics, as well as the application of ecological discourse construction through carriers. The following is an analysis of the construction of the transitivity under the ecological discourse of the Winter Olympics.

#### 4.2 The Construction of Transitivity in the Ecological Discourse

## 4.2.1 Construction of Ecological Roles of Participants

Group participants appear significantly more frequently than individual participants in the carbon and coverage of the Winter Olympics, and the media focus on the influence of group participants, indicating that under the ecological discourse of the Winter Olympics, groups become ecological shapers and ecological builders with ecological awareness and ecological responsibility.

(1) In fact, in daily life, there are many things that <u>families and individuals</u> can participate in, such as green travel, saving water and electricity, planting trees, etc. It is suggested that some universal initiatives be introduced to increase the enthusiasm of <u>citizens</u>. (Beijing Daily 2021-01-26)

(2) Beijing Blue has become the beautiful colour of the Winter Olympics, and it is mainly due to "<u>human</u> efforts" and "help from the sky" that such achievements can be made. (Science and Technology Daily 2022-02-21)

(3) The "<u>Winter Olympics for All</u>" has further popularized the concept of low-carbon development and green development, increasing the possibility of a "normalized" low-carbon lifestyle. (People's Daily 2022-02-21)

(4) Put together, <u>the Chinese government and Olympic officials</u> paint the tree planting as a win for the environment and one that offsets climate change and carbon emissions from these Games. (Official website of the International Olympic Games 2022-02-19)

As shown in examples, 'citizens', 'human', 'all', etc. all emphasise the collective impact on the environment. Based on the principle of regulation, in terms of responsibility for environmental pollution, the collective has enormous advantages and influence in environmental protection that individuals cannot match. Whether it is the generation, treatment or even prevention of environmental pollution, the collective can always play a greater role than the individual, so it needs to bear corresponding responsibilities.

4.2.2 Construction of the Process Pathways

Processes are the grammatical organisation and expression of experience, and the classification of processes is the categorisation of grammar (Halliday, 1978).

The most frequently used words in the attributive process were 'is' (49 times), 'reach' (16 times) and 'become' (9 times), all expressing the relation. In the attributive category, 94.14% of the process carriers are inanimate, and the attributive process is mainly used to reflect the importance of inanimate objects and divert more attention to those objects.

4.2.3 Construction of Circumstantial Pathways

The results show that the ration of place is significantly higher than the time in location in circumstantial elements. The following are examples of the analysis.

(1) <u>The National Speed Skating Stadium "Ice Ribbon"</u> has become the world's first avenue speed skating stadium to use a CO2 transcritical direct cooling system to produce ice, with carbon emissions approaching zero. (People's Daily 2022-02-21)

(2) All the <u>venues</u> of the Winter Olympics will be able to meet the green building star standard, and <u>other new buildings</u> in the future should try to move closer to green buildings and strengthen green measures in the design, construction and operation stages; (Beijing Daily 2021-01-26)

(3) China, for the first time at an Olympics, is using CO2 collected from industrial waste gases to cool ice rinks in <u>its four ice sports venues</u>, replacing traditional hydrofluorocarbons that can damage the ozone layer. (Reuters 2022-02-04)

The physical participants of the "National Speed Skating Stadium", "new buildings" and "ice sports venues" illustrated those venues, utilizing advanced technologies, contribute to a green Winter Olympics.

Through the analysis of environmental components: the context of the corpus focuses on the harmonious coexistence of people and the environment and Beijing Winter Olympic Games pays special attention to ecological protection and environmental harmony.

### 4.3 The Embodiment of the Idea of Ecological Diplomacy

Participants play an important role in the ecological discourse of news. The diversity of participants in the ecological context is in line with the operational characteristics of ecological diplomacy, which is

characterised by a plurality of participants and a variety of roles. States continue to play the role of the main bearers and implementers of ecological diplomacy as subjects of international relations and diplomacy. At the same time, intergovernmental organisations, non-governmental organisations and social groups all play a role in guiding, coordinating, organising and evaluating ecological affairs, taking on ecological responsibilities.

The role of non-living organisms is emphasized in the carbon neutral coverage of the Winter Olympics, especially in some venues that apply advanced technologies, products that contribute to a green Winter Olympics. For example, the construction of U-channel ski slopes and energy-efficient venues reflect technological empowerment. Similarly, ecological diplomacy has strong technological attributes and is heavily influenced by the interaction and impact of politics and technology. Thus, the development of ecological diplomacy is influenced with the development of science and technology.

In the Chinese and foreign reports, we can find that the foreign media also have a positive attitude towards the ecological effects of the Beijing Winter Olympics, which is a trend of mutual learning, absorption and coordination between the international ecological environment, tending to globalisation and collectivism. Therefore, the coverage of the Winter Olympics reflects the characteristics of ecological diplomacy as "multiple subjects", "technological empowerment" and "globalisation of ecological diplomacy".

Similarly, the coverage of the Winter Olympics by the foreign media shows that, with the multipolarisation and equalisation of international power, the traditional pattern of international ecological diplomacy dominated by developed countries has begun to reverse. Since the beginning of the new century, the overall influence of developing countries in multilateral and bilateral ecological diplomacy has been rising rapidly, marked by the rise of emerging powers, giving new impetus to the construction of a new, more rational, just and orderly international ecological political order.

#### 5. Conclusion

The Chinese and foreign media's coverage of the Beijing Winter Olympics is embedded in the idea of ecological diplomacy. Based on the transitivity system, this study analyses the ecological discourse of the participants, processes and circumstantial elements of the coverage of the Winter Olympics, and reveals the ecological orientation of the ecological discourse and the construction pathway.

#### References

Cao Jin, & Yang Mingtuo. (2022). Analysis of the ecological discourse of online news based on the system of objectivity. *Journal of Northwest Normal University (Social Science Edition)*, 59(02), 136-144.

Fairclough, N. (1992). Discourse and Social Change. Cambridge: Polity Press.

Fill, A. (2001). Ecolinguistics: States of the art. In A. Fill, & P. Mühlh usler (Eds.), *The Ecolinguistics Reader: Language, Ecology and Environment* (pp. 43-53). London: Continuum.

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- Gerbig, A. (1993). The representation of agency and control in texts on the environment. In R. J. Alexan, der J. C. Bang, & J. Dr (Eds.), *Language and Ecology: Proceedings of the Symposium on Ecolinguistics of AILA '93, Amsterdam* (pp. 61-74). Odense: Odense University Press.
- Halliday, M. A. K. (1978). Language as Social Semiotic: The Social Interpretation of Language and Meaning. London: Edward Arnold.
- Halliday, M. A. K. (1994). An introduction to functional grammar. London: Edward Arnold.
- Haugen, E. (1972). The Ecology of Language. Anwar S. The Ecology of Language: Essays by Einar Haugen. Stanford: Stanford University Press.
- He Wei, & Wei Rong. (2017). The construction of a model for the analysis of international ecological discourse and materiality. *Modern Foreign Languages*, 2017(5).
- Hu, Zhuanglin et al. (2008). *Introduction to Systemic Functional Linguistics*. Beijing: Peking University Press.
- Huang Guowen. (2017). On the assumptions and principles of ecological discourse and behavior analysis. *Foreign Language Teaching and Research*, 49(06), 880-889+960.
- Stibbe, A. (2012). *Animals Erased: Discourse, Ecology, and Reconnection with the Natural World*. Middle- town, CT: Wesleyan University Press.
- Stibbe, A. (2015). *Ecolinguistics: Language, Ecology and the Stories we Live by*. London: Routledge. https://doi.org/10.4324/9781315718071
- Wang Qian, C. Longbao, & Gao Yuan. (2022). Ecological discourse analysis in educational discourse: the case of New Horizons University English textbook. *English Abroad*, 2022(17), 79-81.

89