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| RESEARCH ARTICLE

Ecological Discourse Analysis of TED Talks on Environmental Protection from the Perspective of Transitivity

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| ABSTRACT

Ecological Discourse Analysis is one of the main research approaches in Ecolinguistics, which focuses on the role of language in the ecosystem. Its purpose is to raise people's ecological awareness, enhance their sense of ecological responsibility, and take action to save the ecological crisis. Given this, this study employs the transitivity system as the theoretical framework, guided by the ecosophy of "diversity and harmony, interactive coexistence". It employs the UAM Corpus Tool 3.0 software to conduct a transitivity analysis of six TED talks on environmental protection, revealing the ecological ideas contained in their discourse.

| KEYWORDS

TED talks; environmental protection; transitivity system; ecosophy

| ARTICLE INFORMATION

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1. Introduction

With the intensification of ecological crises, climate change has emerged as one of the most severe global ecological challenges. In recent years, the trend of global warming has become increasingly pronounced, with extreme weather events such as heatwaves, heavy rains, and droughts occurring frequently, bringing far-reaching impacts on human society and the natural environment. Climate change not only threatens biodiversity but also poses a serious threat to agriculture, water resources, and human health. Faced with this global issue, the active participation of everyone is needed to jointly address climate change and protect the Earth, which we depend on for survival.

At the 9th International Conference on Applied Linguistics, Halliday (1990) delivered a keynote speech titled "New Ways of Meaning: The Challenge to Applied Linguistics". In his speech, he pointed out that problems like class discrimination, species extinction, and environmental pollution are not only to be solved by biologists, physicists, and scientists, but also require the participation of linguists. In this speech, Halliday emphasized that dealing with environmental issues should occupy a core position in applied linguistics (Penz and Fill, 2022).

Ecolinguistics is an emerging and thriving branch of linguistics that combines ecology and linguistics (Huang, 2016). At present, there are two recognized research paradigms in ecolinguistics: one is the Hausen paradigm, and the other is the Halliday paradigm. The Halliday paradigm focuses on the relationship between language and ecology. This model emphasizes the role of language in ecological issues, highlights the social responsibility of linguists, and reminds them to contribute to environmental protection. The research on ecological discourse analysis mainly includes theoretical research and empirical research. The former mainly involves the construction of theories and research methods , as well as the construction of localized ecological discourse analysis models. The latter mainly focuses on the ecological discourse analysis of news (Miao and Liu, 2023), slogans (Kuang ,Guo and Zou, 2022), and reports (Liu and Miao, 2024).

In summary, there is less research on oral discourse. As a globally renowned information - dissemination platform, TED talks on environment protection have played an important role in arousing people's attention to the environment protection and have a certain research value. Therefore, this study adopts the Halliday paradigm, combines transitivity with ecological discourse analysis, to analyze the distribution and realization of transitivity in TED talks on the environment protection, and explores the ecological ideas and consciousness constructed behind the discourse.

2. Literature review

2.1 Ecosophy

The term "Ecosophy" was first introduced by the proponent of deep ecology, Arne Naess (1973). It refers to the value-oriented conceptual system that an individual holds in situations involving the relationship between self and nature. Although ecosophy is similar in expression to "ecological philosophy," the two are not exactly the same. Naess (1989) further explained that ecosophy is the conceptual element that truly plays a role in actual ecological situations. It is not only related to ecological science itself but also involves a wide range of topics such as society, culture, and co-existence. It is concerned not only with what people think about but also with the way they think.

The British scholar Stibbe who explicitly introduced ecosophy into ecological discourse analysis was formerly engaged in the study of disease metaphors. Later, his research interest shifted to critical discourse analysis, and he is currently committed to constructing a research model for ecolinguistics and ecological discourse analysis (Huang, 2018). He (Stibbe, 2014) was the first to propose that ecological discourse analysis needs to be carried out within a certain ethical framework, which is constituted by the ecosophy of the analyst.

The mainstream ecosophies at present include resource abundanceism, sustainable development view, social ecological view, and ecological feminism, among others. Although these ecosophies have a certain guiding significance for the research of ecolinguistics to different degrees, most of them still focus on the impact of human activities on the ecological environment. They fail to regard human beings as part of the ecosystem and neglect the ecological attributes of human beings as well as the interaction between human beings and other ecological elements (He and Zhang, 2017). Based on this, He Wei and Wei Rong (2018) put forward the ecosophy of "pluralistic harmony and interactive co-existence." This concept provides a highly generalized account of the principles of positive running relationships between nature and nature, human and nature, human and human, and society and society. It has universal guiding significance. Ecosystems are interwoven and interact with each other. As ecological factors with subjective initiative, human beings should play a leading role in the operation of the ecosystem, maintain the coordination between natural ecology and social ecology, and promote the joint development of the natural world and human society.

This paper will take the ecosophy of "pluralistic harmony and interactive co-existence" as the guiding principle and conduct an ecological-oriented analysis of TED speeches on environmental themes from the perspective of ecolinguistics. It aims to reveal their ecological connotations, improve people's ecological behavior, and provide inspiration for the harmonious development of human beings and nature, human beings and society, and human beings and themselves.

2.2 Transitivity

The transitivity system refers to the categorization of what people see and observe in life into a series of processes, including material processes, mental processes, relational processes, behavioral processes, verbal processes, and existential processes. The function of transitivity is to "break down what people see, hear and do in the real world into several kinds of processes"(Halliday, 2000). This process is not only a description of objective things but also determines how we understand the objective world. The purpose of a speech discourse is to convey the speaker's ideas and opinions to the audience, and the transitivity system uses process patterns to represent human experiential behavior, thus laying the theoretical foundation for the ecological discourse analysis of TED environmental speeches. In addition to this, the participants in the process are also an important part of the transitivity system. Terms such as "actor," "goal," "carrier," "attribute," and "environmental participant" are considered. Based on the transitivity system of systemic functional linguistics.

He Wei and Wei Rong (2017) constructed a transitivity analysis model suitable for international ecological discourse. They reconstructed the participant system and re - defined and subdivided the process system. Participants can be divided into "living participants" and "non - living participants." The former includes "human living participants" and "non - human living participants," while the latter includes "physical participants" and "social participants." First, according to the verb in the clause, its linguistic ontological process type is determined, such as action, relation, mental process, communication, etc. Then, adhering to a certain ecological philosophy, the ecological process type is determined through the analysis of the clause semantics, which includes three types of processes: beneficial, neutral, and destructive.

3. Analysis

TED, as a globally renowned platform for knowledge dissemination, play a significant role in promoting intellectual exchange and social progress with their diverse themes and profound insights. Many TED Talks focus on various ecological issues, triggering widespread attention and reflection. Among them, speeches on topics such as light pollution and air pollution vividly demonstrate the severity of environmental problems and their far-reaching impacts on ecosystems and human health. The corpus for this paper is sourced from the TED official website (www.ted.com). By entering the keyword "Environment Protection," I carefully selected six representative TED Talks on environment protection themes from the past year as the corpus for this study. As a speech platform with extensive global influence, TED's presentation of environmental protection themes is not only forward-looking but also fully reflects its concern for global ecological sustainability and its sense of mission to drive social change.

3.1 Overall distribution of clause process types

Different process types reflect the diverse perceptions and experiences of the real and psychological worlds, each carrying unique functions. Under the perspective of ecological discourse analysis, the different process types and participant roles in TED speeches on environmental protection are crucial for the interpretation and dissemination of ecological concepts and environmental issues. Through a detailed analysis of the clauses in the selected TED speech corpus, a total of 673 transitivity processes were identified. Among them, material processes took the dominant position (255, 37.9%), fully demonstrating the actual interaction between humans and the environment as well as the occurrence of various environmental behaviors. In the second place were relational processes (197, 29.3%), which clearly presented the connections between environmental elements and between humans and the environment. Next were mental processes (97, 14.4%), reflecting people's cognition, emotions, and attitudes towards environmental issues. The number of behavioral processes was relatively small, ranking fourth (65, 9.7%), reflecting the specific behavioral manifestations of humans in the environment. The number of verbal processes was 43, playing an important role in conveying environmental information and calling for action. The frequency of existential processes in the corpus was relatively low. Considering the distribution of each process type, due to the small proportion of existential and verbal processes in the corpus, this paper will focus on the analysis of material, relational, mental, and behavioral processes, and will not conduct in-depth analysis of verbal and existential processes.

Table1 Distribution of transitivity processes

Process type	Material process	Relational process	Mental process	Behavioral process	Verbal process	Existential process	In total
Number of sentences	255	197	97	65	43	16	673
Percentage	37.9%	29.3%	14.4%	9.7%	6.4%	2.3%	100%

3.2 Transitivity Analysis and its Ecological Discourse Significance

3.2.1 Material process

The material process refers to the process of "doing," which expresses that an entity does something, or possibly does something to another entity. The participants in the action process are divided into the doer of the action (the agent) and the receiver of the action (the patient). As can be seen from the above statistical results, the action process has the largest proportion and is mainly used to construct reality and express actions and behaviors.

1. That light is meant to be illuminating our sidewalks, and our streets and our houses.

2. Instead, it's actually going up into the sky and out into the universe.

Example 1 and Example 2 respectively elaborate on the normal functions of light and light pollution. The semantic structure of Example 1 is presented as "agent—non-living physical participant (that light) + action process (illuminating) + patient—non-living physical participant (our sidewalks, our streets and our houses)", emphasizing the function that light should originally perform, which is to illuminate the living areas of human beings. Among them, the agent "that light" occupies the thematic position, highlighting the functionality of light. From the perspective of ecological discourse, this falls within the category of ecologically beneficial discourse, emphasizing the importance of the rational use of light resources for the human living environment. It aims to remind people to pay attention to the appropriate role of light in the ecological environment so as to maintain a good living order and ecological balance. Example 2, on the other hand, reveals that there is something abnormal with the light, which fails to function as expected. Instead, it enters the sky and the universe, reflecting the problem of light pollution. In this sentence, the agent "it" is in the thematic position, guiding readers to focus on the abnormal performance of light. At the same time, the environmental element elaborates on where the light goes, triggering people's thinking about the phenomenon of light pollution.

3. I rushed Ella to hospital 28 times in 28 months.

4. She was admitted into intensive care five times and put in an induced coma to save her life.

5. Her body was absorbing invisible, toxic air spewed out by petrol and diesel vehicles.

Examples 3 to 5 focus on the close link between human health and the environment. The semantic structure can be summarized as "actor - human individual (I) + action (rushed) + recipient - human individual (Ella) + environmental context (to hospital 28 times in 28 months)". These sentences depict the scenario where "I" frequently takes Ella to the hospital, and the environmental context suggests that Ella's health condition may be closely related to environmental factors. From an ecological perspective, this reflects the active actions of humans in dealing with environmental challenges (such as the air pollution mentioned later), and also highlights the potential risks of the environment to human health, prompting society to deeply reflect on the importance of environmental protection for maintaining human health.

Example 4 focuses on Ella's treatment experience, placing "she" (Ella) at the core of the narrative. Although the actor is not directly mentioned (it can be implied to be medical personnel), from the perspective of ecological relevance, it further highlights the far - reaching impact of environmental factors (such as air pollution) on human health. This description is in line with the core views of Ecological Discourse Analysis, which holds that environmental factors have a significant impact on human health, thereby emphasizing the key role of environmental protection in safeguarding human life safety.

Example 5 clearly reveals the passive relationship between humans and the polluted environment. According to the principles of Ecological Philosophy, this relationship violates the basic principle of Harmony and Coexistence among the elements of the ecosystem. This example emphasizes the urgency of controlling pollution sources and improving air quality, aiming to achieve Ecosystem Health and the Sustainable Development of human society. These examples collectively emphasize the urgency and importance of environmental protection, reminding us that while pursuing economic development, we must also take into account environmental protection to ensure the harmonious coexistence of humans and nature.

6. We need to shift from toxic fossil fuels to clean, electrified public and active transport.

7. In an entire year a dog whelk will rarely move more than about 10 meters.

8 They attack things like barnacles.

The structure of Example 6 is "agent—participant of the human group (we) + action process (shift) + starting point element (toxic fossil fuels) + ending point element (clean, electrified public and active transport)", conveying the actions that humans should take to improve the environment. Among them, the agent "we" is in the thematic position, highlighting the initiative and sense of responsibility of human beings. The starting point and ending point elements clearly indicate the direction of the transformation, which falls within the category of ecologically beneficial discourse. This sentence conveys a positive awareness of ecological protection, encouraging people to reduce the use of energy sources that are harmful to the environment and promote the development of sustainable transportation. It is in line with the concept in ecological discourse that advocates active human participation in ecological protection, reflecting humanity's understanding of ecological environmental issues and corresponding coping strategies.

Examples 7 to 8 focus on biological behaviors. Example 7 describes the movement of dog whelks. The agent is in the thematic position, highlighting the characteristics of biological behaviors. The environmental element explains the time and degree of the occurrence of the action, and it also belongs to ecologically beneficial discourse, demonstrating the activity habits of organisms in the ecological environment, which helps people understand the survival status of organisms and the diversity of

the ecosystem. The configuration of Example 8 is "agent—participant of a non-human group (they, referring to dog whelks) + action process (attack) + patient—non-human participant (things like barnacles)". This sentence concisely describes the prey of dog whelks. The agent emphasizes the subject of the behavior, and the patient clarifies the target of the attack. From an ecological perspective, it further shows the food chain relationship among organisms and belongs to ecologically beneficial discourse, enabling people to have an in-depth understanding of the interactions among organisms in the ecosystem and the stability of the ecosystem. It reflects the importance attached to the ecological relationships of organisms in ecological discourse analysis and helps to enhance people's awareness of ecological environmental protection.

These sentences of material processes show the complex relationships among humans, organisms, and the environment from different perspectives. Through the analysis of the agent, patient, and action process, the ecological meanings contained therein can be clearly revealed. The interaction between humans and the environment not only includes the impact of the environment on human health but also reflects the efforts made by humans to improve the environment; biological behaviors demonstrate the diversity of the ecosystem; and phenomena such as light pollution highlight the problem of ecological damage. These analyses help to enhance people's awareness of ecological protection and promote the work of protecting and improving the ecological environment.

3.2.2 Relational process

In the transitivity system, relational processes are used to express the state of "be". They can assign a certain characteristic to an entity or determine an identity for something, and they are a way of representing experiences of the abstract world. In the TED talks involved in this study, relational processes are mainly used to display the characteristics of environmental phenomena, explain the connections between environmental issues and other factors, and present the relationship between human health and the environment. This reflects the seriousness and impact of environmental problems and arouses people's attention and thinking about ecological issues.

9.Those cities are shining like jewels, highways are traced by webs of light.

Example 9 demonstrates a specific semantic structure, in which "non - living physical participants (those cities, highways)" serve as the carrier, and are connected to the attributes "shining like jewels" and "traced by webs of light" through the relational processes "are shining" and "are traced". Such descriptions endow cities and highways with the characteristics of "shining like jewels" and "outlines traced by webs of light", vividly depicting the unique appearance of human - made products under the illumination of light. This description implies the fact that humans use light resources to shape urban landscapes, but it also hints at the potential problem of light pollution caused by excessive lighting. Light pollution is not only an unnecessary consumption of energy, but it may also disrupt biological rhythms and pose a threat to the life of organisms and ecological balance. Therefore, while this statement praises the beautiful urban scenery created by humans, it also reminds us to balance the relationship between landscape beautification and ecological protection in the process of urban development, to ensure their harmonious coexistence.

10. These unremarkable, completely blank night skies are due to all of the light we produce at night.

11. The money that's spent on that wasted light is three billion dollars a year.

12.Light pollution is linked to obesity.

The semantic configuration presented in Example 10 focuses on the "non - living physical participant," namely, "those unremarkable, completely dark night skies," and introduces the underlying cause through the relational process "are due to" . This configuration establishes a causal chain between the state of the night sky and human nighttime lighting activities, highlighting the current characteristics of the night sky and revealing the destruction of light pollution on the night sky ecosystem, which in turn affects the organisms that depend on the night sky environment. This prompts us to reflect deeply and encourages us to explore effective strategies for protecting the night sky ecology.

In Example 11, funds are closely connected to a specific amount attribute through the relational process "is," revealing the seriousness of the light pollution problem from an economic perspective. This statement reminds us that when considering environmental protection issues, we should not ignore the importance of economic factors, and encourages us to explore ways to use light resources rationally in order to achieve a win - win situation for economic benefits and environmental protection.Example 12 shows the association between the "non - living physical participant" — light pollution, and the "health problem" — obesity, connected by the relational process "is linked to." This configuration reveals the potential risks of light pollution to human health, especially its association with obesity, thereby broadening our comprehensive understanding of the hazards of light pollution and prompting us to pay more attention to the potential impact of light pollution on human health.

13. Air pollution is an invisible global pandemic.

14. Air pollution around our home was persistently far above the levels deemed acceptable by the WHO.

15. Ella had one of the worst cases ever of asthma recorded in the United Kingdom.

The semantic configuration of Example 13 is "Carrier — non - living physical participant (Air pollution) + relational process (is) + attribute — concept with serious impact (an invisible global pandemic)". "Is" assigns the attribute of "an invisible global pandemic" to air pollution, conveying the severity of air pollution and raising the importance of its governance and prevention.In Example 14, the relational process "was" connects the carrier of air pollution around the home with the attribute of exceeding the acceptable levels of the World Health Organization, highlighting the seriousness of air pollution around the home. In terms of ecology, this sentence shows that the problem of air pollution in the human living environment is very serious, and long - term exposure to such an environment poses a great threat to the health of residents. It reflects the deterioration of the local environmental quality and the urgency of environmental protection. This sentence belongs to ecologically - beneficial discourse, reminding us to pay attention to the air quality around us and promote the improvement of the ecological quality of the living environment. It shows that relational processes can help us understand the close relationship between environmental issues and human life when describing the state of entities, which is in line with the representation of abstract world experiences (the relationship between the air quality of the living environment and the standard) by relational processes.

In Example 15, "had" assigns the attribute of severe asthma to Ella, and considering the background, her condition may be related to air pollution, revealing the direct impact of the environment on human health and triggering the thinking about the relationship between environment and health. In conclusion, these sentences of relational processes reveal the relationship between environmental issues and human health, economy, etc. from various aspects through different semantic configurations, and play an important role in ecological discourse, which helps to promote ecological protection actions.

3.2.3 Mental process

In transitivity analysis, mental processes are categorized as "consciousness activities," encompassing three dimensions: perception, emotion, and thought. They involve two core roles: the sensor and phenomenon. In this study on TED talks about environmental protection, mental processes are mainly used to demonstrate individuals' emotional experiences, attitudes, and cognitive understandings when facing various environmental issues and their ecological consequences.

16. I've always loved the night sky.

17. You might be wondering how normal light could possibly impact cancer rates.

In Example 16, the mental process "loved" expresses the sensor's affection for the phenomenon "night sky," which is an emotional mental process. With "I" as the individual sensor in the subject position, the sentence highlights personal emotional inclination. From an ecological perspective, this love for the night sky reflects the emotional bond between humans and specific elements of the natural environment (night sky). It shows humanity's appreciation for the beauty of nature and implies people's inner love for the natural environment, which may then motivate efforts to protect it and maintain this pleasant emotional experience.

In Example 17, the mental process "wondering" reflects the exploration of "you" and the wondering of the phenomenon "how normal light affects the incidence of cancer," which is a mental process of thought. Similarly, with "you" as the sensor, the sentence highlights individual concern for environmental health issues. Ecologically, it shows people's exploration of the potential link between environmental factors (light) and health conditions (cancer incidence), indicating the public's deep concern for the impact of the environment on health. This mental process can stimulate the motivation to conduct in-depth research and understand related issues and then take measures to prevent or mitigate the potential threats of the environment to health.

18. I want every government to guarantee their children the chance to live full and healthy lives.

19. The hope comes from seeing the incredible stories of innovators and policymakers and investors that are doing more.

In Example 18, the mental process "want" expresses the sensor's expectation and demand for the phenomenon "the government ensures a healthy life for children," which is an emotional mental process. With "I" as the sensor, the sentence expresses a widespread social expectation. Ecologically, although there is no direct mention of environmental problems here, the premise of ensuring a healthy life for children often depends on a good ecological environment. Therefore, this mental process indirectly reflects people's desire for a healthy ecological environment, hoping that the government can take measures to create

and maintain such an environment, so as to ensure that the next generation can grow up in a healthy environment, showing the concern for the relationship between the ecological environment and human future development.

In Example 19, the mental process "hope" reflects the optimism of the implied group of sensors towards "witnessing the active actions of innovators, policymakers, and investors," which is also an emotional mental process. Although the sensor is not explicitly stated, the context implies that it is the audience of the speech. Ecologically, this hope for active actors mirrors people's anticipation for solutions to environmental problems. Seeing these groups committed to environmental protection enhances the confidence in improving the ecological environment. This mental process can inspire more people to join the ranks of ecological protection and jointly promote environmental improvement and sustainable development.

In conclusion, these expressions of mental processes reveal human emotional responses, attitudes, and cognitive levels towards environmental issues and their impacts from different dimensions. By analyzing the sensor and phenomenon, the ecological connotations are explored.

3.2.4 Behavioral process

In the transitivity system, the behavioral process is a process that embodies "doing," which is similar to the action process, but the behavioral process focuses more on describing relatively simple, habitual, or physiological actions of organisms. In the ecological discourse analysis of TED speeches on environmental protection in this study, the behavioral process is of great significance for showing the interaction between humans and the environment and the development and changes related to the environment.

20. I want you to go out and experience a truly dark night sky for yourself.

21. We've seen exponential growth in electric vehicle sales.

For the sentence 20, the semantic configuration is "causer - individual human participant (I) + behavior - initiating process (want) + behaver - individual human participant (you) + behavioral process (go out and experience) + object of behavior - non - living physical participant (a truly dark night sky)." Here, "want" serves as the behavior - initiating element, with the causer "I" hoping that the actor "you" will carry out the behavioral process of "go out and experience," and the object of behavior is "a truly dark night sky." From an ecological perspective, this expression of the behavioral process reflects "my" hope that others can personally experience the truly dark night sky, implying that light pollution is currently severe, and people may rarely have the opportunity to experience a pure night sky. By advocating for this behavior, it encourages people to pay attention to the issue of light pollution, enhances their perception and love for the natural environment, and thus stimulates people's awareness and actions to protect the night sky ecology and reduce light pollution, which has a positive ecological significance.

For the sentence 21, the semantic configuration is "behaver - group human participant (We) + behavioral process (seen) + object of behavior - non - living physical participant (exponential growth in electric vehicle sales)." The behaver "we" has carried out the behavioral process of "seen," and the object of behavior is the phenomenon of "exponential growth in electric vehicle sales." Analyzing from an ecological standpoint, the increase in electric vehicle sales reflects the growing demand for clean energy transportation under the backdrop of environmental protection, as well as the progress society has made in promoting the development of sustainable transportation. This behavioral process indicates that in response to environmental issues (such as air pollution), humans are taking concrete actions by choosing more environmentally - friendly modes of transportation, which embodies the positive efforts of humans to improve the ecological environment, conveys a positive ecological development trend, and also implies the possibility and potential for achieving sustainable development in the transportation sector in the future.

In conclusion, these two sentences of behavioral processes demonstrate human behavior and awareness in aspects related to environmental protection from different aspects. One focuses on guiding individual experiential behavior to enhance environmental awareness, while the other reflects the ecological development changes brought about by group behavior. They have important enlightening significance for understanding the ecological discourse in the speeches and promoting ecological protection.

4. Conclusion

This paper focuses on a specific ecological value - orientation and conducts an in - depth ecological discourse analysis of the transitivity system in TED speeches on environmental protection. Through a detailed exploration of various transitivity elements such as material processes, relational processes, mental processes, and behavioral processes in the speech texts, it reveals the ecological representation forms and profound ecological implications contained therein.

Specifically, at the level of material processes, the narratives in the speeches vividly depict the interactions between human activities and the natural environment, the behavioral patterns of organisms, and the actual scenes of ecological protection and destruction. They clearly show the impact of human actions on the environment and the key role of organisms in the ecosystem. The relational processes ingeniously expound the characteristic attributes of environmental phenomena, the interconnections between environmental issues and various other factors, as well as the close link between human health and the environment, further highlighting the complexity and interwoven nature of environmental issues. The mental processes profoundly reflect the diverse emotional responses, attitudes, and profound understanding of humans towards environmental issues and their ecological consequences, showing the public's deep concern for and rational thinking about the ecological environment. The behavioral processes effectively demonstrate the specific actions and awareness manifestations of humans in environmental protection practices, as well as the ecological and environmental changes brought about by these actions.

These transitivity processes interweave and work together in the speeches, constructing a diverse and rich ecological discourse framework that conveys ecologically - significant messages. Based on the above analysis, we deeply appreciate that TED speeches, as an important platform for spreading ideas and knowledge, have great influence and potential to promote ecological awareness. Speakers should make full use of this platform, carefully select and use language, and adopt appropriate language strategies to accurately convey ecological values, in order to enhance the audience's cognition and understanding of ecological issues and guide them to form positive ecological concepts and awareness.

At the same time, we also call on the audience to actively respond to the ecological concepts advocated in the speeches, transform them into concrete actions, start from themselves, and contribute to the environmental protection cause. In addition, various sectors of society, including the media, educational institutions, and government departments, should take on the responsibility of spreading ecological awareness, work together, and strive to cultivate “ecological citizens” with ecological awareness, promote a positive ecological culture in the whole society, and promote the sustainable development of the ecological environment.

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