A Study on The Construction of Multimodal Eco-Aesthetic Framework

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> DOI: 10.31364/SCIRJ/v10.i8.2022.P0822922 http://dx.doi.org/10.31364/SCIRJ/v10.i8.2022.P0822922

> > Paper Submission Date: 2nd July 2022 Paper Acceptance Date: 18th August 2022 Paper Publication Date: 25th August 2022

Abstract- Based on the interpretation of the construction of ecological civilization during the "14th Five-Year Plan" period and the 6th Plenary Session of the 19th Central Committee, this research investigates the possibility of the cooperation between multimodal discourse analysis (MDA) with aesthetic linguistics. From the perspective of Eco-aesthetics, this paper tries to construct a multimodal Eco-aesthetic analysis framework, pays attention to the Eco-aesthetic experience of multimodal symbolic images to information receivers, and finds aesthetic inspiration that is more suitable for information receivers, and interpret new energy from different angles. Then, this paper takes the advertisements of 2021 BYD new energy vehicles and Lixiang ONE vehicles as examples to make Eco-aesthetic from the two directions of non-verbal symbols (representational meaning, interactive meaning and compositional meaning) and linguistic symbols (conceptual function, interpersonal function, textual function), and tries to make Eco-aesthetic evaluation. Finally, this paper attempts to convey the concept of "sustainable development" of low-carbon, green and environmental protection to readers, and calls on more auto brands to take on the social responsibility that enterprises should take, so as to inject new strength into the new pattern of China' s industrial development of mutual integration, symbiosis and win-win cooperation.

Index Terms—Multimodal discourse analysis (MDA), Ecoaesthetics, visual grammar, new energy vehicle advertisements.

I. INTRODUCTION

All During the "14th Five-Year Plan" period, it is a very challenging task for China to build a modern energy system while promoting high-quality economic development, building a new development pattern, and achieving strategic goals such as "carbon peaking" and ecological civilization system construction [19]. According to the push results of this serious situation, although China has a record of electric vehicle production from 2016 to 2019, it has not been developed due to factors such as manufacturers and government subsidies. The outbreak of the COVID-19 in 2020 has made the development of new energy vehicles even worse. In view of the current complex situation, in order to promote economic development, the Chinese government clearly pointed out in Chapter 11 of

the 14th Five-Year Plan: Resolutely curb the blind development of high-energy-consuming and high-emission projects, and promote green transformation to achieve positive development. It can be seen that vigorously developing the green economy and building an ecological civilization system has become a hot topic of concern for society, enterprises and even individuals. Based on policy incentives and development needs, the new energy vehicle industry once again caught the power of green development. The General Office of the State Council [12] issued the "New Energy Vehicle Industry Development Plan (2021-2035)", with the vision that by 2025, the competitiveness of Chinese new energy vehicle market will be significantly enhanced, power batteries, drive motors, automotive major breakthroughs have been made in key technologies such as the operating system, and the security level has been comprehensively improved. The average power consumption of new pure electric passenger vehicles will be reduced to 12.0 kWh/100 kilometers, the sales of new energy vehicles will reach about 20% of the total sales of new vehicles, and highly autonomous vehicles will be commercialized in limited areas and specific scenarios. The convenience of battery swap service has been significantly improved. Major auto brands responded positively to the plan, and gradually formed a fierce market competition. In order to adapt to the eyeball economy and the era of visual images, industries use advertising, the most effective and straightforward way, to promote to consumers, express ideas through sound, image, text, color and other elements, and fully reflect the aesthetic characteristics of multimodal symbols in language environment.

Therefore, this paper selects the official advertising videos of BYD new energy vehicle and Lixiang vehicle as the corpus, and introduces MDA into them, paying more attention to the effect that the corpus wants to present to readers in the process of use. And with the integration of various fields and disciplines, this paper tries to construct an Eco-aesthetic framework to interpret the efforts made by the new energy vehicle industry from different perspectives, so as to provide some ideas for MDA to have a discourse in China and make new energy vehicle industry go global.

II. MULTIMODAL ECO-AESTHETICS FRAMEWORK CONSTRUCTION

A. The Availability of Multimodal Discourse Analysis and Eco-aesthetic

Wherever Since Joseph Meeker published his The Comedy of Survival, ecological esthetics has gradually entered the academic field [4]. In Ecological Literature and Art of Lu Shuyuan, he mentions the French sociologist J. M. Ferry' s prediction of ecological aesthetics, "Ecology, and everything related to it, heralds the emergence of a new wave of modernization governed by aesthetic theory" [9]. Professor Zeng Fanren proposes the establishment of an aesthetic state of being that conforms to ecological laws [20]. This is a new ecological existential aesthetic view of man in a state of ecological aesthetics that is in dynamic balance and harmony with nature and society. Cheng Xiangzhan points out in his article On the Four Key Points of Ecological Aesthetic Appreciation that ecological aesthetics is relative to the previous non-ecological aesthetics (hereinafter referred to as "traditional aesthetics"), and it is a new type of aesthetics to respond to the global ecological crisis, based on the ideology of ecological ethics, triggering imagination and stimulating emotion with the help of ecological knowledge [1], and aiming at it is a new aesthetic approach and aesthetics to overcome human aesthetic preferences, based on the idea of ecological ethics.

Multimodal refers to a compound discourse with images, diagrams, etc. in addition to text, or any text that is encoded by more than one symbol to achieve meaning. The combination of multimodal and language, a social symbol, gradually formed a multimodal discourse. Multimodal discourse is a phenomenon that uses multiple senses such as hearing, vision, and touch to communicate through language, images, sounds, actions, and other means and symbolic resources [21]. A sociosemiotic analysis of multimodal discourse [18] details Kress & van Leeuwen' s "visual grammar" [13]. Halliday studies language as a semiotic resource, and his semiotic ideas and systemic functional linguistics theory provide a direct theoretical source for multimodal discourse analysis, "Systemic Functional Linguistics Multimodal Discourse Analysis" (SF-MDA) becomes a research path for multimodal discourse [13].

Regarding the combination of MDA and Eco-aesthetics, this paper adopts the following processes. First, these two research objects should be related when described. Zhang points out that multimodal discourse refers to the phenomenon of using auditory, visual, tactile and other senses to communicate through language, image, sound, movement and other means and symbolic resources [21]. In the related theory of Eco-aesthetics, David believes that the task of aesthetic knowing is to transform the ambiguous, multi-sensory things into clear perceptual images [2]. That is to say, in the process of aesthetic description, the research object needs to have aesthetic characteristics and multimodal characteristics, and the two should be related. Second, both of them focus on the role that context plays in a situation. Zhang mentions that the situation can directly participate in the communicative process [21], but it cannot participate in the communicative process in an active way, it is "pulled" into the communicative process

according to the communicator' s communicative purpose and the communicative method adopted. The basic character of the beauty of speech is reflected in the fact that the speaker chooses the appropriate discourse in the form of language, that is, the arranged discourse is suitable for both the social background and the discourse background (context) [15]. Images or language have different meanings in different contexts, so after describing the research object, it is necessary to give an explanation suitable for the social background based on the context. Finally, in terms of visual response, there is a combination of the two areas. The process of combining visual elements (people, places, and objects) in a visual statement with a certain level of complexity and extensibility is explained with the help of visual grammar in MDA. Just Meeker mentions that, "... the name of that common element that governs human perceptions of beauty in nature forms and in human art forms. [4]" The visual element has obviously become an important point in the Eco-aesthetic process. On the basis of the above combination points, this paper should not only focus on how to better integrate culture and political ideology, but also properly analyze the interaction between methods. The third step of this paper is to evaluate the positive and negative effects of visual elements on the information receiver, in order to propose a more suitable ecological aesthetic scheme for human beings.

Eco-aesthetics is rarely used in language, so the combination of MDA and Eco-aesthetics, and the organic integration of linguistics and aesthetics, not only breaks the deadlock of "linguistic too strong or not strong enough" [17] expressed by discourse. It also introduced the research path of Eco-aesthetics into the eyes of scholars.

B. Construction of multimodal Eco-aesthetic framework

Multimodal Eco-aesthetic aims to investigate the organic combination and the possibility of interdisciplinary expansion between multimodal symbols and aesthetic properties, the connection between the presentation of multimodal symbols and aesthetic forms and attempts to find multimodal expressions that can confer beautiful aesthetic experiences on the recipients of the symbols [3]. According to the selected corpus, multimodal Eco-aesthetic can be realized through the following processes: firstly, the symbols of different modalities in the text are categorized, and the aesthetic features are described in terms of both verbal and non-verbal symbols through meaning potential, respectively, because the systematic nature of many symbols is difficult to describe, especially some fragmented, ephemeral and isolated symbols, due to the emphasis on the resourceful character of the symbol system in multimodal discourse studies [22]. Secondly, aesthetic activity is an activity in which the language of the act and the speech act cooperate in depth [10], and the ideology behind the text should be interpreted in the context of cultural, social, and political backgrounds, and discourse analysis should be carried out in terms of aesthetic concepts and cultural environments. Finally, an evaluation of the aesthetic process is carried out, reflecting on the aesthetic intention behind the choice of the symbol and considering how to describe the phenomenon more vividly and effectively through multimodal discourse, reflecting the charm of language.

Combining the above process, this paper constructs a framework construct based on three functions of Halliday (1985) and visual grammar with multimodal Eco-aesthetic analysis as the subject, two forms of non-verbal and verbal

signs, and aesthetic parsing and aesthetic evaluation as the output (as shown in Fig.1). The framework attempts to programmatically parse the symbolic resources in the corpus one by one from the total to the divided Eco-aesthetic, ultimately achieving an effective description of the symbolic aesthetic features and giving the most intuitive aesthetic expression to the multimodal symbol receivers.

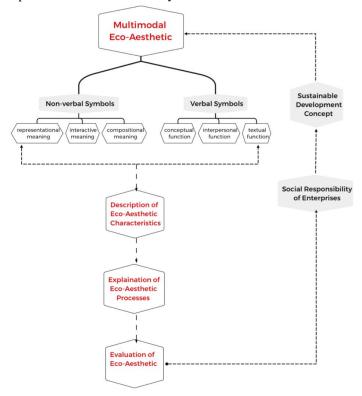


Fig. 1. Multimodal Eco-aesthetic Framework

III. CORPUS SELECTION

New energy vehicles in the Chinese market have seen production records since 2016 and have been developed slowly due to factors such as manufacturers, government subsidies, and the emergence of the COVID-19 in 2020. Therefore, the corpus selection in this paper is based on the summary of Tencent. Com about new energy vehicle sales in the Chinese market in 2021 (as shown in TABLE. I). In the growth data, it can be found that BYD, XPENG, Lixiang and MINI EV under SAIC-GM are obviously more popular with the public. By comparing the car prices, it can also be found that most consumers are attracted by its small size and affordable price before purchasing the MINI EV under SAIC-GM. Finally, compared with the other three cars, XPENG is still a new brand, and its publicity is relatively focused on car performance and experience.

TABLE I. New energy vehicle sales ranking data in 2021

Ranking of new energy vehicle sales in the Chinese market in 2021				
Ranking	Brand	Sales in 2021	Growth	
1	XPENG	98,155	275%	
2	Tesla	484,130	252%	
3	BYD	598,528	227%	
4	Lixiang	90,491	177%	
5	MINI EV under SAIC-	452,270	173%	
	GM			
6	Great Wall Motor	135,028	140%	
7	Chery Automobile	98,172	125%	
8	SAIC Passenger Cars	162,126	111%	

9	NIO	91,429	109%
10	GAC AION	120,155	100%

2021 is called "the year of the explosion of new energy vehicles", so this paper uses sales, popularity, purchase reason and year of release as the filtering reasons, and finally uses BYD's new energy vehicles: "What can we do for the earth" as the theme of the advertisement and the Lixiang ONE as the corpus, and the theoretical basis of visual grammar and three linguistic functions of Halliday are combined with the framework established in Figure.1 to conduct Eco-aesthetic analysis and explore a more perfect aesthetic experience with symbols as the main constructs.

IV. MULTIMODAL ECO-AESTHETIC ANALYSIS OF BYD AND LIXIANG ONE ADVERTISING VIDE

The two advertisements selected in this article are BYD & Lixiang ONE new energy vehicle. The former is based on the theme of "What can we do for the earth", which arouses the audience' s thinking from the ecological and environmental problems facing the earth today, and then transformed into BYD new energy vehicle production concept, finally ended with the subtile "Driven by the future". The latter Lixiang ONE video highlights the transformation of new energy in many aspects, showing the different style of the current new energy vehicles.

To ensure the accuracy and objectivity of the study, this paper uses the smallest unit of video, "frame", to analyze the video and intercept the corpus of the advertisement to be analyzed. The total duration of BYD new energy vehicle advertisement is 81s, and 2430 frames of images are obtained. The author deletes duplicate images and invalid images, and finally obtains 195 valid images. The total duration of Lixiang ONE advertisement is 153s, 3825 frames of image are acquired. The author also deletes duplicate images and invalid images, 326 frames of valid image are finally obtained.

The following paper will take new energy vehicles as the main object of observation, the characters and environment appearing in the promotional video as reference indicators, use the effective images intercepted in the video as a symbol, and apply the multimodal Eco-aesthetic analysis framework shown in Figure1 to interpret the corpus in combination with the music and language in the film. In response to the analysis, this paper also attempts to explore the space and possibilities of a more suitable outreach advertising language for new energy vehicles in the Chinese market.

A. Eco-aesthetic Analysis of Non-verbal symbols

Visual grammar views visual composition as "grammar" that can combine depicted people, places, and things into a meaningful entirety. Kress and van Leeuwen [5], base on the three metafunctions proposed by Halliday, extend the three meta-functions into three functional meanings: representation, interaction, and composition, proposed a theory of visual grammar, and use visual grammar to study the phenomenon of multimodal regularity in expressing meaning. This part will analyze the Eco-aesthetic process based on the constructed analytical framework from the representative, interactive and compositional meanings and extend to the branches of each meaning.

1) Representational meaning reflects changes in Ecoaesthetic balance

Base on the characteristics of the image itself, the reproduction of meaning is divided into two parts: narrative

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representation and conceptual representation. Narrative images express unfolding actions and events, changing processes, and momentary spatial arrangements, while conceptual images represent categories, structures, and meanings of images, which express a generalized, stable, and non-time-bound essence [5]. The process of narrative representation can be divided into four processes of reaction, action, psychology, and speech. And conceptual representation is embodied through three processes of analysis, categorization, and symbolism.

Kress and van Leeuwen use the term "representation" to denote this process, and the representational meaning is embodied in conceptual and narrative modes. Conceptual modes represent the class, structure, or meaning of participants [5]. In other words, it represents the broad, more or less stable and eternal nature of the participants, and the narrative mode is used to present unfolding actions and events, processes of change, ephemeral spatial arrangements. For example, in the advertising video of Lixiang ONE, there is a picture of two cars following on the highway, the road in the picture is a vector, and the two cars driving on the road play the role of "participants" in the driving process, which is achieved through the narrative process. This is because there must be directional symbols in the narrative process, which means "connection". The clean highway, the new energy car without exhaust emissions, and the intelligent driving mode show the concept of green and low-carbon development in the new energy era, while the pictorial symbols show the action process in the sense of reproduction.

The potential meaning of image vector decomposition is broad and abstract, and it's difficult to express in words. The accompanying text tends to describe the participants more explicitly, describing what exists in space [5]. Therefore, some of the text in the BYD advertising campaign embodies the narrative process in a completely logical spatial order, for example: "如果,我们把地球的历史浓缩成一年,单细胞 生物在三月下旬出现,恐龙则在 12 月中旬称霸地球,人 类出现仅仅一瞬。" The process of speech fully reflects that BYD new energy vehicle enterprise has been fully aware of the current serious ecological problems and is doing its part to actively promote the development of ecological civilization. Besides, these two ads do not reflect the psychological process.

The actor is a participant in the vector, or it constitutes the vector in whole or in part by itself. The actor is often the most important participant in the images. There is a picture of a human with a mask inhaling a lot of black smoke in the video of Lixiang ONE, the smoke that blends in with the gray background is instantly inhaled by the human body. The transition of the phenomenon from thick smoke pollution to human in extremely harsh environmental conditions, the background is still depressingly gray, including the clothing of human echoes the background. The different background, color saturation and sharpness settings give the visual impact to the receiver of the information, human puts on the mask and her expression is very painful, conveying the message that the ecological environment is seriously polluted and the human is also to blame. Therefore, severe ecological problems also violate the principle of harmony between man and nature advocated by Eco-aesthetic, resulting in the breaking of aesthetic balance.

2) Interactive meaning reflects the dynamic changes of *Eco-aesthetics*

Interactive meaning is about the relationship between the maker of the image, the thing (or person) represented by the image, and the viewer [8]. There are four elements to achieve interactive meaning: contact, social distance, perspective and mood, and different choices affect the result of the image presented and the interactive relationship between the viewer. Interactive meaning is similar to interpersonal function in that both are characterized by the realization of specific social relationship between image makers and readers. Below this paper will show that interactive meaning how to establish the relationship between image creators, participants, and viewers through these four aspects.

a) Contact

Kress and van Leeuwen divided the images into those with eye contact (both frontal and oblique) for information seeking and those without eye contact for information giving [5], based on whether there was direct eye contact between the participant and the viewer. In the end of BYD's video, the participant (a child dressed as an astronaut) is waving to the viewer, which is the requesting information category with line-of-sight communication. The image is displayed from blurred to clear, from far to near, with the text "Driven by the FUTURE", which is closely related to the ecological concept in this commercial, and also achieves the effect of BYD's global promotion.

b) Social distance

Through the movement of the camera, the social distance between the viewer and the participant can be presented, and the intimacy between the two is proportional to the social distance. Lixiang ONE shows the sequence of shooting from back to front. From the beginning of only shooting two people to the six people in the frame shown in the picture, it seems that the camera is zoomed out, but the distance between the participants is narrowed, even shorten the social distance, so that viewers and participants directly resonate, as if they were inside a car. In addition, the text expresses: "Leave no man behind" also reflects the shortening of social distance, Chinese means "不丢下一个人". Aesthetic choices at the level of language and symbols also correspond to the harmonious state of life [15]. The sharpness and color saturation of the image are vivid, which well reflects the improvement and beautification of the environment in this new energy era. In addition, language is a very intuitive aesthetic object. These two images display to the viewer a comfortable aesthetic experience.

c) Perspective

The perspective is divided into horizontal perspective and vertical perspective. The horizontal perspective basically starts from the perspective of the participants. Most of the corpus selected in this paper adopts a frontal perspective, which fully integrates the viewer and the participants, presenting an immersive atmosphere for the viewer. The vertical perspective is divided into the upward viewing angle, the head-up viewing angle and the overhead viewing angle, which are all reflected in the advertising video. Lixiang ONE is taken from an overhead perspective. The viewer observes from far to near, Lixiang ONE is integrated with the city night and gorgeous lights, reflecting the aesthetic concept of harmony and beauty. At the same time, this shooting angle implies power relations, which in a certain sense establishes the image of consumers and presents the current great situation and fervor of new energy vehicles.

There is also a picture showing the starry sky from an elevated perspective which is shot from an upward angle, showing the viewer the vast starry sky from the participant's perspective. The driving experience in the new energy era feels as pleasant and comfortable as watching the stars in the night sky at night.

d) Mood

The mood mainly expresses through the color saturation of the image, and the change of mood can be reflected according to the level of color saturation. In the BYD ad, from the beginning of the video to the 26th second, the overall color saturation is dark gray, and the video presents a foggy feeling to the viewer, so this video presents a low mood, thus showing the heavy topic of gradual deterioration of the environment with the emergence of human beings. Then the ad writer starts the high mood shooting, and the color saturation gradually goes up, explaining to the viewer that new energy vehicles can bring consumers a convenient, intelligent, low-carbon and environmentally friendly future. The sublimation of the text at the end of the video reinforces the viewer's commitment to a new energy era that is "Driven by the FUTURE".

3) Compositional meaning reflects Eco-aesthetic health

The composition meaning depends on three elements: information value, salience and frame. Kress and van Leeuwen point out that images at different positions have different information values [5], that is, different information can be obtained at different positions of the image. The upper part of the figure is "idealized", which refers to the idealized information in substance, the lower part is "real", which refers to the specific information in detail, the information on the left is "known", the information on the right is "new". Salience is the varying degree to which an image element attracts the viewer. A frame is a dividing line that cuts or connects elements in a diagram.

According to the information value, the symbol elements in the picture are located in different positions, and the meanings in the picture are also different. Kress and van Leeuwen propose three basic composition styles: left-right structure, topbottom structure, and middle-edge structure [5]. Most of the corpus in this article has a middle-edge structure. The overall picture takes the vast universe as the background, and the child in space suits occupy the center position. Therefore, the core information is located in the center, which the text occupies the center of the whole picture, it is also the core information. The word "FUTURE" is all using capital letters, expressing the future outlook of the ad writers for the development of the new energy vehicle industry, making a strong call in the form of text to encourage consumers to pay attention to ecological issues, moving closer to new energy products.

The role of salience is not a single manifestation. It attracts the viewer's attention through foreground, tone intensity, size, etc, and shows the salience of different symbols in the image. Framing can reflect the connection between the language symbols. At the end of the Lixiang ONE ad, the ad writers brighten the tone of "ONE" to highlight the size of "ONE" on the ending screen, and used white, which is the strong comparison with the black background in color, occupying the core position in the image and having a very distinctive feature. It highlights the strength of the brand, strengthens "ONE", and implies the uniqueness of this new energy vehicle. It echoes "the one is like no one" in the title, and also reflects the language style of simplicity and beauty.

B. Eco-aesthetic analysis of verbal symbols

From the text aspect, it can be found that nearly 90% of the language settings of the two advertisements are Chinese. By deleting invalid images, the following article will analyze the ecological aesthetic process from the three sections of conceptual function, interpersonal function and text function through the framework of verbal symbols.

- Example 1 如果,我们把地球的历史浓缩成一年, 单细胞生物在三月下旬出现,恐龙则在 12 月中旬 称霸地球。人类出现仅仅一瞬,地球却经历浩劫, 你想要一个怎样的地球?
- Example 2 比亚迪执掌新能源核心技术,覆盖汽车 全产业链,成为拥有电池、电控、电机的科技先驱。
- Example 3 比亚迪新能源汽车,遍布全球 48 国家、200 个城市,从私家车到公交车,从机场到港口,7+4 全领域,全市场驱动新能源科技。比亚迪将新能源科技种子遍洒在世界的每一寸土地,驱动你的世界。
- Example 4 Driven by the FUTURE.
- Example 5 全新的理想 ONE, the one is like no one.
- Example 6 还你一片清净的空间,开门就是这么简单,泊车就是这么简单,音乐就是这么简单,……刹车就是这么简单。
- Example 7 Leave no man behind.

1) Conceptual Function

Conceptual function is defined as the ability of a semiotic system to represent objects and their relationships in semiotic systems that characterize a world or culture outside the system [5]. It can be used to express the understanding and feeling of things, describe the experience of the world, including the experience of the real world and the psychological world. Example 2 is an innovation process sentence, the actor is "BYD", the verb is "执掌", and the innovation result is the development of new energy batteries, electronic controls, and motors. Example 4 is a verb phrase used passive voice, the verb is "drive", and the entire advertising discourse is connected to know that the actor is the "future", and "by" is driven by BYD and new energy vehicle companies in the Chinese market. The sentence in Example 5, "the one is like no one", seems like nonsense literature (remarks that seem to speak without any useful information, like the sentence structure of "it is what it is"), but this sentence also shows that Lixiang ONE is unique. From the perspective of Ecoaesthetics, the text is combined with the Lixiang ONE image to allow the receiver to extract information in an intuitive cognitive way.

The ad writers combine the ecological environment with BYD's current production strength in text form (Examples 1 and 2). In Example 1, the history of the earth is described in years, from single-celled creatures to dinosaurs and then to the emergence of humans. The logic of the narrative and shows that if the development of fuel vehicles continues, the emergence of human beings on the earth for a moment will not only cause the earth to experience catastrophe, but may also have more unimaginable consequences, thus triggering the thinking of the information receivers. In addition, ad writers put the situation of the earth at the beginning of the film, strengthen the effect of the ecological environment from primitive to today, and let the recipients of the information realize that the behavior of human beings has brought a lot of burdens to the earth from the perspective of perception. 2) Interpersonal Function

In daily communication, in addition to conveying information, language can also convey the speaker's personal identity, social status, behavioral motivation, attitude, etc. [6]. People use language to establish and maintain interpersonal relationships, and the purpose of language communication is not only to convey information, but also to establish and maintain good interpersonal relationships. Therefore, it can be reflected in appellation, tone, and mood.

From the perspective of tone, two ads are mainly narrative. In short, the evolution of the earth is condensed into one year, and the changes that have occurred in this year are described. The changes in the ecological environment are mainly images and texts which present to the recipient of the information in an auxiliary manner. From the perspective of logical thinking, since the emergence of single-celled organisms, the changes of sea and land, and the emergence and extinction of various organisms, the ecology has always been in a dynamic equilibrium. After the emergence of human beings, this dynamic balance has been broken many times. In just the moment we can see, there have been many disasters that nature cannot maintain balance and the ecosystem is destroyed. Therefore, although the text (Example 1) only sets a question at the end, it can trigger a lot of thinking of the information receiver. Several repetitive clauses are used in Example 6, which reflects the efforts made by new energy vehicles and contributes to the maintenance of ecological balance in a more intelligent way.

3) Textual Function

Textual function refers to the relationship between language and context. It involves specific social and cultural uses and variants of discourse. The pattern of a discourse is closely related to the meaning of the text, through themes and information structure (mainly the order and structure of clauses) and cohesion (the collocation of discourse and vocabulary, including the use of pronouns, repetition and omission, etc.) to reflect.

From the perspective of ecological language, the theme is the starting point of the discourse and the main message. Since the choice of the corpus involves two car brands and the information structure is complex, it is impossible to analyze all the categorized example sentences in this paper for a unified theme, so we choose Example 3 and Example 3 as the objects of analysis.

In the discourse structure of Example 1, the ad writer takes many non-human objects as the main theme, such as "单细胞生物" and "恐龙", and there is a crossover between the main positions of human objects and non-human objects. Example 3 has a single theme, focusing on the global development of new energy vehicles. From the ecological perspective, it is clear that the ad writers are committed to showing the message recipient the many efforts companies have made to protect natural resources and what they have achieved so far.

C. Evaluation of Eco-aesthetic

BYD new energy vehicle brings out the ecological and environmental problems by reviewing the history of the earth, and then flashes to the beautiful development of the new energy era now, which brings strong visual impact and reflection to the viewers, while Lixiang ONE ad shows the public the industry's commitment for the society and consumers with the modern, intelligent and convenient development concept.

Speech activity can be an aesthetic medium for the speaker, and when it externalizes the aesthetic image, it becomes a stimulus for the aesthetic re-creation of the listener [15]. However, in these two promotional videos, the power of words does not fully stimulate the aesthetic concept of the message recipient, especially the Lixiang ONE does not stimulate the distinctive feature of ecology.

The narrative part has some highlights, but also has fly in the ointment. First of all, the ad writer is able to use English and Chinese, surpassing other new energy vehicle brands in the Chinese market in text editing. The Lixiang ONE text has neat sentences and achieves aesthetic characteristics of phonetic beauty in a few small sentences in particular, and BYD uses short and competent words to depict a green, ecological and harmonious picture of the new energy era to the message receiver. Moreover, it is regrettable that the text part is a large description of the performance of new energy vehicles and corporate culture. Although this writing concept can unsuspectingly turn consumers' minds to new energy vehicles themselves, with images and music effects, it significantly enhances consumers' desire to buy, but ignores the original intention of developing new energy vehicles to actively promote ecological development, and fails to further enhance consumers' aesthetic concepts. In addition, the cooperation between words and images in the advertising campaign is not very harmonious, the advertising words do not have the aesthetic characteristics of verbal beauty, and the writer of the advertisement fails to give the best aesthetic experience to the consumers.

V. CONCLUSION

This paper establishes a framework based on symbolic visual grammar and three linguistic functions of Halliday, based on MDA and theoretical support from aesthetic linguistics, and conducts an ecological architecture study of the 2021 BYD and Lixiang ONE advertising video. The research results reflect that the development line of China's new energy vehicles highly echoes the spirit of the Sixth Plenary Session of the 19th Central Committee, actively promotes ecological civilization proposed in the fourth clarification, demonstrates the concept of sustainable development of China's new energy vehicles, and through the language setting of the commercial can also show the belief of the car brand side to go international, contributing to the improvement of China's sinternational influence.

For the analysis of the two commercials, it is not difficult to find that human beings have gradually realized the importance of the community of human destiny, and ecological construction can't be delayed. Human beings live in the same global village, living and working together, protecting the earth while also protecting themselves. For this reason, in the midst of a global call for environmental protection, foreign car

brands have taken action to attract the public with vivid story clips, advertising campaigns and car shapes, performance and so on. In response to these circumstances, the Chinese government has proposed a development plan for new energy vehicles (2021-2035), and included the development of new energy in the 14th Five-Year Plan, while companies are gradually doing a precise interpretation of the planning done by General Secretary Xi Jinping for the development of the new energy vehicle industry. It has been proven that only good ecological environmental protection can provide more guidance for the scientific use of resources, and only the scientific use of resources can lay the foundation for a cyclic ecological environment, avoid the phenomenon of resource depletion, and also avoid the deterioration of the ecological environment and various threatening factors to human society, and promote the sustainable development of the whole human economy [14].

To sum up, protecting natural resources, giving priority to ecology, green development, synergistically promoting highquality economic development and high-level protection of the ecological environment are the top priorities of current development. We believe that our enterprises can fully embody their social responsibility, through the green low-carbon mode transformation of new energy vehicles, stimulate market vitality and promote the formation of a new pattern of mutually beneficial symbiosis collaboration and success together in the industrial development [12].

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