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VALUE AND FUNCTION OF SYMBIOTIC GRAPHICS IN CONTEMPORARY VISUAL COMMUNICATION DESIGN BASED ON NEUROAESTHETICS

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Symbiotic graphics construct a multi-semantic system through form sharing and have become an important metaphor carrier in contemporary visual communication. This paper analyzes the cognitive mechanism of the «one form with double meanings» of symbiotic graphics from the perspective of semiotics.

Key words: Symbiotic Graphics; Visual Communication Design; Semiotics; Neuroaesthetics.

INTRODUCTION

In the field of contemporary visual communication design, symbiotic graphics, with their unique forms and rich semantic connotations, have become a much-concerned design element. Through form sharing, symbiotic graphics can construct a multi-semantic system and achieve the effect of "one form with double meanings", thus playing an important metaphorical role in visual communication. With the development of neuroaesthetics, people's research on visual cognition and emotional experience has been deepening, providing a new perspective and method for the study of symbiotic graphics.

PURPOSE

This paper aims to explore the cognitive mechanism and value of symbiotic graphics from the perspectives of semiotics and neuroaesthetics, and to propose the design functions of symbiotic graphics based on the theory of neuroaesthetics in visual communication design.

RESULTS AND DISCUSSION

Symbiotic graphics refer to a graphic form in which two or more graphics are interdependent and integrated with each other by sharing part of their forms. Symbiotic graphics usually have rich semantic connotations and can attract the attention and association of the audience in visual communication. Take the "Six Children Competing for the Head" picture, a representative work of Wuqiang New Year pictures in the Ming Dynasty of China, as an example. In it, the "six children" cleverly borrow each other's heads and buttocks, connecting six bodies in a circle. At first glance, there seem to be three children, but upon closer inspection, there are actually six. Through the beautiful implications of the six children competing for



the head (Similar to the pronunciation of "the first place in the imperial examination" in Chinese), competing for the buttock (Similar to the pronunciation of "making money" in Chinese), and the wish for everything going smoothly, it also expresses the desire for having many children and much happiness. At the same time, this form of composition of symbiotic graphics shows the Taoist thought that you are in me, I am in you, all lives are one, and man is an integral part of nature.



Fig. 1. Wuqiang New Year pictures in the Ming Dynasty of China

From the perspective of semiotics, the semiotic structure of symbiotic graphics can be divided into two levels: the surface structure and the deep structure. The surface structure refers to the form of symbiotic graphics; the deep structure refers to the meaning represented by symbiotic graphics. The surface structure and the deep structure are interconnected and interact with each other through form sharing, forming the semiotic structure of symbiotic graphics. When the audience views symbiotic graphics, they will first perceive the form of the graphics. Then, through cognitive processes such as association and reasoning, the audience will combine the form of the graphics with their own experience and knowledge, thus understanding the meaning represented by the graphics. In this process, the form sharing of symbiotic graphics plays an important role. It can guide the cognitive process of the audience, making it easier for the audience to understand the meaning represented by the graphics.

Neuroaesthetics is a newly emerging interdisciplinary subject. It applies the methods and theories of neuroscience to aesthetic research and explores the neural mechanisms of human aesthetic experience. Firstly, as a visual symbol, symbiotic graphics can be translated between different cultures. The graphic elements in different cultures are integrated and interact with each other in symbiotic graphics, producing a graphic form with cross - cultural significance. This cross - cultural graphic form can help people from different cultures communicate and understand each other, promoting the spread and integration of culture. Secondly, symbiotic graphics have the function of emotional arousal for the viewers. Neuroaesthetic research shows that visual stimuli can cause people's emotional responses. As a graphic form with strong visual impact, symbiotic graphics can cause the emotional response of the audience in an instant. This emotional



response can be positive or negative, depending on the form and the meaning represented by the symbiotic graphics. Finally, the form sharing and the richness of semantics of symbiotic graphics can also inspire the cognitive process of the audience, enabling the audience to have more associations and thoughts when viewing symbiotic graphics. This cognitive inspiration can help the audience better understand the theme and information of the design, improving the communication effect and memorability of the design.

CONCLUSIONS

As a unique graphic form, symbiotic graphics have important value and application prospects in contemporary visual communication design. Symbiotic graphics construct a multi - semantic system through form sharing and achieve the effect of "one form with double meanings", providing the audience with rich space for association and thinking. From the perspective of neuroaesthetics, symbiotic graphics can play a unique role in dimensions such as cultural translation, emotional arousal, and cognitive inspiration, bringing a more profound visual experience and emotional resonance to the audience. Based on the theory of neuroaesthetics, symbiotic graphics provide new ideas and methods for contemporary visual communication design. In future research and practice, we can further explore the cognitive mechanism and value of symbiotic graphics, continuously improve the creative paradigm of symbiotic graphics based on the theory of neuroaesthetics, and make greater contributions to the development of contemporary visual communication design.

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ЗНАЧЕННЯ ТА ФУНКЦІЯ СИМБІОТИЧНОЇ ГРАФІКИ В СУЧАСНОМУ ВІЗУАЛЬНОМУ КОМУНІКАЦІЙНОМУ ДИЗАЙНІ НА ОСНОВІ НЕЙРО-ЕСТЕТИКИ

Симбіотична графіка створює мультисемантичну систему через спільне використання форм і стала важливим носієм метафор у сучасній візуальній комунікації. У статті аналізується когнітивний механізм «одної форми з подвійними значеннями» симбіотичної графіки з точки зору семіотики.

Ключові слова: симбіотична графіка; візуальна комунікація; семіотика; нейроестетика.