

Research on the Influence of Interactive Interface Layout Design Based on Confucius's "Doctrine of the Mean"

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Abstract:

Confucius is the first thinker in Chinese history to attach importance to and advocate aesthetic education. The core of his thought is "harmony", that is, "the doctrine of the mean". As an important part of Chinese traditional culture, the doctrine of the mean is closely related to philosophy, ethics and other disciplines. He takes "happy but not lewd, sad but not hurt" as the aesthetic standard, and has rich design concepts, which provides a new perspective and thinking direction for the development of design theory. This study combines it with the layout design of the interactive interface, promotes the communication and integration between different disciplines, and provides a useful attempt for interdisciplinary research. Based on Confucius' "doctrine of the mean" thought as the scale and principle, it emphasizes moderation, balance and harmony. In the design of interactive interface layout, the principle of moderation can avoid the problems caused by excessive design to users. From the perspective of the dialectical unity of the whole and the part, Confucius's "Doctrine of the Mean" thought carries out layout planning from a global perspective, while paying attention to the coordination of local details and overall style. The development status of interactive interface design urgently needs excellent design concepts to guide, and Confucius' "golden mean" thought provides new ideas and directions for this field.

Keywords:

Interactive Interface Design, The "Doctrine of the Mean" Thought, Layout Design, Moderation Design, User Experience

1. Introduction

As an important part of Chinese traditional culture, Confucius' doctrine of the mean plays an irreplaceable role in the inheritance and innovation of culture. It is consistent with the concept of harmony and balance contained in the advocated doctrine of the mean and the concept of pluralistic symbiosis and harmonious development in contemporary cultural construction. With the continuous progress of science and technology, people's requirements for interactive interfaces are getting higher and higher. They not only need to meet functional requirements, but also need to have a

good user experience. In this context, the demand for excellent design concepts is becoming more and more urgent, and Confucius's "doctrine of the mean" thought has shown potential great value in the field of interactive interface design.

2. Study on the Background

2.1. *The concept of Confucius' doctrine of the mean thought*

As a great thinker and educator in ancient China, Confucius' ideological system had a profound and all-round influence on Chinese society and culture. The idea of advocating the middle in the ancient times, such as Yao's admonition to Shun's "Yun Zhi Jue Zhong," has begun to take shape. Standing at the intersection of history and culture, Confucius gradually formed a unique "golden mean" ideological system in the process of integrating and sublimating these early ideological resources. According to the existing data, the concept of "Zhongyong" first appeared in the book "The Analects of Confucius · Yongye [1]." This marks the formal proposal and preliminary interpretation of this thought by Confucius, and also opens up the long and glorious development of the "golden mean" thought in Confucian philosophy and even the whole history of Chinese philosophy.

2.2. *Layout design of interactive interface*

Interactive interface layout design refers to the reasonable arrangement and organization of each element in the interface to achieve a good user experience and efficient interaction. Visual elements are crucial in the layout. As a powerful visual language, color can lay the overall tone of the interface and trigger different emotional reactions of users [2].

Layout design is the most important part of the design of interactive interface. Excellent layout, you need to fully consider the page information, that is, to consider user needs, user behavior, but also to consider the purpose of the information publisher, goals. The interface layout is to arrange and design the text, graphics or tables of the page. The quality of functionality and user experience depends largely on the rationality of the interface layout design, which not only improves the user's efficiency, but also provides a comfortable sensory experience. The purpose of interactive interface design is that users can obtain and process information through the object itself, and fully realize the interaction between "people" and "objects" in the process of use. The reasonable distribution of visual elements can improve the aesthetics and ease of use of the interface, and enhance the user's sense of identity and belonging to the interface.

3. Research Status

In architectural design, Guo [3] discussed the artistic representation and aesthetic cultural connotation of inheriting and innovating the development of Zhonghe aesthetic thought in contemporary architectural environment design in his "Application Research of Zhonghe Aesthetic Thought in Contemporary Architectural Environment Design". Li [4] pointed out in his article "On the Influence of the Doctrine of the Mean on Chinese Modern Environmental Art Design," preliminarily discussed the influence of the Doctrine of the Mean on environmental art design, expounded the relationship between the Doctrine of the Mean and architectural culture, and illustrated the influence of the Doctrine of the Mean on modern architectural design and indoor and outdoor environmental design with a large number

of examples. Ren [5] pointed out in “the embodiment of Confucian aesthetic thought in modern packaging design” that the enlightenment of modern packaging design and the application of analysis in modern packaging design should be discussed from these aesthetic thoughts, so as to promote the far-reaching development of modern packaging design. Zhang [6] put forward the influence of the Confucian “Doctrine of the Mean” thought on the appearance design of industrial products in the digital media era in the “Doctrine of the Mean” design exploration of industrial product design in the digital media era, and discussed the combination of design elements. The relationship between the Confucian concept of environmental protection and green design and the strategy of local design. In his article “Application of the ‘Harmonious Doctrine of the Mean’ in Product Design”, Ma [7] pointed out that based on the ecological view of the harmonious development of man and nature in the Confucian “Harmonious Doctrine of the Mean” thought, combined with the theory and knowledge of product design, the relationship between “man-product-environment” is analyzed in depth. From the perspective of philosophical thinking and design, it is helpful to the development of product design and the harmonious coexistence of people and environment. Dai [8] the development and changes of the “Doctrine of the Mean” thought in the study of the core essence of the “Doctrine of the Mean” thought of Confucianism and its contemporary enlightenment, and expounded the core essence of the “Doctrine of the Mean” thought of “self-restraint” “loyalty and forgiveness” and “sincerity”. Combined with the current situation of ideological and political education in colleges and universities, this paper analyzes the influence and performance of the “Doctrine of the Mean” thought on the values of college students.

It can be seen that from the research status of other art design fields, many scholars have paid attention to the design and research of Confucius’ s “doctrine of the mean” thought, and have achieved certain results. However, at present, there is no research on the interactive interface layout design of Confucius’s “doctrine of the mean” thought in China, and it is still in the exploration stage. For Confucius’ doctrine of the “mean” thought how to better influence the interactive interface layout design, interactive interface layout design visual elements, interface layout, user experience and other functions, there are still blank spots to be studied. The main purpose of this paper is to meet the diverse needs of users, but also in line with the design principles and aesthetic standards of the interface layout to achieve a visual and functional balance of the state of research and analysis.

4. Problems in Interactive Interface Layout Design

4.1. The distribution of vision and elements

In order to make the elements in the interactive interface achieve harmony, it is necessary to follow the principle of color harmony and unity, follow the moderate concept of Confucius’ doctrine of the mean, select the appropriate color, avoid color conflict, consider emotional and psychological needs, so as to show the functional theme. Graphic text in the use of pay attention to coordination and unity, simple graphics and text complement each other, the attributes of the text and the style of the graphics need to match, will create a unified visual sense. The functional modules are reasonably divided and organized according to the user’s needs. With the help of card classification and other clear relationships, the information presentation is optimized based on the user’s cognition, and the importance is distinguished according to the characteristics of the elements. The focus is on the consistency and unity of the user

experience, so that the button style operation is consistent, and the user switching is smooth.

4.2. The control of the principle of moderation

It is very important to control the complexity of the function. In-depth analysis of user needs, clear core tasks and usage scenarios, and screen out complex functions. Such as designing music playback software, precise positioning playback, switching songs and other major functions, abandoning complex but low-usage special effects, folding menus to accept advanced setting options, and then clicking on users' needs to avoid information bombing. Moderate functional complexity can improve efficiency, make the interface more concise, speed up the user to find the function, and complete the task quickly. For example: takeaway APP, the order process function is simple, the user orders quickly, saving user time. With the change of demand and technology, the function can be gradually expanded and optimized. The initial function of social software can be simplified according to the situation, and then the video call and other functions can be gradually added according to the user's needs, which can be flexibly adjusted without too much burden.

4.3. The dialectical unity of the whole and the part

In the layout design of interactive interface, layout planning from a global perspective is very important. In the layout design of interactive interface, layout planning from a global perspective is very important. The designer first clarifies the target users and usage scenarios, so as to plan the information architecture. When planning, the style and color matching should be taken into account to ensure the overall consistency and coordination, so that the interface has both beauty and function and practicability. Local details can add detail personality and charm to the interface, while the coordination of the overall style can ensure the unity and coherence of the interface. In terms of color matching, the color of local elements should correspond to the overall tone. Similar colors can be selected to enhance the overall sense, or comparative colors can be used to highlight the focus, but attention should be paid to control the contrast to avoid too harsh. In the use of graphics and text, the local graphic design should conform to the overall style positioning, and the font, size, color and other attributes of the text should also be consistent with the overall coordination. At the same time, we should pay attention to the function and significance of local elements to ensure that they are in line with the overall functional requirements. By matching the function of local elements with the overall functional requirements, the interactive interface of individuality and unity can be shaped by carefully carving local details and coordinating the overall style.

5. Confucius's "Doctrine of the Mean" Thought in the Interactive Interface Layout Design Optimization Exploration

5.1. The "middle" of the layout framework is in order

Flexible and orderly focusing. Using a clear layout, slightly staggered layout, so that pictures, text, buttons and other elements follow the rules of the relevant close group arrangement, so that the interface logic is clear and lively. It can also use monochrome websites to highlight full-color pictures, full-screen large pictures with linear elements, layouts beyond boundaries, classic layouts and scattered interactive elements, and unified colors to clarify visual focus, so as to focus users' attention on

key information and important functional areas. In terms of clear hierarchy, the target user groups and usage scenarios of the interface are clarified, and the information architecture of the interface is considered. Different types of information are reasonably classified and organized, and the information architecture is planned using tools such as tree structure and flow chart to ensure that the information is clear.

The eternity of symmetric conservation. Symmetrical balance is to place the elements on either side of the horizontal or vertical central axis on average, creating an aesthetically orderly and harmonious design, such as some traditional web design. Symmetrical balance has withstood the passage of time and is still one of the effective methods to show the balance of web design. Asymmetric balance creates balance by setting elements vertically or horizontally in half of the screen, while setting more elaborate elements in the other half, using dissimilar concepts. Color can also play an important role in asymmetric design. A sharp contrast tone or creating a project with a variety of colors and a project with few or no colors can create an asymmetric sense of balance.

5.2. The “balance” beauty of element configuration

The harmony of color matching. Harmonious and unified color helps the interactive interface to get a good first impression, so that users can feel satisfied and comfortable. In the design, the arrangement of colors can be perceived by users in the most attractive and effective way. The main color determines the style of the whole interface. It is generally used in the application of LOGO and the navigation bar with large visual area, which affects the visual communication effect. The auxiliary color helps the main “*balance*” color to establish a more complete visual image, which is applied to various controls, icons, and illustrations. Different color matching methods such as adjacent color, similar color, embellishment color, complementary color and neutral color can be adopted. For example, adjacent color matching can effectively achieve a harmonious and unified interface effect. Similar color matching gives users a consistent feeling. Complementary color matching produces high contrast and has visual impact. Neutral color matching is based on neutral color to weaken interference. It should also follow the principle of contrast tone. The light color background uses dark text, and the dark background uses light color text, which brings personalization to each UI element and enables all UI elements to capture the user’s attention.

The synergy of graphics and text. From the perspective of visual design, graphics and text are the two major elements of graphic design, which are independent of each other and penetrate each other. As the direct undertaker of layout design, graphics play an important role in the dissemination of information. It has the characteristics of strong visual impact and easy memory, and its propagation speed is much faster than that of text description. The core of graphics is concise and accurate. It should be accurately communicated and complemented with text, such as icon buttons. Its design affects the manipulation experience and needs to be consistent with the overall style. Appropriate decorative elements can strengthen the expressive force and allow users to integrate into the interaction. Text has different missions in the interactive interface. It is necessary to play a guiding role in the line of sight, select highly identifiable fonts to ensure information transmission, and set the size according to the interface and screen size to provide a good reading experience. Different font size matching and transparency adjustment can improve information readability and picture hierarchy, and the text is decorative, and the combination with graphics is more abundant in visual communication design. The combination of graphics and text

should accurately reflect the internal relationship rules, achieve the ideal effect, and improve the interface quality and user experience.

5.3. The “moderate” optimization of user experience

The simplicity of the operation process. In the design of interactive interface, a simple and moderate operation process can enable users to get started quickly and reduce learning costs. When users face a complex and cumbersome operation process, they often feel confused and frustrated, thus reducing the enthusiasm of using products, while a simple and moderate operation process can enable users to master the use of products in a short time and improve user satisfaction. As the user's familiarity with the product gradually increases, it can gradually guide the user to explore more functions and operations, so as to realize the simplicity and moderation of the operation process. In addition, a simple and moderate operation process can also improve the user's work efficiency. If the operation process is too complicated, the user needs to spend more time and energy to complete the task, thus reducing the work efficiency.

Timely and appropriate feedback mechanism. In the design of interactive interface, a timely and appropriate feedback mechanism can make users understand their operation results in time and enhance their trust in the product. When users operate, if they do not get feedback in time, users will feel uncertain and anxious, thus reducing the enthusiasm of using products. The timely and appropriate feedback mechanism can enable users to understand their operation results in time during the operation process and enhance users' trust in products. When designing the feedback mechanism, it is necessary to select the appropriate feedback mode and intensity according to the user's operating scenarios and needs, so as to realize the timely and appropriate feedback mechanism.

6. Conclusions

Confucius's “doctrine of the mean” thought is combined with the interactive interface layout design, and the concept of balance, harmony and moderation in the “doctrine of the mean” thought is integrated into the current interface layout design. Strictly follow the principle of moderation of the “doctrine of the mean” thought, reasonably control the use of color, graphics, text and other elements, and avoid the visual fatigue caused by excessive design to users. It is neither too complicated nor too simple to grasp the appropriateness and make a reasonable division according to user needs. Confucius's “doctrine of the mean” thought is a treasure of Chinese traditional culture. Applying it to the layout design of interactive interface can not only inherit and carry forward Chinese traditional culture, but also provide a new way for the innovative development of traditional culture. In the context of globalization, the interactive interface design with Chinese cultural characteristics can better display the charm of Chinese culture and enhance the international influence of Chinese design.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

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