

Exploration of Exhibition design--Functional and Aesthetic Intertwining Practice

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Abstract. With the increasingly fierce business competition, the visual effect of Corporate exhibition halls design has increasingly become the key to attract customers and display corporate image. By combining practical experience, this paper discusses in depth the importance of Visual design, and its role in the display effect in Corporate exhibition hall design. In Corporate exhibition halls, Visual design, not only the aesthetic performance, but also the direct communication of brand image. This article further discusses the key role of Corporate exhibition halls' Visual design, in guiding consumers, enhancing brand image, and conveying corporate culture, etc. Taking Hefei Financial Harbor OVU Culture Exhibition Hall as an example, it discusses how to realize the harmonious unity of functionality and aesthetics in the Exhibition hall design, especially how to combine the aesthetic trend of modern young people to enhance the attractiveness and influence of the Exhibition hall. Starting from the aspects of environmental psychology, Visual design, display methods and lighting effects, the article analyzes the innovation of the Exhibition design and summarizes its successful experience.

Keywords: Exhibition design; Functionality; Aesthetics; Environmental Psychology; Visual design

1 Introduction

With the evolving business environment and increasing competition in the marketplace, it is becoming increasingly important for companies to develop a superior brand image. This helps companies to stay ahead of the game in a competitive market. In order to effectively communicate Corporate exhibition halls to showcase the diversity of their products and the high quality of their services, many companies have begun to utilize exhibition halls to showcase the diversity of their products and the high quality of their services. Exhibition design, as an important carrier of cultural display, is not only about the display effect, but also directly affects the audience's cognition and acceptance of culture. Hefei Financial Harbor OVU cultural exhibition hall is designed with full consideration of the aesthetic trends of modern young people, and through clever functional layout, Visual design, display techniques and lighting effects, it realizes the perfect combination of function and aesthetics, bringing a profound cultural experience to the audience.

2 Application of Environmental Psychology to Functional Layout

The application of environmental psychology to functional layout involves the incorporation of environmental considerations into architecture, urban planning and design to promote people's comfort, efficiency and well-being.^[1] This approach emphasizes the interaction between the environment and people and aims to create spaces that meet people's psychological and behavioral needs.^[2]

2.1 Application in architectural design

The application of environmental psychology is to consider the effect of spatial layout on people in architectural design. By analyzing factors such as building layout, space size, light, color, sound and temperature, designers can create environments that are more suitable for people to live and work in. For example, a reasonable indoor layout and the use of natural light can improve people's mood and concentration and reduce stress and anxiety, for an example see Figure 1.

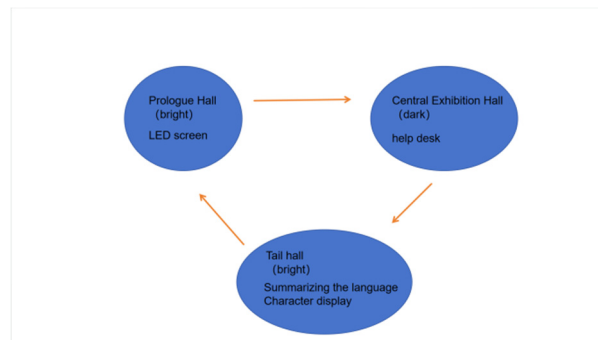


Fig. 1. Space tour route design

2.2 Application in urban planning

In urban planning, environmental psychology can guide urban layout and public space design to create urban environments that are more socially interactive, safe and accessible. For example, designing pedestrian-friendly streets, parks, and plazas, as well as providing adequate greenery and bike lanes, can facilitate interaction and activity among people while reducing traffic accidents.

2.3 Application to workplace design

Environmental psychology can also be applied to workplace design to improve employee productivity and satisfaction.^[3] By designing ergonomic desks, comfortable chairs and good ventilation systems, employee fatigue and health problems can be reduced, and work performance and employee loyalty can be improved.

2.4 Application in Exhibition design

The application of environmental psychology in Exhibition design can enable visitors to have a more pleasant experience in the exhibition and to absorb the contents of the display more

easily.^[4] Hefei Financial Harbor OVU Culture Exhibition Hall has fully considered the audience's psychological needs and behavioral habits in the functional layout, and demonstrated the application of environmental psychology through the following aspects:

(1) Space division and flow line design: The Exhibition design enables the audience to tour the display content smoothly through reasonable space division and flow line design. This includes determining the location and size of different display areas, as well as the design of natural tour routes, so that the audience can visit the entire Exhibition Hall in an orderly manner, will not produce a sense of loss or confusion. For an example see Figure 2.

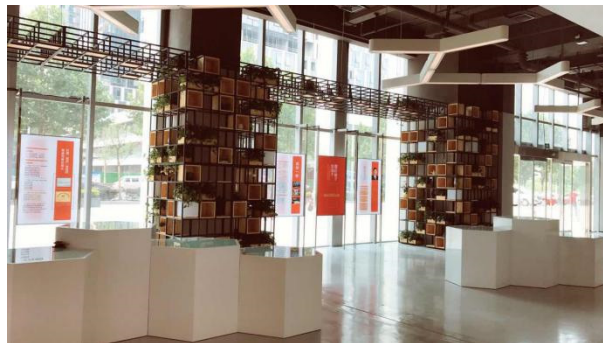


Fig. 2. Hefei Financial Harbor OVU Culture Exhibition Hall Entrance View

(2) Organic series of display content: the exhibition hall will show the organic series of various display areas, forming a coherent and rich sense of hierarchy of the display space. This design can make the audience in the process of visiting naturally from a theme or content transfer to another, to help them better understand the content of the display, and enhance the coherence and attractiveness of the visit. For an example see Figure 3.

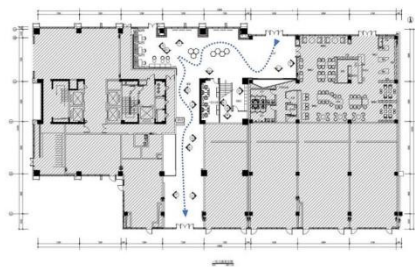


Fig. 3. Hefei Financial Harbor OVU culture exhibition hall first floor plan

(3) Setting of service facilities: The exhibition hall is set up with rest area, information consultation area and other service facilities to provide a convenient and comfortable visiting environment for the audience.^[5] These facilities can not only provide necessary rest and consulting services for the visitors, but also increase the time the visitors stay in the exhibition and improve their satisfaction and experience.

Hefei Financial Harbor OVU Culture Exhibition Hall fully utilizes the principles of environmental psychology in its functional layout to create a comfortable, smooth and attractive visiting environment for visitors, thus enhancing the effectiveness of the exhibition and visitors' satisfaction.

3 Integration of Visual design with aesthetic trends

Visual design, as the most intuitive part of exhibition space, plays a crucial role in exhibition hall design. With the change of the times and the constant updating of aesthetic concepts, visual design must keep pace with the times and integrate the current aesthetic trends to ensure the attractiveness of the display effect and the audience's participation.

3.1 Analysis of current aesthetic trends

Aesthetic trend is an ever-changing concept, which is influenced by a variety of factors, including social culture, scientific and technological development, fashion trends, economic conditions and so on. For Exhibition design, it is crucial to understand and grasp the current aesthetic trend, which helps designers better meet the audience's expectations and create attractive and influential exhibition space. As society continues to develop and change, people's understanding and pursuit of beauty is also changing. In today's multi-cultural fusion, more and more design works show cross-cultural integration, reflecting the aesthetic trend of diversity and inclusiveness. The continuous progress of science and technology has also had a profound impact on aesthetic trends.^[6] With the development and application of new technologies such as virtual reality and augmented reality, designers can utilize these technologies to create more futuristic and technological design works, thus attracting the attention of more young audiences. Fashion trends are an important part of aesthetic trends. Changes in the fashion world often affect the development of the design field, including color, material, shape and other aspects. Designers need to pay close attention to the dynamics of the fashion world, and timely integrate fashion elements into Exhibition design to make the works more fashionable and avant-garde. The economic situation will also have an impact on the aesthetic trend. In times of economic prosperity, people are often more willing to pursue luxury and high-end aesthetic experience; while in times of economic downturn, simple and practical aesthetic style may be more popular. Designers need to adapt their design styles to different economic environments to suit the aesthetic needs of their audience.

3.2 Application of Aesthetic Trends in Visual design

Visual design is one of the most important means of attracting the attention of the audience in Exhibition design. Understanding and applying current aesthetic trends is crucial for designers. Currently, bright and vivid color combinations are widely welcomed.^[7] Designers can use bright colors to create a pleasant and lively atmosphere and attract the audience's attention. At the same time, the color matching should also take into account the characteristics of the display content and the aesthetic needs of the audience in order to achieve the best display effect. In terms of material and texture, natural texture and rough texture are more and more favored. The use of natural materials such as wood and stone, as well as metal, glass and other textured materials, can create a rich and varied spatial feeling and increase the audience's tactile experience. Different design styles represent different aesthetic trends. For example, the

simple modern style emphasizes clean lines and elegant shapes, which is suitable for displaying technology, artwork and other modern content; while the retro nostalgia style pursues retro feelings and a sense of warmth, which is suitable for displaying history, culture and other traditional content. In terms of the use of graphics and images, abstract graphics, simple lines, vivid illustrations and other elements can be used to enrich the visual effect of the exhibition hall and increase the audience's viewing pleasure. Lighting and images play an important role in Visual design. Reasonable lighting design can highlight the characteristics of the exhibits and create a comfortable viewing environment; while the use of images can present the audience with more vivid and intuitive display effects through video and projection.

3.3 Innovation and personalized Visual design

Innovation is one of the core elements in Visual design. Designers can break the traditional design mode and bring new vitality and attraction to the Exhibition design by exploring novel design concepts and unique ideas. For example, using advanced technical means such as virtual reality, augmented reality, etc., to create a new way of display and viewing experience, so that the audience can feel the unprecedented visual impact and immersion.^[8] Designers can flexibly utilize different design elements and styles according to the characteristics of the display content and the needs of the target audience, shaping unique personalities and characteristics of the Exhibition design. For exhibitions with different themes, designers can choose different colors, layouts, materials, etc. to express unique display styles and emotional connotations, thus attracting more audience attention and participation. Innovative and personalized Visual design not only enhances the ornamental value of Exhibition works, but also effectively spreads the brand image and values of the exhibition organizer. Through unique design style and outstanding visual effect, the Exhibition design can attract more audience's attention, thus enhancing brand awareness and reputation and achieving the purpose of brand communication. Innovation and personalization are indispensable elements in Exhibition Visual design, which can bring new vitality and attraction to the exhibition hall, enhance the display effect and audience experience, and at the same time effectively disseminate the brand image and value concept of the exhibition organizer.

4 Innovation in presentation and interactive experience

The innovation of display mode and interactive experience plays a crucial role in the design of exhibition hall, which can not only attract the audience's attention, but also enhance the audience's participation and experience.^[9] Through innovative display mode and interactive experience design, the exhibition hall can provide the audience with a richer and deeper visiting experience, stimulate their interest and desire for exploration, and at the same time increase the audience's participation and satisfaction. Virtual reality (VR) and augmented reality (AR) technology, for an example see Figure 4, interactive exhibition immersive experience and other innovative design means can not only attract more viewers, but also enhance the brand image and influence of the exhibition hall, and promote the dissemination and promotion of the exhibition content. For example, Tesla Motors utilizes VR technology to let visitors feel the pleasure of driving a new car in a virtual environment, and even demonstrates how the vehicle performs in different road conditions. and even demonstrate the performance of the vehicle under different road conditions. AR technology, on the other hand,

can be applied to product display. By scanning the AR logo attached to the exhibits, visitors can see the 3D model of the product in the actual scene and understand the internal structure and functional characteristics of the product. By setting up a VR experience area in the exhibition hall, visitors can wear VR helmets and experience the use of enterprise products in an immersive way.

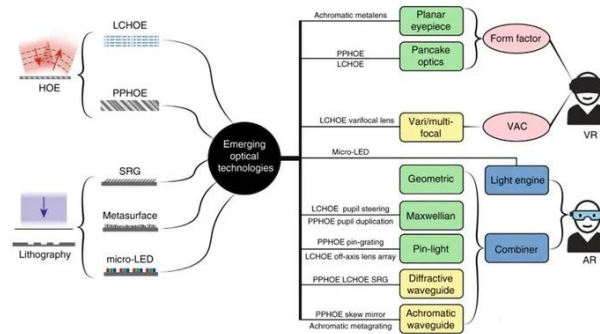


Fig. 4. Schematic of emerging optical technologies applied to AR/VR.

Hefei Financial Harbor OVU Culture Exhibition Hall has made useful exploration and innovation in this regard. The exhibition hall provides visitors with an immersive display experience through the use of modern technological means, such as virtual reality and augmented reality. At the same time, the exhibition hall also sets up interactive links, such as quiz games and VR experience, etc. Through touching the screen or the manipulator, visitors can choose the content of interest, watch the introduction video of the exhibition hall, browse the information of the exhibition hall, etc. through touching the screen. Through the game link, visitors can test their mastery of the knowledge of the exhibition hall by participating in the game, thus increasing the sense of participation and interactivity. These innovative design means can not only attract more audiences, but also enhance the brand image and influence of the exhibition hall. After experiencing the colorful interactive content, visitors will have a more in-depth understanding and awareness of the enterprise's innovation ability and corporate culture, thus effectively promoting the dissemination and promotion of the enterprise's brand image.

5 Lighting effect and atmosphere creation

Lighting effect and atmosphere creation are indispensable and important elements in Exhibition design.^[10] Through lighting design, light and shadow effect, color matching, dynamic effect and thematic design, etc., they bring unique Visual experience and emotional feeling to the exhibition space, and enhance the audience's visiting experience and exhibition effect. Designers should flexibly utilize various lighting design means according to the characteristics of the exhibition and the needs of the target audience to create a display space in line with the theme and atmosphere of the exhibition, so as to achieve a better display effect and audience experience.

Hefei Financial Harbor OVU Culture Exhibition Hall creates a warm and comfortable visiting atmosphere through well-designed lighting system. The lighting not only provides the necessary illumination for the display content, but also emphasizes the display focus and guides the viewers' eyes through the changes of brightness, darkness and color temperature. In addition, the lighting is also combined with other display elements to jointly build a display space full of artistic flavor and cultural heritage, for an example see Figure 5.



Fig. 5. Flat Lighting Analysis.

6 Conclusions

Exhibition hall is a window for enterprises to show their image, products and services to the outside world, and the visual design directly affects the audience's perception and experience. Therefore, enterprises need to pay attention to the visual design of the exhibition hall to ensure that it can accurately convey the corporate image and value. With the development of enterprises and changes in the market environment, the visual design of exhibition halls also needs to be constantly updated and optimized. This means that enterprises cannot stay in the past design concepts and styles, but should always pay attention to the market dynamics and adjust the exhibition hall design in time to ensure that it keeps pace with the times. Enterprises need to establish an evaluation mechanism to regularly assess the effectiveness of their exhibition halls. This includes the evaluation of audience feedback on the exhibition hall, the use of the exhibition hall, and the behavior of visitors. Through regular assessment, enterprises can find problems and deficiencies in time, providing a basis and direction for the improvement of the exhibition hall. According to the evaluation results, enterprises need to adjust and improve the design of the exhibition hall in time. This involves adjustments to the layout of the exhibition hall, the decorative style, and the way exhibits are displayed. Through continuous improvement, the exhibition hall can maintain its match and competitiveness with the market. The visual design of an exhibition hall is crucial to an enterprise, while regular assessment and continuous improvement are the keys to maintaining the competitiveness and attractiveness of an exhibition hall.

This paper thoroughly researches all aspects of Exhibition design, and takes OVU Exhibition Hall of Hefei Financial Port as an example, discussing modern aesthetic trends, innovative design concepts, personalized Visual design, display methods and interactive experience, as well as lighting effects and atmosphere creation. Through the analysis of this example, we not

only understood how to integrate modern aesthetic trends in Exhibition design, but also learned how to innovatively apply various design means to enhance the display effects and audience experience. With its simple and bright lines and color matching, multimedia display and three-dimensional display and other innovative means, the OVU exhibition hall of Hefei Financial Harbor successfully creates a fashionable and modern display atmosphere, and presents the traditional cultural elements in a brand-new way, which profoundly infects the audience. This kind of design concept which integrates tradition and modernity, innovation and inheritance not only shows the creativity and wisdom of the designers, but also fully embodies the deep understanding of and concern for the needs of the audience. Exhibition design is not only the presentation of display content, but also the process of interaction with the audience, which should be able to stimulate the audience's emotions, inspire their thinking, and provide them with a pleasant and comfortable visiting environment. Therefore, in Exhibition design, it is necessary to constantly pursue innovation, actively integrate modern aesthetic trends and personalized design style, and use a variety of display means and lighting effects to create a colorful and fascinating display space, bringing the audience a richer and more in-depth visiting experience.

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