# **Analysis on the Design of Experiential Exhibition Space**

## Zhiyang Zhao, Hang Ren

Jilin Normal University of Engineering Technology, Changchun 130052, China

Abstract: Under the new development form, the design in the demonstration space of the experience hall should have new requirements to adapt to the times. In the original design, we pay more attention to the audience's sense of experience and the appeal under the space modeling. The space designer must optimize the space and experience design according to the functions and design requirements of the experience hall, and maximize the realization of the space and experience. Both are coordinated and unified. In order to improve the level of demonstration design, so that the library has more vitality and appeal.

**Keywords:** Experience hall, demonstration space, design, display

#### 1. Introduction

### 1.1. The research background

In the long history of human history, the important role of demonstration art in the development of people can clearly see that the rapid development of human society demonstration art is also gradually growing, progress, and it is also an important medium for human information transmission and mutual exchange. The artistic role played is irreplaceable in other art forms. With the rapid growth of economic globalization in modern society, the application and popularization of rich multimedia digital display, network technology and imaginary reality technology, and the intervention of modern scientific and technological means, the design thinking and form of demonstration space have under changed greatly. In the vast information age, the development of new media will show the essence of the presentation space, and play an irreplaceable role. The use of modern scientific and technological means and the improvement of innovative consciousness will make the presentation design display form to a certain extent. Digital, photoelectrelectric, video and other integrated media technology use and art combined effect, will make the experience museum more prominent performance of the visual power of art. In recent years, the display industry has been affected and radiated to all walks of life related to it, the prospects are very broad, the Shanghai World Expo held, but also reflects the demonstration space design to improve people's living quality, improve product publicity efforts, in order to give people the important role of enjoying beauty. It is expected that the future of space design will be endless potential, but also will be more and more attention, highlighting its unique charm.

#### 1.2. Research Content

The research content of this thesis is the design analysis of the experience hall in the demonstration space, and the main research content is the design analysis of the demonstration space. First of all, the background of contemporary demonstration space design made a holistic overview, the second from the demonstration space lighting, presentation techniques and design elements of the three aspects of in-depth discussion and research. This paper expounds the irreplaceable role of these three aspects in the demonstration space and the design elements that need attention in the design of the space. This paper mainly expounds the combination of modern information technology and space design art and design when demonstrating spatial design to find out the value and application of its existence. By analyzing the design form of contemporary demonstration space, we explore the techniques and ways of contemporary space display and find out the basic method of contemporary space design. Finally, through the case and the use of light, it shows the role of light in the demonstration space.

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### 2. Design Elements in Demonstration Space

#### 2.1. Demonstrates the light color analysis of the space

In modern presentation space, lighting design without scene space is influenced and coordinated by the surrounding environment, and of course reflects its own value. Visually gives a comfortable feeling. Effective lighting is an important expression of the exhibits in the presentation space, attracting the attention of the audience and better display of the exhibits is the greatest role of lighting design in the space. The size of light in the presentation space should be designed according to the content and conditions of the presentation, the space and exhibits are different, and the different ways of color, lighting and lighting should be treated differently. The exhibition area, corridor, office area and experience area in the experience hall should be distinguished according to the different scene lighting design, so as to attract the audience's attention to the exhibits and the experience area. The design of light in the demonstration space should embody the principle of art and carry out the artistic design, which will help the atmosphere expression of the whole demonstration space, while the shape and style of the space environment are unified, and the artistic atmosphere is cleverly baked. Increase the sense of spatial hierarchy and create an atmosphere in different spaces through a variety of clever use of lighting in the presentation space. The value of light in the demonstration space is to meet the needs of people's senses and psychology, so that the whole space to achieve its practical and appreciation value, to achieve the unity of use and aesthetic functions. There are also great requirements for the safety of lamps in the Experience Hall, where safety measures must be taken to avoid accidents due to the variety of uses in the Experience Zone. In the modern demonstration space, not only reflect its own value in lighting design, but also pay attention to the impact and coordination of the surrounding environment, creating a comfortable space for visitors. The development of lighting design from a certain degree can be said to be driven by the demonstration space, but the demonstration space to be richer can not be separated from lighting design, so on the one hand, it can be said that lighting design promotes the development of demonstration space. The key to exhibit expression in the presentation space is to provide effective lighting for the exhibits, and the greatest function of lighting is to attract the audience and better display the exhibits. The exhibition area, corridor, office area and experience area in the Experience Hall should be distinguished according to the different scene lighting design, so as to attract the audience's attention to the exhibits and the experience area. Demonstration The design of lighting in space should embody the principle of art, so that when carrying out artistic design, it will help the atmosphere expression of the whole performance space, and the environment shape and style should be consistent with the whole when carrying out space design, so as to show the means of beautiful environment and rendering artistic atmosphere. Through the use of lighting, increase the level of the presentation space sense, to create a different space environment atmosphere. In order to meet people's visual feelings and aesthetic psychological needs, so It is essential to show the lighting design in space. Get the highest appreciation and utility value in a limited space. Thus in the function to achieve the use of aesthetic unity. Depending on the purpose of the presentation space and the clarity of the resolution, the criteria for selecting lights will vary, so as to avoid waste of resources due to flashy words, and even affect the atmosphere of the entire space. There is also a great deal of demand for the safety of lamps in the Experience Hall, where safety measures must be taken to avoid accidents due to the variety of uses in the Experience Zone.

#### 2.2. The application of lights in this presentation space

Experience the museum with some light as the main light, forming a fun center. In the display area, different lights are used to illuminate the exhibits to achieve special light rendering effects. Most of the lights have directional, such as spotlights, spotlights, light range of small light concentration, the resulting projection is more intense, the purpose is to enhance the display area contrast, thereby stimulating people's emotional response, causing people to pay attention to the exhibits. However, the role of spotlights and spotlights in the experience area is very different, and the lights in the experience area create a special atmosphere through the color change of special time. The role of the same object in different environments has different values and manifestations. In the public communication space is the use of overall lighting, lighting at the same time also has a guide to the audience when visiting. The role of light can be "tangible" and "invisible" embodiment, the same light source in different spaces, the role of different, the same light in the same space, the role may be different.

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## 2.3. Demonstrates the design elements of the space

The design elements of the presentation space are roughly divided into the following points: color: color arouses people's emotions and sensory changes, so it is important to use color cleverly in the presentation space. Different colors give us a different feeling, bright colors feel light, gloomy dark colors appear heavy. In order to make color better used in the design, we must master the characteristics of color, through color to bake and render the atmosphere of space. Color is full of reason and sensity, It is based on people's psychological and physiological feelings. Different scenes have their own unique personality, need different colors to bake, render, make its personality more distinct. The atmosphere formed by the uniform color tone is the lifeblood of the whole demonstration space design. All the colors in the presentation space are not isolated, but complement each other and echo each other. Sense of space: open space will give people a comfortable and easy feeling. Activity space, visit space should be in line with ergonomic principles, so that the audience walking to watch very convenient, crowd gathering, evacuation, rest should be relaxed degree. Traffic flow line: Traffic flow line is divided into audience flow line and staff flow line: audience flow line to be designed in an orderly manner, so that it can intentionally guide the audience to visit the route, it has the advantage that the audience can watch the entire part of the exhibition hall, and get a complete impression. The worker flow line is a relatively independent line that does not conflict with the viewing line.

#### 3. Demonstrate the Role of Space in this Presentation Space

The presentation space has a variety of presentations. People find extraordinary from the ordinary, limited from the discovery of infinite. The combination of innovation of space forms in presentation space brings people the enjoyment of visual beauty, and also reflects that space art and various technical means are the meeting point of a discipline, enriches the connotation of demonstration art, and makes the concept of performance space diversify. The presentation space evolved from a static presentation to a dynamic presentation in this experience gallery. Use the most direct design language to create a unique spatial range. Through the organic combination of space sequence, the design of the experience hall has been different forms of composition, space is divided into various types, and the audience is in many spaces to experience, activities, in order to increase people's awareness and feeling of the experience museum. The dynamic presentation in space not only uses points, lines, faces and other forms, but combines modern multimedia technology to make the performance space scene more realistic, so that the audience is completely in a virtual objective world, which is also the most important and dazzling design of the demonstration space in this experience hall. Experience the earthquake-graded experience area in the museum, which combines scene, light change, sound and dynamic experience station, and on-screen presentation into a perfect presentation space. Restore the earthquake scene with this dynamic, static presentation. Let people perceive the real picture of the earthquake, through experience to reduce the fear of earthquakes. In the post-earthquake ruins area, the site is restored by the collapsed wall, so that people can learn about the dangers of the earthquake.

## 4. Presentation of the Space

The presentation space "by the complexity", "to win more with less" display techniques, in order to display the image and space creation, in the limited space to convey more images and information, and strive to show as many functions in the limited space. The spatial design created by this method not only conforms to the development trend of modern minimalism in recent years, but also doesn't fit with the strategic thought of Laozi "to win less and more". In the demonstration space in order to exchange information to leave a certain space, and the integration and utilization of the rest of the space and a variety of design techniques cleverly used, so that the entire space to achieve the accuracy of creation and the rationality of the space sequence. In the performance of a variety of methods, the design is diverse. In the age of information technology, the expression method should be combined with modern information technology as far as possible to innovate, taking full account of people's visual and auditory feelings. Using new materials, motion picture, interactive design, virtual reality, the traditional static into dynamic, passive into active, in order to better use a variety of ways to display. Use multimedia technology to create an interactive environment and atmosphere. Seismic seismic area in the museum, the need for dynamic images and other materials to create a virtual reality, static into dynamic, to impact the visual stress of the audience.

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#### 5. Summary

Through a large number of previous collection of relevant literature, this paper found and summarized the existing problems and solutions of the current science and technology experience museum in China; Based on the theoretical knowledge of the relevant literature, the behavior patterns and psychological needs of the visitors are analyzed. This paper has carried out a profound study on how to make visitors learn scientific and cultural knowledge independently while relaxing their own entertainment.

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