The Enlightenment of Kite-Wei Manufacturing Technology to Modular Special Booth Design

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Abstract

Purpose In view of the enlightenment of the core skills of the kite-Wei folding kite production process on the modular special booth design, explore new ways and new methods of modular special booth design, and provide new designs for designers of similar special booth designs Design ideas. Methods Analyze the development trend of domestic special decoration booth design and find that modular design is bound to become the general trend of the future development of special decoration booth design. Through in-depth exploration of kite Wei folding kite making skills, it is found that it is modular The fitting point of the special booth design provides a new source of inspiration for the future modular special booth design. Conclusion Kite Wei's detachable, folding, eyelet button and tenon structure invented on the basis of predecessors will provide new design ideas for China's modular special booth design and provide a new paradigm for China's modular special booth design.

Keywords

Kite Wei; Production skills; Modularization; Special booth design.

1. The Development Trend of Modular Design of Special Booths

1.1. The Basic Concept of Modular Design

Modular design means that on the basis of functional analysis of objects with different or same functions and specifications within a certain range, the overall function of the object is decomposed into several lower-level unit modules, and these basic unit modules are divided and designed a series of functional modules, through the selection and combination of different modules, and efficiently design a new product series to meet the different needs of the market. Regarding modular design methods have gradually been applied to many design fields, such as Internet product design, architectural design, display design, etc., this article mainly discusses the application of modular design in the design of special booths.

1.2. The Development Process of Modular Special Booth Design

With the increase of exhibitions and the segmentation of the market, the problems and disadvantages in the design and development of special booths have become increasingly apparent. Among them, the waste of resources that cannot be recycled once the booth is dismantled is the most prominent. At this time, the modular design has obvious advantages compared with the high-cost one-time special booth design in reducing the waste of resources. The integration of the modular design concept can make the design of special booths more standardized, batch-oriented, and universal, thereby reducing material costs, saving installation and dismantling time, and increasing recycling rate. Due to the limitations of the materials used, the design of modular special booths has also restricted the artistic expression. The advantages in the application of the exhibition industry have not been perfectly presented. The current high-end exhibition design is still able to highlight the participation. Customized special booths are the main products. How to properly resolve the contradiction between the need for personalized expression in custom booth design and the standardization principle in
modular design is a big problem that exhibition designers will face. Through the excavation of the "Kite Wei" folding kite production technology, it is found that its core production skills can provide inspiration for the design of modular special booths, provide new design ideas for exhibition designers, and facilitate the exploration of modular special booth design. Broad space for sustainable development.

2. "Kite Wei"'s Unique "Unpassed Secret"

Kite Wei Kite has long been a well-known city name card for Tianjin people. As a traditional handmade art treasure of the Han nationality, it has been rated as a national intangible cultural heritage and Tianjin Nankai District intangible cultural heritage. The craftsmanship of kite Wei is passed down within the Wei family, from Wei Yuantai to the second generation Wei Shenxing, and then from Wei Shenxing to the third generation Wei Yongchang and Wei Yongzhen. Today, it is in the hands of the fourth generation successor Wei Guoqiu of "Kite Wei". The inherited old craftsmanship is heading to the world and glowing. The production of the kite Wei kite has to go through eight production processes: creativity, design, material selection, rigging, color painting, pasting, test flight, and final assembly. Among them, the four major craftsmanship of frame-making, wall-papering, painting, and flying all contain the "unspoken secrets" of the kite Wei Kite.

2.1. Skeleton Binding

Skeleton making is the first step for Wei Kite to make a kite, and it is also the soul of Wei Kite. Of course, the process of making the skeleton is constantly being improved. Under the improvement of Wei Yongchang, the third generation descendant of Kite Wei, nowadays the kite of Wei Wei uses bamboo as the skeleton. Although the production process is more complicated, the stability and yield of the kite are The fidelity of the shape and shape is well guaranteed. As the core production process of kite-making, the skeleton binding process includes five production processes: selection, chopping, cutting, roasting, and binding. After the basic modeling is completed, it is the last process of skeleton binding. The inheritor of "Kite Wei" kite production invented on the basis of predecessors, which can be disassembled and folded, and has a perforated and tenon structure. The tenon-and-mortise structure of the eyelet button and tenon uses a small solder hoop to connect the skeleton of each part. The skeleton can be folded and folded, which is convenient to carry and store. This is also one of the biggest differences between "Kite Wei" kites and other kites, and it is also the soul of "Kite Wei" kites.

2.2. Pasting Process

After the frame is tied up, it is pasted. The "Kite Wei" kites are mostly made of silk and silk in the selection of materials for pasting. Compared with ordinary paper-pasted kites, kites made of such fabrics are lighter and stronger.

2.3. Painted Coloring

Drawing and coloring determines the exquisiteness of a kite. In the drawing process, the ink line is drawn according to the pattern, and the heavy line is the main method. Starting from the shape of the kite, drying and ironing after the outline is drawn, and then the color of the pattern and pattern is filled. "Kite Wei" kite drawing colors use a large number of pigments such as mineral colors, traditional Chinese painting colors, advertising colors and product colors. The kites here are all painted purely by hand. They are all unique and unique. They have the characteristics of the Chinese nation, and have the freehand brushwork of traditional Chinese painting and the charm of meticulous brushwork. They are highly ornamental.
Among them, the production process of the eyelet button and tenon and the foldable and stackable kite contain the idea of modular design. The skeleton of the entire kite can be disassembled and reorganized, and kites of different shapes can be assembled. These features help the predicament of modular booth design provides new design ideas.

3. The New Paradigm of Modular Special Booth Design

3.1. Feasibility Analysis

The implementation basis of the modular design of special booths lies in the separation of system modules. According to the design methods and design implementation operations of special booth design in the existing exhibition design, and referring to the current viewpoints on the research on modular exhibition design, it can be seen that the detachable system of a special booth is divided into four basic modules: ceiling system, slab wall system, floor system and exhibition equipment system. These systems are divided into several different levels of module units. In the design and implementation process, in addition to considering the coordinated operation of the various systems to ensure the safety issues during and after the splicing and construction, it is also necessary to pay attention to breaking the lack of aesthetics in the design of modular special booths and solving the design of special booths. The contradiction between the need for personalized expression and the principle of standardization in modular design is given top priority. What kind of modular design can make the construction of special booths not only have the continuity of recycling, but also have the interchangeability of short-term, multiple, and diverse shapes? It can be inspired from the analysis of the core production process of the "Kite Wei" folding kite, and provide exhibition designers with new modular design thinking and design principles when designing modular special booths.

3.2. Applicability

3.2.1. Extraction and Application of Skeleton (Shaping)

Take the special booth ceiling system as an example. Due to the short display time of the special booth, the ceiling structure is generally built with trusses, and the lamps are also unified standardized products. It is easier to plan and realize when implementing modular design. Still, we can’t get rid of the shackles of being too single and standardized. We can get some inspiration from the whole frame of the kite Wei kite. In the process of the modular special booth design scheme, try to make some attempts to enlarge the various kite Wei kite skeletons to be used as a separate special booth. The volume of the partitioning medium of the exhibition space, the spatial volume and the sense of form formed by the attempt of this new special booth appearance are more capable than the existing modular special booth design. It takes into account the functionality of the display and the visual aesthetics.

The assembly and construction of the on-site exhibition and the dismantling and dismantling after the exhibition period are also important links in the design of modular special booths. Among them, it is necessary to consider the storage and transportation of basic modular components that can be used twice after the dismantling of the entire special booth. The folding kite designed by Wei Yuantai, the founder of the kite, adopts the mortise and tenon structure of the eyelet and tenon in the production. The small tin hoops are welded to connect the skeleton of each part. The skeleton body does not see a stitch or a thread. Stackable, easy to carry and store. At this stage, my country’s special booth designers and standardized panel developers are considering how to combine the complex and diverse basic components, and find a suitable linkage method, so that the modular special booth design presents a completely new look and truly becomes Meet the needs of the era of low carbon consumption.
3.2.2. Visual Expression of Cultural Temperament (Yan Yi)

In the current stage of development, the design of modular special booths mostly adopts internationally standardized profiles, which results in the modular design of special booths showing the same look, which completely deviates from the original intention of exhibitors to choose special booths. Although the basic components of modular special booths are composed of a large number of standard parts, it does not mean that the special booths formed therefrom are necessarily single in form and monotonous. The key innovation lies in the combination of the exhibition system. Look for variability. There is a soothing change in the process of baking the skeleton with an alcohol lamp in the process of making the kite. The special booth is very particular about the sense of rhythm and rhythm in the space design. In order to more reasonably guide and control the flow and pause of the visiting line. The modular special booth design can be inspired by the inheritor’s control of rhythm and rhythm during the process of kite-Wei kite skeleton forming and baking, and give the modular booth system components try some new permutations and combinations to make the rigid standard modular The exhibition tools are rearranged to produce a different rhythmic beauty. Of course, in the design of the stretch fabric system that appeared later in the development of modular components, some techniques and techniques can be extracted from the pasting process and drawing process made by the kite Wei kite, and the appropriate plane vision of the stretch fabric system for different themed special booths The addition of design elements, by imitating and reflecting the painting techniques of Kite Wei, can also present a special booth with both practicality and beauty, thereby creating a booth design with the unique charm of the Chinese nation and the characteristics of the times. Under the background of the rapid development of economic globalization, modular exhibition designers must have the responsibility and responsibility to show the charm of China and promote the excellent traditional Chinese culture.

4. Conclusion

Modular special booth design will become a new development trend. If they want to seek a broader development space, they must get rid of the shackles of rigid standardization, and carry out modularization on the basis of the established basic modular design system. The innovation of space combination styles of special booths, the research and development of new forms of modular basic components, the update of new forms of modular connection components and assembly tools are new issues that exhibition designers and demonstrative general profile research and development teams will face. Combining with the enlightenment brought to us by the core production technology of the "Kite Wei" folding kite, we will re-explore the design thinking and design methods of modular special booths, and provide new design inspiration and design ideas for future modular special booth designers. Conform to the trend of modular design becoming the future development trend of the exhibition industry, open up a broader development space for modular special booth design, and make modular special decoration design play a new role in the new development stage of the exhibition industry. The direction and responsibility of every exhibition designer's hard work.

References


