

The Application and Optimization of Handicrafts Design Under the Perspective of Non-Heritage Culture

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Abstract. In order to "reproduce" and "innovate" Tianshui lacquer carving handicraft workshop in the current era of economic development, to inherit and protect Tianshui lacquer carving, the application and optimization of the design of Tianshui lacquer carving as a handicraft under the perspective of non-heritage culture are proposed. Optimization is proposed. Firstly, the interior space design of Tianshui lacquer carving handicraft workshop is conceptualized, and the influence of its characteristics on the workshop space is analyzed from the characteristics of lacquer craft. According to the proposed design strategy of Tianshui lacquer craft workshop, theoretical verification is carried out in design practice, and specific design expressions are analyzed. The practical results show that: the first-floor space of the craft workshop mainly has the behavioral activities of visiting, making, negotiating and purchasing, and the corresponding main functional areas are display functional area, reception and negotiation functional area, and the second floor is mainly set up for the experience space. The scale of furniture used in the space affects the comfort of people in the space. Conclusion: This study provides theoretical basis and design reference for the space design of Tianshui lacquer carving handicraft workshop.

Keywords. Tianshui lacquer carving; Handicraft workshop space; Indoor spatial environment design; Non-heritage culture

1 Introduction

Under the simultaneous construction of material civilization and spiritual civilization, developed material civilization provides conditions for the construction of spiritual civilization, which is also an important part of the construction of traditional handicraft culture, and also provides opportunities for the development of traditional handicrafts. General Secretary has repeatedly emphasized "revitalizing traditional crafts" and formulated the "Plan for the Revitalization of China's Traditional Crafts", deploying the promotion of the inheritance and development of China's traditional crafts, under the guidance of this policy, a series of explorations and practices to revitalize traditional crafts have been carried out one after another [1]. At the same time, the important document "Notice on Supporting the Establishment of Non-heritage Employment

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Workshops for Poverty Alleviation" was issued to provide policy support for the establishment of non-heritage traditional craft workshops [2].

As people's consumption levels increase, they begin to pay more attention to spiritual and cultural life and have higher-level pursuits, such as health, leisure, comfort and personalized needs [3]. People are gradually no longer satisfied with industrial products, and are instead pursuing personalized customized handicraft products. The charm of handicraft production makes consumers more willing to gain their own relaxation and spiritual pleasure in experiencing production. Some creative crafts such as flower art workshops and pottery workshops are emerging in the current society. The workshop integrates into the market and leads the new trend of consumption. Tianshui carved lacquer has a history of two thousand years and has gone through multiple stages of rise and fall, including workshop production, cooperative production, and craft factory production [4]. Tianshui traditional lacquer carving craftsmanship was announced by the State Council as one of the first batch of national intangible cultural heritage representative project expansion projects in 2008. Judging from the current development status of Tianshui lacquer carving, it relies on enterprises to drive development and mainly produces lacquerware as national gifts and appreciation. product. It is precisely because it has not been actively and fully integrated with the current consumer market that Tianshui carved paint rarely appears in the public eye and its development is limited [5-7].

In this paper, the practical application of Tianshui lacquer carving handicraft workshop space from the premise of reception, experience, display, production, leisure, as well as the space for the rational division of spatial multi-functional processing, from the use of indoor furniture scale, lighting configuration, indoor ventilation and other aspects of the humanistic care design, to create a comfortable experiential environment, from the extraction of the elements and the application of the spatial theme of the embodiment.

2 The research methodology

2.1 Project Profile

The project is located in a city pedestrian street, the project name is "Lacquer Rhythm Square", the total building area of about 522.1 square meters, the first floor of the building area of 261.05 square meters, the second floor of the building area of 261.05 square meters, is in the original store on the floor area of the renovation, the architectural style for the antique Chinese-style architecture.

Overall orientation: Based on Tianshui regional culture, the workshop space is remodeled on the basis of the existing base plan, with the goal of displaying lacquer craft and experiencing lacquer craft, breaking the position that it only stays in the ornamental position, and creating a handicraft workshop that combines with modern life. Based on the original definition of handicraft workshop, the creative handicraft workshop combined with modern life, through the structure and reorganization of carved lacquer culture and lacquer elements, the functional space is re-divided and redefined to satisfy the comfortable and rationalized working environment of carved lacquer craftsmen while attracting the consumer groups to experience the production of carved lacquer, so as to

achieve the ultimate goal of the inheritance and development of carved lacquer handicrafts.

Specific objectives: Firstly, in terms of crowd orientation, the workshop can accommodate 60-70 people at the same time, and analyze the corresponding impact of their behaviors on the functional space in the lacquer workshop from the different perspectives of the workshop staff and consumers. Secondly, the spatial polysemy of the lacquer workshop determines its spatial openness, and the spatial openness makes the lacquer workshop interactive between the spaces, and achieves the coordination between the functional spaces on the basis of meeting the different functional needs of the space users. Again, in the workshop space to make lacquer art furnishings products and the overall spatial unity of the display, in the architectural and interior furnishings style to choose and traditional Chinese cultural elements combined with the Chinese style, into the carved lacquer culture, Tianshui and Gansu regional cultural symbols, reflecting the theme of the carved lacquer workshop space.

Table 1 Tianshui Carved Lacquer Handicraft Workshop Targeting

Targeting	Specifics
crowd-sourcing	1. Staff: a. Reception staff b. Lacquer craftsmanship staff 2. Consumers: a. Lacquer art crafts buyers b. Lacquer art experience consumers
Functional orientation	Coordination between display areas, recreational and experiential areas, and production areas
architectural style	Chinese style with a modern twist
cultural orientation	Carved lacquer culture and Gansu regional culture

2.2 Design Ideas

(1) Solve the problem of hindering the promotion of craft culture caused by the characteristics of the carved lacquer craft, make the workshop space compound multiple functions, expand the compatibility of the multiple functions of the carved lacquer workshop, and attract more people who understand the culture of carved lacquer.

(2) According to the workshop space in a variety of functional needs, to solve the carving lacquer workshop in the display, work, experience, leisure, storage space layout of the rationality of the processing, the development of display, work, experience, leisure, storage space to enhance the use of efficiency and applicability of the overall design program.

(3) to solve the carving lacquer workshop space in the space integrity and visual atmosphere to create technical problems, control the unity of the interior style, in the selection of furniture furnishings, color matching, the choice of materials and materials on the unity of the style, starting from the improvement of the physical environment of the space to improve comfort, enhance the visual, auditory, olfactory and other aspects of the perceptual experience.

In the study of Tianshui lacquer carving handicraft workshop practice project, the starting point is to research the workshop form suitable for the sustainable development of Tianshui lacquer carving, firstly, highlighting the inheritance concept of lacquer carving culture in the workshop space furnishings and spatial expression of emotions, secondly, the functional orientation of the lacquer carving workshop space form, synthesizing the various functional needs of display, work, experience, recreation, and storage to meet the concept of multi-functional design. Secondly, to improve the comfort

of the environment in the lacquer workshop to meet the concept of humanistic care in the environment of personal experience.

3 Analysis of results

3.1 Analysis of program design expression

The starting point for the design of the Tianshui lacquer carving handicraft workshop is to design it in conjunction with the current society. Satisfying the spatial functional complexity is the first step in the craft workshop. Firstly, by analyzing the composition of the people in the Tianshui lacquer carving handicraft workshop, and based on their behavioral activity needs in the workshop, the functional areas in the workshop space are divided (Figure 1). The people in Tianshui lacquer carving handicraft workshop are mainly receptionists, lacquer practitioners and consumers, and in the first and second floors of the space are based on the behavioral activities of the people in the space as a reference, and the main activities in the space are reception, production, and experience, and other secondary functional areas are set up in accordance with the behavioral activities of the people in the space, such as to meet the needs of workers resting and working in the workshop, and the leisure and conversational activities of the consumers during the process of production and experience. The workshop workers can rest and work in the workshop, and the consumers can relax and talk during the process of making experience, etc. Accordingly, we further divide and discuss the multiple functional areas in the workshop space through bubble diagrams, flow diagrams, and floor plans.

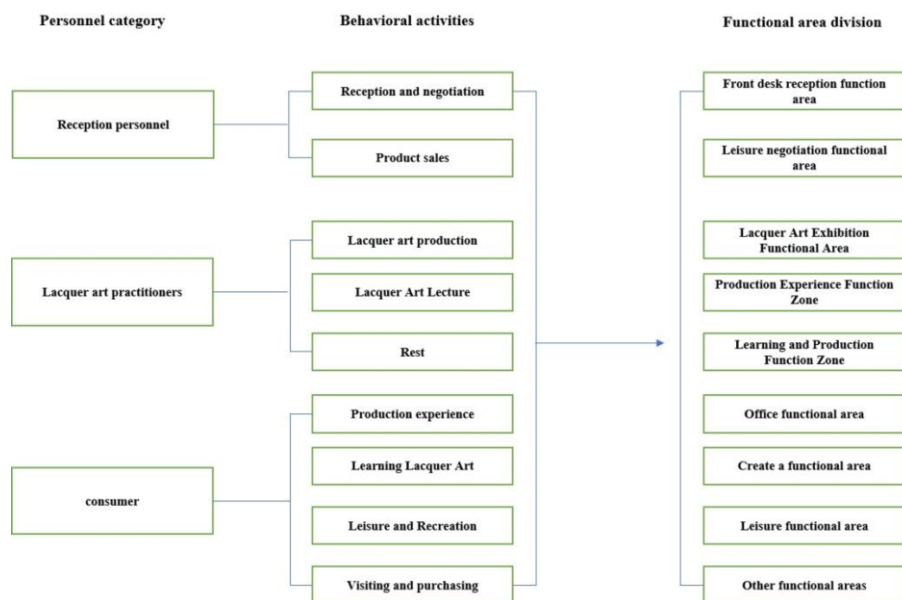


Fig. 1 Behavior of people's activities in the workshop and the division of functional areas

Tianshui lacquer craft workshop in the first floor space in the functional space area is divided into bubble diagram (Figure 2). There are mainly behavioral activities of visiting, making, negotiating and buying, and the corresponding main functional areas are display functional area, reception and negotiation functional area. According to the functional needs of the space to set up a semi-enclosed space, such as the production area is set up as a semi-enclosed space, the front desk and the production area of the link between the semi-open production space is more convenient for the lacquer production process of the visit . According to the space of different people in the line of motion for the division and combination of space, the storage room and the first floor of the lacquer workers production space is connected, belong to the workshop staff can access the space, in order to meet the lacquer workers in the production process of other tools and equipment, lacquer auxiliary materials convenient to use at the same time, without interfering with the consumer in the space of the other needs of the use of the space.

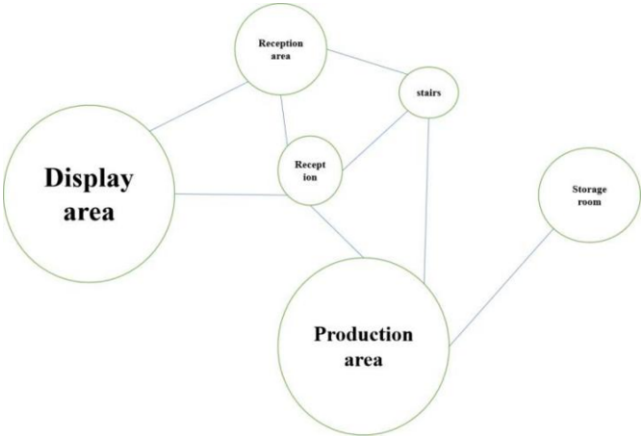


Fig. 2 Spatial bubble diagram of the first floor of the Tianshui Carved Lacquer Handicraft Workshop

The functional space in the second floor of the Tianshui lacquer craft workshop is divided into areas as shown in the bubble diagram (Figure 3). The second floor is mainly set up to experience space, lacquer workers teaching area connected to the consumer production experience area, when there is a need for explanation, you can use the electronic projection equipment in this area for explanation and learning, without the need for explanation, you can directly utilize the area for the production area. The second floor space relative to the first floor space to accept more people, so the bathroom, shade room two areas set up in the second floor, more convenient to produce the experience of the area in the consumer's use, according to the nature of the shade room needs, need to be selected in the hidden without windows without ventilation. The second floor space for lacquer workers to provide rest area and office area, to meet the needs of lacquer workers on duty, rest.

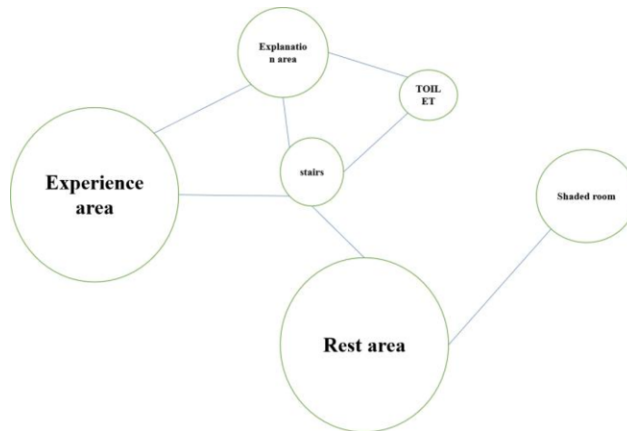


Fig. 3 Bubble diagram of the space on the second floor of the Tianshui Carved Lacquer Handicraft Workshop

3.2 Humanistic design

In the era of experiential consumption, people are more inclined to choose a more comfortable experience environment, in Tianshui lacquer carving handicraft workshop space with humanistic care to create a comfortable experience environment. We focus on the design of space details and physical environment to express the humanistic care[8-9].

(1) Space details set up to reflect the humanistic design: in the lacquer experience production process, the complexity of the production process will lead to a handicraft can not be completed at once, the producer may sometimes need to go through several cycles to complete the need for its handicrafts display and storage, while in the production of the tools and equipment required, such as uniforms, brushes, brushes, paints, etc., so according to the workshop space tools and equipment and handicrafts storage needs, to select and place the workshop space cabinets and display racks. Therefore, according to the tools and equipments in the workshop space and the storage needs of handicrafts, the cabinets and display shelves in the workshop space are selected and placed. For example, in the production area of the first floor lacquer staff work, according to the lacquer staff production needs, choose a larger storage rack to place the production tools and equipment and lacquer handicrafts to be completed, the lacquer production of the required uniforms and consumer experience to be completed works of art storage cabinets are placed in the first floor to the second floor of the stairway, convenient for experiencing the collection of the consumer, in order to facilitate the second floor of the experience area consumers to take the lacquer experience process tools and equipment, in the second floor of the experience area consumers to take the lacquer experience process, in the second floor, in the second floor, in the second floor of the experience area consumers to take the tools and equipment needed in the process of lacquer experience. In order to facilitate the second floor experience area consumers to get the tools and equipment needed in the process of lacquer art experience, in the second floor experience production area set up wall-mounted shelves, simple structure, easy to get, but also can play a decorative role.

(2) Space physical environment embodies humanistic care design: first of all, in creating a comfortable visual and auditory environment, through the use of artificial lighting and natural lighting combined to create a comfortable light environment in the space experience. According to the lacquer experience production area, display area, storage area requires different lighting illumination needs, in the lighting configuration and choice of lamps and lanterns are also different. For example, not only to meet the basic lighting in the display area, but also to highlight the display of exquisite lacquer products, in the choice of lamps and lanterns to downlights, tracked spotlights mainly in the production area and the experience of the production area in combination with artificial light sources and natural light sources, the use of warm-colored light source chandeliers, downlights or lamps, in order to avoid eye fatigue in the process of production and experience in Tianshui carving lacquer handicrafts workshop lamps and lanterns configured specific configurations (Table 2).

Table 2 Lamps and lanterns of Tianshui lacquer carving handicraft workshop

space type	Lamp selection
Showcase	Downlights, spotlights, T4 light strips
making areas and experiential making areas	Chandeliers, downlights, table lamps, T4 light strips
storage areas	Ceiling lamps, downlights
Rest area	Ceiling lamps, downlights

Secondly, in the creation of auditory atmosphere, take part of the wall sound-absorbing treatment. Reasonable absorption and reflection of sound for people to form the psychological impact of spatial perception, due to the lacquer products in the pre-production of wooden tires or sanding process, sometimes used mechanical equipment will produce a certain amount of noise, but also in the experience of the production area in the sound of people talking to a certain extent will affect others, so in the carving of lacquer handicrafts within the part of the wall to do the sound-absorbing treatment. In creating a good auditory space environment, the music is also brought to the space to experience the production of people, the sound embedded in the ceiling grille ceiling, in the process of people's experience along with the melodious classical music can be more relaxing and pleasurable physically and mentally, according to the frequency of use of the workshop space for the placement of the sound points.

4 Conclusion

Given that Tianshui lacquer carving itself has craft complexity, craft decorative, craft specificity, analyze its specific problems, and come up with the path of workshop space design research that is suitable for its craft characteristics, put forward the Tianshui lacquer carving handicrafts workshop space needs to satisfy the design principles of functional composite, cultural lineage inheritance, comfortable experience and contextual embodiment, and through the spatial function definition and delineation, the creation of indoor furnishings styles, The design method of physical environment experience is further verified in practice. In this paper, we practiced the design of Tianshui lacquer carving workshop. Firstly, through a brief analysis of the project overview, based on the design concept of Tianshui lacquer carving handicraft workshop, we put forward the design concept and the key problems that need to be solved in the design, so as to further alleviate the obstruction of the promotion of lacquer carving culture from the application of Tianshui lacquer carving handicraft workshop's indoor

space design in practice. In terms of design practice, the design expression of Tianshui lacquer carving handicraft workshop is analyzed from the levels of multi-functional design, interior furnishing design and humanistic care design.

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