

Research on the Practice of Social Design Concept in the Protection and Development of Intangible Cultural Heritage Handicraft

Taking the Bamboo Weaving Project of Rural Revitalization Workstation of Hushang Township, Anxi, and Fuzhou University as an Example

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ABSTRACT

Further study on theory and widespread practical projects involving social design in recent years enrich its connotation. With bamboo-weaving design project of rural revitalization workstation, a school-enterprise cooperation project between Hushang Township, Anxi, and Fuzhou University, as an example, this paper elaborates the social design concept and participatory design method reflected in the project. The feasibility and efficiency of participatory design methods in such scenarios are evaluated based on the actual project results, in an attempt to propose social innovation design patterns in the context of rural revitalization.

Keywords: social design, participatory design, bamboo-weaving product design, sustainability

I. INTRODUCTION

The continuous enrichment of social design connotation prompts practical projects guided by the concept of social innovation to be a catch in design field in China, which involves different branches of design. Despite the nuance in concept between social design and social innovative design, they all aim to solve social problems, that is, how design plays its social responsibility. As Chinese traditional craftsmen with intangible cultural heritage skills mostly live in rural areas, it is no surprise that design's participation in protection and development of intangible cultural heritage handicrafts is an important approach for design involving in rural revitalization. Among them, the corresponding projects in colleges and universities are exploratory and experimental. Most such projects are co-conducted by teachers and students in universities and local inheritor of national intangible cultural heritage. The practice methods employed include successful model that has been proved empirically effective in the academic field. Better ideas are also proposed. The humanistic care and social responsibility consciousness of teachers and students can be cultivated in the process. Based on the perspective of social design concept and practical methods, this paper

analyzes the process and practical results of the bamboo-weaving design project of rural revitalization workstation between Hushang Township, Anxi, and Fuzhou University. Practical methods that can be taken for reference in the protection of intangible cultural heritage handicrafts and rural revitalization are proposed.

II. SOCIAL DESIGN CONCEPT AND PARTICIPATORY DESIGN MODE

It is generally believed that the concept of social design originates from *Design for the Real World* by Victor Papanek in 1971: Design should be responsible and be able to make a real difference in the real environment. The book mentions two major flaws of the design at that time: first, designers' neglect of environmental issues and design's contribution to consumerism; The second is the neglect of the relatively vulnerable groups. [1] Papanek's ideas enjoy keen insight into the nature of the problem at the time, as well as inspire further progress. Whether design can play a positive role in the real environment is the issue faced by every designer. The development and progress of society cannot be achieved without commercial activities and consumption. The sustainability of social development requires attention to various potential

influencing factors in the process. "Design must be an interdisciplinary featuring innovation and creativity, and be responsible to real human needs." [2] The insight is of great instructive value. Since then, further discussion on this issue has been carried out in the field of design research. In his research, Mannich proposed social innovative design and defined it as the design that changes the social structure. The evolution of social structure driven by design innovation is closely linked with the concept of social design.

After the concept of social design was put forward, the organization and development of design practice projects also developed corresponding practice mode. The typical examples cover "participatory design" or "co-design". Participatory design is one of the early fruits of Scandinavian scholars in the field of HCI (human-computer interaction). Its earliest practice aims to alleviate the conflicts between staff who need to work with new technical systems and the system setting. [3] Later, it is gradually applied to systemic problem-solving scenarios in various fields. According to Suzanne, participatory design focuses on facilitating direct communication and collaboration between users and designers through technology or other means based on daily process. However, the context in which users' specific demands are made should also be taken into account. [4] Bjogvinsson, Ehn, and Hillgren share same similar views. Participatory design should realize the transformation from designing products to designing things (i.e. the aggregation of social materials). [5] More representative individuals are employed to directly participate in design process in participatory design, while collaborative design emphasizes more on inter-organizational standard communication, collaborative promotion and resource complementarity as an integral part of the overall system.

In recent years, the successful examples that employ participatory design method and follow the concept of social design are not rare in rural revitalization and cultural industry development. For example, "Connecting, Invisible Keelung", course involving environmental planning by Institute of Architecture and Urban And Rural Studies, Taiwan University, effectively integrating local culture and design teaching. In practice, teachers and students are divided into groups with diverse characteristics, and team members with multidisciplinary backgrounds are guided to cooperate and learn from each other. Interdisciplinary cooperation is neither disciplines overlap nor team-sharing cooperation, but new cooperative models requiring practice and theory. Based on the study and discussion of theoretical knowledge, this course group has carried out in-depth exchange and cooperation with local residents. Tea parties and other forms with affinity are taken to explore local stories, and the humanistic and emotional connotation and historical context shown in the

narration of local residents are combined for humane design refining and presentation. [6] The social group working mode adopted effectively integrates practical teaching and social design practice, which is of vital reference value. Similarly, the "Benshun Bamboo Art", an intangible cultural heritage brand project based on school-enterprise corporation and launched by Art Institute of Xiangtan University, integrates design teaching and intangible cultural heritage brand design, which both cultivates students' ability to solve practical problems, and helps local brands to improve economic benefits. [7] The transformation of subject and object is realized in teaching process, the school-enterprise collaboration is highly integrated with the intra-school collaboration, the positive role of design in the development of intangible cultural heritage brands is brought into play, and innovative ways, methods and strategies that meet the practical needs are explored.

In general, participatory design method can effectively integrate diverse groups, materials and scenes in the process of social design. The effective dialogue between designers and users endows participants the initiative and right of speech, facilitate the change of roles, reduce the trial and error cost of design, and make the design more friendly to relevant groups in the applicable environment.

III. BRIEF INTRODUCTION TO THE BACKGROUND OF BAMBOO-WEAVING INDUSTRY TRANSFORMATION IN HUSHANG TOWNSHIP, ANXI

Anxi has been the producer and user of bamboo-made tea vessels since ancient times. As early as the Five Dynasties period, *Record of Anxi County at Early Five Dynasties* mentioned "坐肆列邸, 贸通有无; 荷畚执筐, 各安职业" (The county boasts sound government, transportation and economy. The locals weave baskets and feed themselves)". It proves that bamboo-made products were popular in Anxi more than one thousand years ago, and later developed synchronously with the times. Thanks to their wisdom, local people created a variety of weaving techniques and introduced different kinds of raw materials into weaving, such as vine, iron, wood and so on. During the Song and Yuan Dynasties, the technique was further penetrated, with 14 categories and more than 40 varieties appearing. [8] Nowadays, bamboo-weaving products are no longer only practical tools, but practical arts and crafts or works of art, which reflects people's pursuit of better life. It is particularly necessary to examine bamboo-weaving daily utensil. Only through design innovation in a modern context, and the creation of bamboo-weaving products in line with modern life aesthetics, can such products be brilliant again. [9] Hushang Township, Anxi, where rural revitalization workstation locates, boasts 4,785 residents, of which 100 are in nearly 50 households

engaged in bamboo-weaving, and the figure is decreasing year by year. Local residents generally concentrate on tea production during the tea season and bamboo weaving during the slack season. [10] Compared with the large-scale bamboo weaving e-commerce villages nearby, the inheritance of bamboo-weaving skills and the development of the industry in Hushang township are slightly lagging behind. Bamboo weaving with deep historical and cultural roots in the local area is complementary to the local tea industry. Older generation of villagers also have deep feelings for it. However, bamboo-weaving products here fails to establish its own influence, and the innovation efficiency is poor. Compared with other areas in Fujian province with mature bamboo-weaving industry, bamboo-weaving industry in Hushang township serves as underdog in order acquisition and market development give its lack of representative products and brand. The local common bamboo-weaving products lag behind in aesthetic value compared with that of Japan and Southeast Asia in the international market. Most local young generation go to the surrounding cities or provinces to work and study, and the inheritance of skills also faces challenge.

In respond, the local government elevated bamboo weaving the second livelihood industry requiring concerted efforts from villagers in Hushang township. In addition to regular activities and training involving bamboo-weaving industry, relevant venues and facilities have also been established, such as bamboo-weaving experience hall in Hushang township, bamboo-weaving exhibition hall, etc. And the bamboo-weaving culture appears in the life scene in the form of wall painting. At the end of 2018, the township sent numerous bamboo-weaving masters to study systematically in Chen Qinghe's studio. School-enterprise cooperation with Anxi Vocational and Technical College, Huaqiao University and Xiamen Academy of Arts and Design, Fuzhou University has also been gradually carried out. Since then, the development of bamboo-weaving industry caught on.

IV. DOCUMENTARY OF PROJECT PROCESS AND METHOD

The bamboo-weaving design project of rural revitalization workstation between Hushang Township, Anxi, and Fuzhou University has been launched since July 2019. A total of 148 students have been engaged in practical work for a long time, including 10 graduate students and 138 undergraduate students, who have created more than 100 creative products. The following is an analysis of the project's summer practice in 2019. ("Fig. 1")



Fig. 1. Photos of the design team (photographed by the author).

This design practice process is carried out in the form of group collaboration, with a total of 5 groups. The "1+1+3" model was adopted, which include a master in bamboo-weaving, a graduate student, and three undergraduates. ("Fig. 2" and "Fig. 3") Students from both design and pure art disciplines are covered, and groups with comprehensive professional backgrounds are formed. All members are deeply involved in the entire process of design practice. The overall process consists of three main steps: the first stage is to observe and learn bamboo-weaving master to prepare materials and traditional weaving techniques display. In the second stage, all team members discussed innovative design ideas together and made design sketches. In the third stage, the bamboo-weaving master finished the products, while other members learned the production methods. The following details how the three types of member participate in the phases.

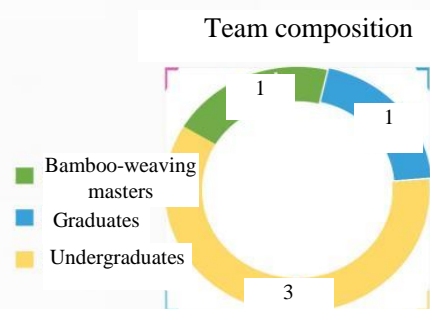


Fig. 2. Sketch map of the team composition of "1+1+3" model in Fuzhou University.



Fig. 3. Photos of bamboo-weaving team members (photographed by the author).

As shown in "Fig. 4", in the first stage, the bamboo-weaving masters spend a whole day in practical operation. Masters of each group cooperate with each other to fully display material preparation and several representative traditional weaving methods. At this time, the members of the group were not familiar with each other, and the communication between them was still a question-and-answer mode. The graduate students mainly guide the in-depth communication of the team. The students' main activity in this stage is to study, observe and record the basic composition of bamboo-weaving products as the basic materials for design and creation.

Display material preparation and several representative traditional weaving methods

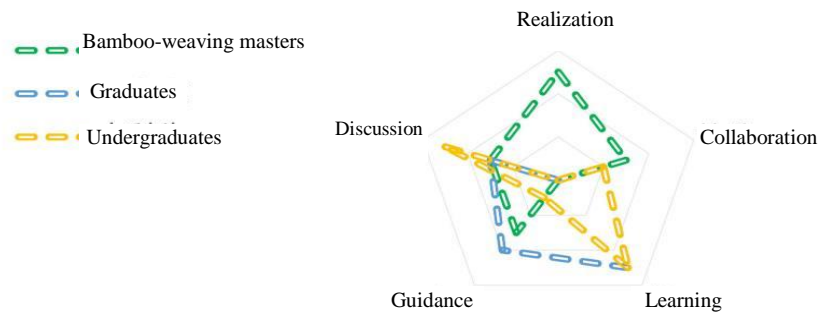


Fig. 4. Statistics on the participation of members in the first phase.

The first phase of run-in was followed by three days of innovative design and sketches. Masters and students make in-depth discussion on design project. On the basis of learning in the first stage, the students put forward a variety of different design schemes, and each group combined with the design concept to make the model. Bamboo-weaving masters mainly listen to everyone's design, judge whether they're practical. In

this process, the masters learned the thinking and methods of design and later participated in the design of schemes. At this stage all members are engaged in collaboration and discussion. Since most bamboo-weaving masters can't draw, the sketching is mainly completed with the help of undergraduate students. ("Fig. 5")

Innovative design and sketches

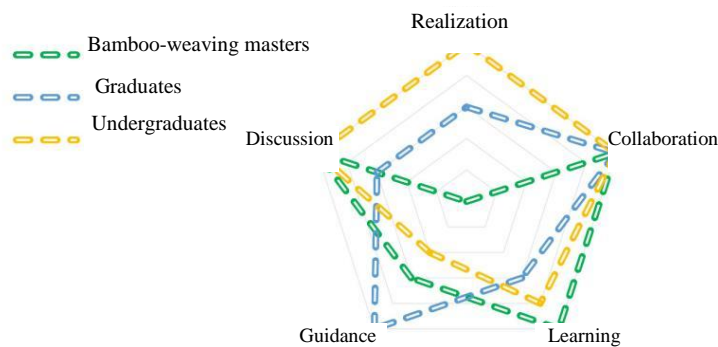


Fig. 5. Statistics on the participation of members in the second phase.

As shown in "Fig. 6", in the final production stage, the bamboo-weaving master not only led the production of the finished product, but also realized the change of the behavior mode. The time spending with students in the past week allows masters more willing to communicate and express their ideas, and they have begun to play a guiding role in the team. They not only took the initiative to teach bamboo-weaving techniques, but also came up with their own ideas and discussed various possibilities based on the sketches with students. Students in the third group designed "Guangdi

Cup"("Fig. 7") with porcelain and bamboo based on the story of Li Guangdi, a local historical figure. In the original design, the cup body was protected by bamboo, and the upper part resemblances the shape of the cap of the prime minister. In the batch production, the master felt inspired and not only spontaneously added the "braid" in line with the characteristics of historical figures for the top, but also actively changed the product name to "Famous Prime Minister Cup" through communication with teachers and students, which is more suitable for sales and promotion.

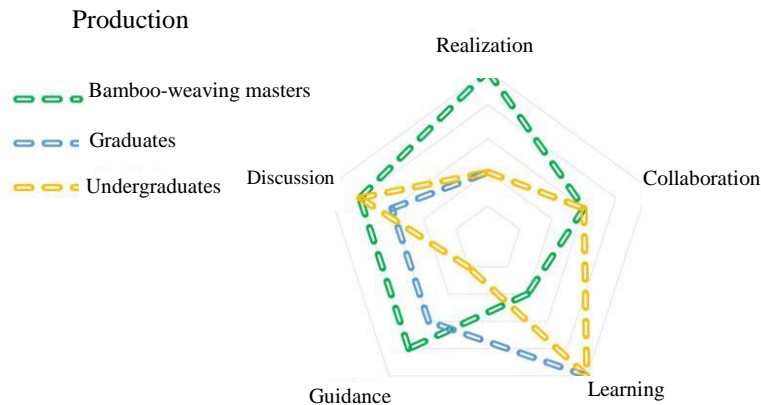


Fig. 6. Statistics on the participation of members in the third phase.

This practice promotes mutual learning among members of the three types, which designs new products that meet the market demand. More importantly, participatory design process prompts the identity transformation of local bamboo-weaving master in industrial structure. They have improved from the original tradition of only weaving basic products, or simply making order-based products, to the active thinking and independent innovation. Such shift makes it possible to keep innovation without professional designers and takes user and producer into account. As Professor Huang Qun said, the boundaries of design will change with the development of society. Only in this way can design positively affect the society and people's life, and the original meaning of design in the society will remain. [11] The students not only experienced the complete process of intangible cultural heritage design innovation, but also cultivated the humanistic care and sense of responsibility that designers should pay attention to through the communication with local residents. Instead of designing for the sake of design, designers should step out of the concrete creative design behavior, seriously treat the people and social problems behind the object, and endow the design with positive social significance.

Mozi's idea of "universal love" can be learned to realize the fundamental change from individual design to public design. [12] In the process of design co-creation between the inheritors of local bamboo weaving skills and the teachers and students of design majors, the bamboo-weaving products of Hushang township gradually showed a trend of differentiation and fashion, and began to consciously excavate local cultural characteristics and reflect them in bamboo-weaving products.

V. SUMMARY OF PRACTICAL WORKS AND DESIGN METHODS

Different from the traditional local bamboo-weaving products in the past, the bamboo-weaving products designed and produced in the form of participatory co-creation have deep cultural expression and aesthetic levels. The local cultural elements are organically integrated into the appearance, reflecting the differentiated and cultural characteristics that are different from similar products in other regions; and through the innovation of product shape, the products reflect the trend of fashion. Based on the content of this practice, the authors sorted out the methods and ideas of

integrating local cultural elements into the design of bamboo-weaving products, hoping to provide a reference for similar intangible heritage handicraft inheritance and innovative design. The bamboo-weaving product design produced in this practice mainly embodies the following elements of local culture: celebrity culture, architectural culture, and traditional craftsmanship.

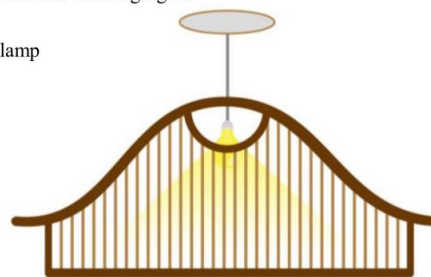
Celebrity culture is a concentrated expression of the local historical and humanistic spirit, has a far-reaching influence, and is also a valuable cultural tourism resource. Incorporating celebrity cultural elements into the design of bamboo-weaving products can not only effectively respond to the actual needs of local agriculture, tourism and other industries, but also help enhance the cultural confidence of the locals. In this practice, the appearance of "Mingxiang Cup" was designed based on the active narration of the bamboo-weaving master, and the story of Li Guangdi (see "Fig. 7"), a famous Neo-Confucianist who were famous during the Kangxi period of the Qing Dynasty, and it is iterated according to actual needs. It was originally conceived as the protection and decoration of the porcelain cup, and it was improved into a tea gift package that conforms to the quality upgrade of the local tea export packaging design (see "Fig. 8").



Fig. 7. Portrait of Li Guangdi.

"Min Yue Guangyun" series bamboo-weaving lights

Top shape lights — ceiling lamp



Front view



Side view of weaving method
(Partially adopting two-on-two
weaving method)



Top view (Partially adopting hexagonal weaving method)

^a Image source: <http://fj.sina.com.cn/news>



Fig. 8. The improved Mingxiang Cup as a tea gift package.

^a Image source: Anxi Hushangxiang live broadcast promotion map

Architectural culture carries the common imprint of human activities and the natural environment of the region in the process of social development, and its form can directly evoke the visitor's pictorial memory of a specific region. In this practice, the design of the "Min Yue Guangyun" series of bamboo-weaving lamps (see "Fig. 9" and "Fig. 10") incorporates a variety of typical traditional architectural features in Fujian, such as the top shape of the ancient house in southern Fujian, the eaves corners, and the appearance of earth buildings. Combining the actual application scenarios of the lamps, the elements are deconstructed and reorganized, and traditional weaving methods are used such as hexagonal weaving, two-up and two-fall dense weaving, and cross weaving, which are commonly used in bamboo-weaving production in Anxi area. While meeting practical needs, it conveys the material and spiritual connotations of local culture with the appearance of fashionable products.

Fig. 9. "Min Yue Guangyun" series of lighting design sketch 1.

"Min Yue Guangyun" series bamboo-weaving lamp design sketches

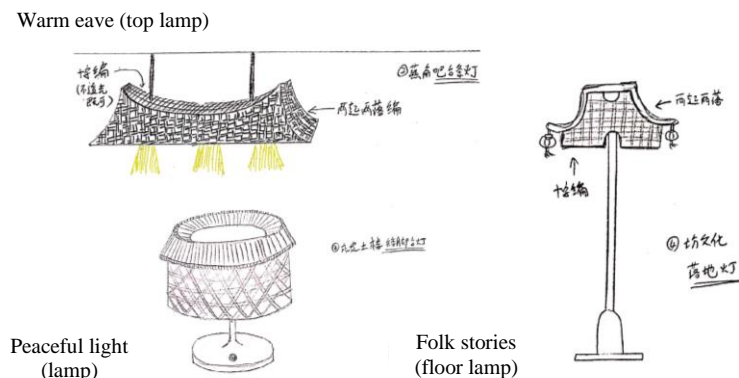


Fig. 10. "Min Yue Guangyun" series of lighting design sketch 2.

Traditional craftsmanship is the crystallization of the wisdom of the local working people, and the fusion design of different types of intangible cultural heritage can provide new ideas for its contemporary design expression. The more typical work in this practice, "Xiangsheng" series of clothing and accessories design (see "Fig 11" and "Fig 12") combines the traditional blue printed cloth production and bamboo weaving of the She ethnic group in Anxi area, creating a "national tide" style bamboo weaving product that conforms to the mainstream aesthetic trend of the current society.



Fig. 11. The actual shots of the "Xiangsheng" series of clothing and accessories design.



Fig. 12. The "Xiangsheng" series of accessories are displayed.

In addition, related content elements such as food culture, clothing culture, and folk culture can also be used as inspiration sources for the design of innovative bamboo woven products. Through reasonable abstraction and design translation, the regional characteristics closely connected with intangible cultural heritage handicrafts can be presented wonderfully. This social innovation design practice not only improves the professional quality of design teachers and students, but more importantly, plays a guiding and inspiring role for local inheritors of intangible cultural heritage, helping them to re-understand the local culture and initially cultivate the design innovation awareness and ability. It is helpful to realize the deep cultivation of local superior resources, expand the diversity of cultural exchange carriers, and lay the foundation for the diversified inheritance and development of intangible heritage handicrafts.

VI. CONCLUSION

The social innovative design mode guided by social design effectively contributes significantly to the protection and development of intangible cultural heritage handicrafts. The application of participatory design method and the dialogue and collaboration scenarios among multiple roles such as art inheritors, teachers and students of universities, professional designers and consumers endow each group the initiative and say to form the consciousness and initiative of independent innovation. It is necessary to cultivate inheritors of intangible heritage handicrafts with innovative potential to meet the needs of social development and enhance their aesthetic level. It is also necessary to jointly realize the cultural, contemporary and aesthetic value of intangible heritage handicrafts, and realize the living inheritance of intangible heritage handicrafts, which will help to construct a sustainable development path in this field.

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