Research on Design Support Methods for Documentary Programs on the Renovation of Old Buildings

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Abstract: The practice of transforming ancient villages and buildings into documentary programs represents a new paradigm in the cultural and creative industries and a novel attempt at the integration of media and design disciplines. Beyond the fusion of entertainment and professionalism, it has had a profound impact on social culture, aesthetic concepts, and the development of the design industry. Due to the spatial attributes of design outcomes, their dissemination as symbols is inherently limited. The empowerment of media in design actions allows for the concrete presentation of design thinking and processes, conveying rich visual information and design concepts to the audience, thereby enhancing their understanding and cognition of design. The key to providing effective design technical support for program production is to establish an effective design creativity management model that can link creativity across professions, integrate aesthetic differences among individuals, and help the audience better understand the cultural significance embodied in design during the viewing and learning process.
Keywords: Documentary programs on design renovation, program production, technical support

Chris Bilton points out in his book Creativity and Management: “If an organization is not considered as a whole in terms of its needs, individual innovation and inconsistencies can ultimately be destructive and meaningless. Creative ideas need to be integrated into the organization’s resources, capabilities, and systems to bear fruit.” In the practice of design renovation documentary programs, designers with different characteristics are often invited to delve into the project site for collaborative design and renovation. The exchange and cooperation among designers promote the collision and integration of design concepts, becoming a key driving force for the innovative development of the design industry. However, how to unify the personal innovations of designers with significantly different educational backgrounds in an organic organization that meets the needs of empowering rural transformation has become a challenge that urgently needs to be overcome in program production. To produce works that reflect local cultural characteristics, meet the needs of building users, embody the individual creative concepts of designers, and align with the spiritual values of the audience, this study, from the perspective of program production and combined with specific cases, summarizes a systematic creative management method to provide design technical support for design renovation documentary programs.

The “Design Reborn” project is a documentary program focusing on rural revitalization, challenging young designers. It selects the most promising young designer teams in China to go deep into the countryside and renovate old buildings. By fully exploring the characteristics of the site and combining multiple complex backgrounds such as economy, culture, and ecology, it is committed to creating architectural spaces that highlight local humanistic temperament and contain innovative spirit, thereby empowering rural development. In this study, we take the first station of the project’s renovation site—Shuitou Town, Fogang

County, Guangdong Province—as an example, and combine the professional theoretical framework of the design discipline to explore and locate the creative management methods of this design model.

1. Constructing External World Cognition: Local Humanities

Excellent design solutions do not emerge out of thin air; they are based on an in-depth analysis and understanding of the background and cultural characteristics of the project location, from which design concepts evolve and grow. By formulating a design brief, a comprehensive understanding of the project location is established. This not only helps designers form a profound understanding of the local objective external world but is also key to ensuring that design works are both innovative and deeply rooted in cultural foundations.

(1) Positioning the project background tone. Through the design brief, the overall background and general direction of the design are clarified. For example, in the practical case study, it is pointed out first: As urbanization continues to advance, rural development faces many challenges. How to protect the rural ecology and culture while achieving sustainable economic development has become an urgent problem to be solved. Therefore, this project aims to activate the existing rural resources through the wisdom and creativity of designers, create a rural appearance with local characteristics, and achieve a comprehensive improvement in the ecological, cultural, economic, social, and living values of the countryside. With this background, designers are required to stand at the height of national development strategy, with an international vision and local wisdom, to create a rural appearance that meets modern aesthetics and retains local characteristics. At the same time, the project emphasizes the practicality and feasibility of the design, requiring designers to go deep into the countryside and get close to the villagers to ensure that the design plan can not only improve the overall image of the countryside but also effectively improve the production and living conditions of the villagers, truly achieving the goal of designing for the people and benefiting the people. This not only clarifies the tone and scope of the design but also guides and standardizes the work objectives and means of the designers.

(2) Clarifying geographical spatial attributes. This attribute covers several key dimensions, including geographical location, historical evolution, and socio-economic structure. These elements together form the macro framework of the design context, which can accurately position the natural ecology and built environment characteristics of the project location, providing a solid scientific basis for the design. When introducing the project location, it is necessary to detail its basic terrain, topographical features, as well as major mountain ranges, climatic conditions (including temperature and precipitation), and hydrological characteristics, etc., to establish the physical basis on which the design relies. At the same time, it is necessary to clarify the administrative division and socio-economic conditions of the project location to form a basic understanding of the economic environment of the design project, and thus reasonably judge the layout of spatial functions and the potential market attributes in the design plan. In addition, extracting key words of the site background is an important step to further refine the macro framework of the design context. For example, in the practical project, in addition to providing the above basic information, it is also necessary to extract key words for the project location, such as “the source of the Pianjiang River,” “green and

low-carbon town," "demonstration town of leisure agriculture and rural tourism," "typical town and village in the northern mountainous area of Guangdong," "the destination of hot spring health care and forest healthy residence in the Greater Bay Area," and "the gathering area of health care and leisure industry," etc. These extracted pieces of information not only help designers to quickly establish cognitive mapping but also preset and guide the design direction to a certain extent during this process.

(3) Elucidating future regional planning prospects. This step is crucial to ensure that the design outcomes closely align with the trends of social development and the local planning vision. In the project brief, not only should the macro planning layout of the regional industries be detailed, such as the konjac industry, health-care industry, and photovoltaic industry in the practical case study, but also the specific locations of each project and the planning of their surrounding areas should be thoroughly introduced. These contain rich informational symbols that profoundly reflect the policy orientation of local development, market demand trends, and the evolution of social culture, providing a macro and comprehensive environmental framework for the design work. Designers can closely rely on core elements in the planning, such as functional zoning, traffic flow organization, and green space system layout, to scientifically and reasonably arrange design elements. This ensures that the project not only fully meets the current usage requirements but also demonstrates good sustainability and adaptability in future urban development.

(4) Design tone suggestions. In the early stages of program production, the aforementioned materials will be submitted to experts with mature influence for review, and they will propose appropriate design tone keywords. For example, in the case study: Lingnan (local), the design project should be committed to inheriting and promoting the Lingnan cultural heritage of Shuitou Town, including architectural style, traditional handicrafts, and folk culture, reflecting local characteristics and historical heritage; Ecology (green), the design plan should reflect the concept of sustainable development, including energy conservation and emission reduction, resource recycling, and ecological agriculture, promoting the coordinated development of economic growth and environmental protection; Future (innovation), the design plan should integrate technology and innovation elements, such as intelligent facilities, digital experience, and Internet+ services, to enhance the smart level of Shuitou Town; Practicality (economy), the design plan should conduct project feasibility studies, considering factors such as investment return rate, market demand, and operating costs, to ensure the practicality and economic benefits of the project. By referring to the design keywords provided by experienced design experts, we can further clarify the reasonable scope of the design in the brief and control the direction of the plan generation.

2. Defining the Material Scope: Design Conditions

(1) Focusing on the basic situation of the building. In the design brief, it is necessary to detail the attributes of the specific design object, including the basic situation of the building, location information, historical functions, and planning orientation. During the preparation stage of the design brief, a detailed survey of the building should be conducted in advance to obtain specific building dimensions, which will assist designers in constructing conceptual models. As shown in Figure 1, the specific dimensions, existing structure, and materials used

of the building to be renovated are detailed. In addition to the conventional design values, given the particularity of ancient building renovation, its historical functions and construction background should also be thoroughly explained. In the practical project case study, we take the “Wufu Building” in Lianyao Village, Shuitou Town, Fogang County, Guangdong Province, as an example. The building is constructed with walls made of a mixture of lime sand, yellow mud, and three-part soil, reinforced with stones, and is very sturdy. It is said that the building was jointly constructed by four local wealthy families to cope with social unrest and clan feuds at the time, serving a defensive purpose. The entire building is tall and imposing, holding significant value for the study of ancient architectural art and history. The building is laid out in a square shape, with four corner towers to enhance defense capabilities. The corner towers are connected by a sturdy three-story, approximately 10-meter-high enclosure, and a central building higher than the corner towers, named “Jiushou Hall,” together form the “Wufu Building.” Only by fully grasping its detailed spatial physical attributes and rich historical and cultural connotations can we more accurately point out the reasonable purpose of the design.

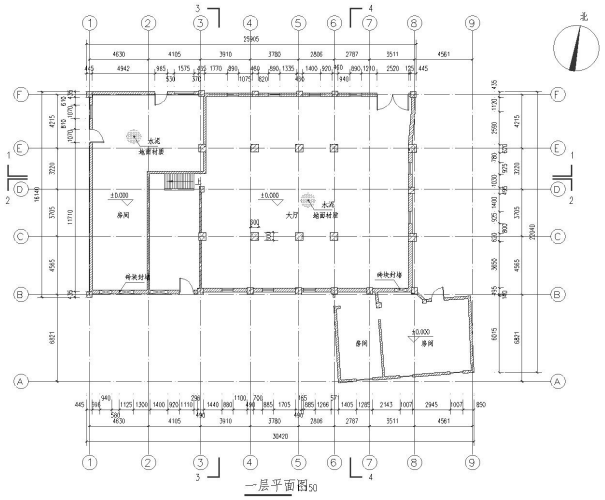

Figure 1: Survey Map Provided in the Practical Case

(2) Defining the Project Design Scope. The clear demarcation of the project design scope is not only the benchmark for design planning and future construction work content in project management but also a prerequisite for ensuring that the design can fully utilize environmental resources and achieve harmonious integration with the environment. Isolating the design from the overall environment will disrupt the overall coordination within the area. In the practical case study, we have clearly divided two types of boundaries for the scope involved in the renovation project: one is the main scope of the renovated building, and the other is the design consideration scope (as shown in Figure 2), where the blue line indicates the design consideration scope, and the purple line indicates the main scope of the building.

Figure 2: Schematic Diagram of Design Scope

By defining these two scopes, we can more effectively emphasize to the designers the close relationship of "mutual shaping and symbiosis" between the building and the environment, thereby ensuring that the renovated building becomes an organic part of the environment.

(3) Clarifying the intended use by the owner. The primary beneficiaries of design are people, and the investors and users of the renovation project have the decisive power over the functional configuration of the building. In the preliminary design phase, it is necessary to deeply understand the needs and preferences of the building's owner, provide reasonable suggestions, and reserve ample thinking space for designers in the design brief to balance the needs of the investors with the professional judgment of the designers. At this stage, the investment amount of the investor should be clarified, and the specific limitations on the design should be defined according to the project budget. At the same time, flexible functional configuration suggestions should be provided, such as the functional positioning suggestions for the "Wufu Building" in the practical case: luxury dining, entertainment and leisure, boutique accommodation, sales and promotion, and handicraft experience, etc. These suggestions are broad in scope, providing ample thinking space for functional planning. In addition, investors should clarify whether the project will have commercial operation capabilities after renovation and estimate the possible range of economic benefits. Finally, the design content and requirements must be clearly defined, including but not limited to architectural design, landscape design, interior design, graphic design, and specific design requirements under each subcategory, to ensure that the designer's work is strictly controlled within the expected range of the project investor.

3. Avoiding Potential Conflicts and Disputes: Risk Prediction

(1) Building structure safety appraisal report. Over time, old buildings may be affected by natural causes such as earthquakes, floods, and hurricanes, or by human actions such as inappropriate renovations and decorations, which can lead to structural damage and aging. In the early stages of project design, it is necessary for professional units to issue a structural safety appraisal of the building to be renovated. This can timely avoid potential hidden

dangers and ensure that the renovation project is carried out on a safe basis. Moreover, the report can provide a detailed survey of the current structural condition of the old building, including the strength of load-bearing components, stability, and the overall structural load-bearing capacity. This information is an important basis for the renovation design and helps designers to formulate a reasonable renovation plan according to the actual condition of the building, ensuring that the renovated building can meet new functional requirements while also ensuring its safety during use.

(2) Discrepancies in land use attributes, scope, and actual occupation. Although satellite positioning technology is widely used in the field of surveying and mapping, its accuracy is affected by various factors, such as the number of satellites, signal quality, and atmospheric interference. In addition, the complexity of land occupation means that changes in land ownership and boundaries may become blurred due to historical reasons, topography, or human factors, which can lead to errors in the range data obtained by satellite positioning. After obtaining the satellite data of the land use scope, it should be verified with the local relevant departments, especially in cases where the surrounding area is complex, to avoid unnecessary disputes during the later stages of project implementation.

4. Conclusion

This paper takes the practical case of “Design Reborn” as the core of analysis, examining the systematic methods of creative management in documentary programs on design renovation. From the perspective of program production, systematic creative management helps enhance the professionalism and aesthetic appeal of the program, allowing the audience to gain a deeper understanding of the thought processes behind the designs. In terms of design practice, it ensures the feasibility and innovativeness of the design plans. By summarizing the methods of design technical support, this study provides strong support for design renovation practices, promotes the innovative integration and development of the design and media industries, and offers intellectual support for social practices such as rural revitalization.

References

[1] Donald A. Norman. The Psychology of Everyday Design. Beijing: CITIC Press, 2015.

[2] Chris Bilton. Creativity and Management: From Creative Industries to Creative Management. Translated by Xiang Yong. Beijing: New World Press, 2010.

[3] Jan Gehl. Life Between Buildings: Using Public Space. Beijing: China Architecture & Building Press, 2002.

[4] Xiang Yong. Introduction to Cultural Industry. Beijing: Peking University Press, 2013.

[5] Clare Cooper Marcus, Carolyn Francis. People Places: Designing a Human - Scale Environment - A Design Guide for Urban Open Space. Translated by Yu Kongjian. Beijing: Beijing Science & Technology Publishing House, 2020.