

Research on the Design Strategy of Art Exhibition Space in Shixiang Village, Conghua District, Guangzhou City under the Theory of Cultural Genes

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Abstract:

In the process of urbanization, the inheritance of regional culture in Lingnan townships faces the dilemma of a lack of spatial carriers. This article takes Shixiang Village, Lutian Town, Conghua District, Guangzhou City as the research object. Based on the theory of cultural genes, the regional culture is decomposed into three types of genes: explicit, implicit, and behavioral activity, and their translation logic and application strategies in the design of art exhibition spaces are explored. By analyzing the core logic of cultural gene spatial translation, this paper proposes strategies for material translation of explicit genes, artistic conception creation of implicit genes, and interactive design of behavioral activity genes. Through the approach of “material inheritance spiritual resonance behavioral participation”, the protection and inheritance of regional culture can be achieved.

Keywords:

Cultural Gene Theory, Lingnan Towns and Villages, Art Exhibition Space, Shixiang Village, Lvtian Town, Design Strategy

1. Introduction

Amidst the rapid advancement of urbanization, the unique regional culture of Lingnan towns is facing unprecedented challenges. Many precious cultural heritages, traditional customs, and spiritual cores are gradually being diluted or even forgotten in the process of modernization, and the inheritance of regional culture is facing the severe dilemma of the lack of spatial carriers. As an important materialized carrier for cultural dissemination and inheritance, the design of art exhibition spaces is crucial to ensuring the proper protection, display, and continuation of regional culture.

The concept of “meme” is an extension of cultural studies, first introduced by foreign scholar Richard Dawkins in his book “The Selfish Gene”. He posited that the fundamental unit constituting culture is the “meme”, which he likened to biological genes, serving as the basic unit for social inheritance and development [1]. By the end

of the last century, the concept of “meme” had been introduced into various fields in China. Among domestic scholars, Professor Liu Changlin, in his book “Chinese Systematic Thinking”, defined meme as a key factor influencing national culture and historical development processes [2]. Based on the theory of meme, scholar Yuan Yuan analyzed and summarized the cultural genes of historical districts from three aspects: explicit, implicit, and behavioral activities, using this as a guide for planning practices in historical districts [3]. Overall, scholars both domestically and internationally approach the definition of the meme concept from different perspectives. Foreign scholars primarily view it from a natural science perspective, while domestic scholars study issues related to meme, such as thinking modes and religious beliefs, from the perspectives of philosophy, sociology, and other humanities and social sciences [4].

The cultural gene theory in this article is also analyzed from three aspects: explicit, implicit, and behavioral activities. Cultural genes refer to the core elements of regional culture that are inheritable, stable, and unique. Specifically, explicit genes are mainly manifested as various material symbols, such as architectural components, decorative patterns, and traditional artifacts; implicit genes are embodied in the spiritual connotations of regional culture, including folk emotions, values, and philosophical ideas; and behavioral activity genes refer to various practical activities related to regional culture, such as traditional rituals, folk performances, and handicraft making. The cultural gene theory decomposes regional culture into three types of genes: explicit, implicit, and behavioral activity. Through in-depth exploration, interpretation, and translation of these three types of genes, art exhibition spaces can not only serve as exhibition functions but also become carriers and disseminators of the spiritual core of regional culture, realizing the “material inheritance - spiritual resonance - behavioral participation” of culture.

2. Constituent Elements of Cultural Genes in Shixiang Village

2.1. Prehistoric cultural genes

The Shixiangyan site, as the earliest known ancient human site in Guangzhou, carries a rich prehistoric cultural heritage. The stone scrapers discovered in 1984 demonstrate a high level of craftsmanship at that time. From the end of 2002 to the beginning of 2003, various flaked stone tools such as stone adzes, stone axes, and double-shouldered stone axes, as well as a small number of imprinted pottery shards, were unearthed from the front slope of the site, providing important material evidence for studying the cultural integration between the Pearl River Delta and the Shixia culture in northern Guangdong [6]. The cultural characteristics exhibited by the remains of the late Neolithic period vividly reflect the production, life, and cultural exchanges of ancient ancestors in this area, providing crucial support for archaeological chronology and historical reconstruction in the Guangzhou region.

2.2. Red cultural genes

Lvtian Town is the only revolutionary base area town in the northern part of Guangzhou. There are many precious red revolutionary sites around Shixiang Village, which have witnessed those magnificent revolutionary years. The first Party branch of the Communist Party of China (CPC) in the north was established in the Hu family's public house in Baishizui, Sancun Village. The CPC Conghua County Committee was established in the Chao Delin Building in Tangji Village. The former site of the

Lvtian Party Organization in the north of the CPC, Shangyi Community School, is located in Lvtian Town Market. There are also the former site of the Yangmeitan ambush battle and the Lvtian Revolutionary Martyrs Monument in Lvxin Village. These red relics embody firm revolutionary beliefs, fearless sacrifice, and the fine tradition of hard work. They are the core manifestation of the red cultural genes of Shixiang Village, inspiring future generations to remember history and inherit the red genes.

2.3. Hakka cultural genes

As a settlement along the Hakka migration route, Shixiang Village retains a strong Hakka cultural heritage. From traditional Hakka walled-house architecture to distinctive Hakka folk songs, dragon and lion dances, and other folk activities, to unique Hakka cuisine preparation techniques such as fermented tofu and pork with preserved vegetables, all demonstrate the Hakka people's spirit of perseverance, solidarity, and mutual assistance. Over the years, Hakka culture has integrated and influenced other local cultures, forming a unique cultural style in Shixiang Village.

2.4. Agricultural cultural genes

Shixiang Village is located on the banks of the Lutian River, blessed with fertile land and a suitable climate, and boasts a long-standing agricultural culture. Traditional farming practices, such as plowing, sowing, irrigation, and harvesting, embody the villagers' reverence and reliance on the land. The terraced farming landscape serves not only as a carrier of agricultural production but also encapsulates the wisdom of harmonious coexistence between humans and nature. Furthermore, the abundant local agricultural products, including tea, fruits, and vegetables, along with the associated planting and processing techniques, constitute a significant component of the agricultural cultural gene.

2.5. Ecological cultural genes

Lvtian Town boasts a forest coverage rate of up to 84%. Surrounded by mountains and rivers, Shixiang Village enjoys a superior natural ecological environment. Here lies Guifeng Mountain, the fifth highest peak in Guangzhou, which serves as the source of the Liuxi River and nourishes this land with its abundant water resources. The natural limestone mountain where Shixiangyan is located has nurtured a rich and diverse flora and fauna due to its unique geological features and ecosystem. The villagers have long adhered to the laws of nature, relying on the mountains and rivers for their livelihood, and have formed traditional customs that respect nature and protect the ecology. The ecological cultural gene is deeply rooted in the development of the village.

3. Translation Logic of Cultural Gene Space in Shixiang Village, Lutian Town

Cultural genes need to be effectively reflected and inherited in art exhibition spaces through reasonable spatial translation. Differentiated design strategies should be adopted for different types of cultural genes to ensure the authenticity of cultural genes is preserved while also adapting to the functions and needs of modern exhibition spaces, endowing the space with contemporary vitality.

For dominant genes, the focus of spatial translation is on “symbol extraction and morphological translation”. Starting from the material symbols in regional culture, conducting in-depth analysis and extraction, extracting the most representative elements, and then transforming these elements into architectural language, decorative symbols, and other display spaces through modern design techniques. For example, extracting elements such as symmetry and enclosure from the form of Hakka walled houses and applying them to the layout and facade design of exhibition spaces can intuitively convey the characteristics of regional culture.

The spatial translation of recessive genes emphasizes the creation of artistic conception and emotional resonance. Due to the fact that recessive genes are a cultural connotation at the spiritual level and cannot be directly expressed through material forms, it is necessary to guide viewers to resonate emotionally through spatial atmosphere creation, narrative expression, and other means, in order to understand and feel the deep meaning of regional culture. By organizing spatial sequences, utilizing lighting, and selecting materials, an emotional atmosphere that is in line with implicit genes can be created, allowing viewers to unconsciously be influenced by regional culture while experiencing the space.

The spatial translation of behavioral activity genes focuses on “interactive guidance and scene reproduction”. Behavioral activity genes are closely related to people’s practical activities. Therefore, in the design of exhibition spaces, it is necessary to provide viewers with opportunities to participate and experience. Interactive design can guide viewers to imitate and participate in traditional cultural behaviors, or through scene reproduction, allow viewers to experience cultural activities in history firsthand. This can enable the dynamic inheritance and development of behavioral activity genes in contemporary space, enhancing viewers’ sense of identity and belonging to regional culture.

4. Design Strategy for Art Exhibition Space in Shixiang Village, Conghua District, Guangzhou City under the Theory of Cultural Genes

4.1. Material translation of dominant genes

4.1.1. Abstract extraction of regional symbols

Regional symbols are an important component of explicit cultural genes, embodying rich information about regional culture. When abstracting regional symbols, it is necessary to conduct comprehensive research and analysis on local historical relics, traditional buildings, folk artifacts, etc., to identify the most representative and recognizable symbolic elements. Taking the Shixiangyan site in Shixiang Village as an example, the unearthed stone artifacts feature unique patterns with simple yet powerful lines, reflecting the craftsmanship and aesthetic concepts of ancient ancestors. These stone artifact patterns can be abstracted, with core lines and composition elements extracted, and transformed into display wall dividing lines, floor pavement patterns, etc. for exhibition spaces.

4.1.2. Abstract extraction of regional symbols

In the region where Shixiang Village is located, the commonly used colors in traditional architecture, such as bluish-gray roof tiles, ochre-red rammed earth, and

natural-colored beams and columns, constitute a unique local color system. In the design of the exhibition space, these colors can be used as the main hues, and through different proportioning and combinations, a spatial atmosphere that resonates with the local culture can be created.

In terms of materials, the abundant local materials in Shixiang Village, such as bamboo weaving, pottery fragments, and stone materials, can be innovatively utilized in the exhibition space. The Shixiangyan Cultural Exhibition Area can make extensive use of local red sandstone as the material for walls and floors, with some walls retaining the natural texture of the rock, allowing viewers to intuitively experience the geological characteristics of Shixiangyan.

4.2. The creation of artistic conception with recessive genes

4.2.1. Linear concatenation of spatiotemporal cues

Taking the historical development trajectory or cultural theme evolution of Shixiang Village as a clue, the exhibition space is divided into progressive sequence units. A timeline is constructed from “prehistoric civilization (Shixiangyan Site) - Red Revolution - Hakka Migration - Folk Custom Formation - Contemporary Inheritance”. Each unit enhances the narrative rhythm through the contraction and expansion of spatial scale, as well as the changes in light and shade.

4.2.2. Narrative reinforcement through multi-sensory interaction

Set up a restoration scene at the sequence node, transforming abstract cultural stories into perceivable spatial scenes. For example, in the “Prehistoric Civilization” unit, simulate the living scene of primitive people in the Lion-Elephant Rock area, using sculptures to restore the images of primitive people making stone tools and gathering food. The ground is paved with simulated leaves and stones, and the air is filled with the scent of soil and vegetation, creating a living atmosphere of ancient times. At the same time, set up a “Cultural Translation Wall” at the junction of the scenes, using a combination of graphics, text, and physical objects to explain the narrative logic and avoid sequence breaks.

4.2.3. Narrative reinforcement through multi-sensory interaction

Combining spatial sequences with multidimensional carriers breaks through the traditional mode dominated by vision, and integrates auditory, olfactory, and tactile senses to construct a three-dimensional narrative. For example, in the “Prehistoric Civilization” section, when viewers approach the simulated cave scene of the Lion-Elephant Rock, they will hear the shouts of primitive hunters and the cries of animals. When touching the rock walls, they will feel a slight vibration feedback, simulating the natural environment of the cave.

4.3. Interactive design of behaviorally active genes

4.3.1. Reproduction of traditional behavioral scenarios

The reproduction of traditional behavioral scenes is an effective way to activate behavioral activity genes. It utilizes modern technological means to recreate historical traditional behavioral scenes in an exhibition space, allowing viewers to immersively feel and experience traditional cultural behaviors. In the traditional production and living experience area of Shixiang Village, a “Shixiang Stone Tool Making Experience Area” has been set up. Under the guidance of professionals, viewers can

use simulated stone materials and tools to experience making simple stone tools similar to those unearthed from the Shixiangyan site, and learn about the production and living skills of ancient ancestors.

4.3.2. Modular design of multi-dimensional elastic space and construction of digital interactive platform

The cultural activities in Shixiang Village exhibit diversity and adopt a spatial structure of “fixed core + flexible periphery”. The core exhibition area retains the basic displays, while the periphery is equipped with flexible areas composed of removable partitions, elevating display platforms, and folding chairs.

5. Conclusions

Build a digital interactive platform to present the behavioral and active cultural genes of Shixiang Village through digital means, providing visitors with more convenient and enriched interactive experiences. Develop a dedicated mobile app or WeChat mini-program, and set up a “Shixiangyan Exploration” section. Visitors can scan a QR code to view 3D reconstructions of the Shixiangyan ruins and learn about the craftsmanship and usage of stone tools.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

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