



Protection and Design of Miao Traditional Village in Qiandongnan Region in China During Rapid Urbanization

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Abstract. The traditional villages and architecture of the Miao ethnic group embody the prosperity and continuity of various ethnic communities. Qiandongnan region which located in the southeast of Guizhou Province, China, these villages, rich in traditional ethnic distinctiveness, dot the landscape. Many of these villages boast a profound history and possess significant ethnic and cultural heritage value. As the country aggressively pursues urbanization in ethnic regions, against the backdrop of economic development and the steady improvement of living standards among ethnic minorities, a pressing question arises: how to harmoniously blend the preservation of these precious ethnic villages with their sustainable development? This study aims to explore the coordinated development of landscape ecology in ethnic regions, focusing on the integration of social progress with the protection of traditional villages. This paper targets the Miao traditional villages in the In Qiandongnan region, examining the transformations and underlying reasons they have undergone due to traditional urbanization and tourism development. It underscores the importance of safeguarding the original character of these villages while emphasizing the urgency of updating and renovating them to create modern ethnic villages. Using the Miao traditional Village as a case study, this paper delves into the spatial structural features of traditional Miao villages, in the protection of the ancient villages with high representativeness, strong representativeness and high historical and humanistic value, contradictions are dispersed, and the ancient villages adopt the overall protection of "museum" to channel the development demands of villagers to the new ethnic villages. This study offering design insights for the rejuvenation of new ethnic villages. The village landscape design examples presented in this paper aim to inform and inspire similar efforts in Qiandongnan region, serving as a reference for the protection of traditional villages and the concurrent development of new urban landscapes.

Keywords: Miao traditional villages, Urbanization, Landscape Design

1 Introduction

New urbanization has been one of the most significant events in China since its reform and opening [1-2]. While cities require development, ethnic minority regions also demand development to enhance the living conditions of their inhabitants [3-4]. However, in the process of traditional urbanization, the regional and cultural diversity of these villages and folk architectures in ethnic regions is gradually being lost. The balancing of development and preservation in ethnic villages and folk architectures, as well as the promotion of new urbanization in these regions, has become a hot topic in academic research [5-6].

Located in the southeast of Guizhou Province, China, the Qiandongnan Miao and Dong Autonomous Prefecture is an area rich in traditional Miao settlements and folk architectural resources. In the Qiandongnan region, affected by urbanization and tourism development, when locals repair or build new dwellings based on their own living and business needs, they spontaneously refer to their ethnic group's traditional dwellings or directly adopt preferred foreign architectural forms for construction. This will inevitably lead to the gradual loss of historical memories, regional characteristics, and ethnic features in traditional ethnic villages during the process of urbanization.

Each ethnic group possesses the right and freedom to aspire for a superior quality of life. Nevertheless, this quest should not entail sacrificing architectural forms that embody profound humanistic values and regional distinctiveness. Against this backdrop, the challenges lie in how to align with the evolving trend of new urbanization, perpetuate the historical lineage of Miao and Dong villages in Southeast Guizhou, conserve the villages' authentic charm, integrate the concept of enhancing community well-being, and genuinely elevate the quality of life for residents in ethnic regions of Southeast Guizhou. This paper, drawing inspiration from the construction site of the Xijiang Qianhu Miao Village, aims to conceptualize the design of novel ethnic villages. In this context, how to conform to the development trend of new urbanization and continue the historical context of traditional Miao and Dong villages in Qiandongnan, how to preserve the original village style as much as possible and integrate the concept of making people's life more comfortable to effectively improve the quality of life of residents in Qiandongnan ethnic areas, and how to plan and build Miao and Dong villages with characteristics that meet the needs of the new era? It has become an important research topic in the southeast of Guizhou Province.

2 Design Area

The Miao village has experienced rapid economic development in the process of urbanization, and the building land has increased by 20% in recent years. The design area for this study is situated 800 meters southeast of the Miao Village in Leishan County, Qiandongnan Miao and Dong Autonomous Prefecture, Guizhou Province, China. With an elevation ranging from 865 meters to 890 meters and an area of approximately 4 hectares, the site is situated on a gently sloping terrain facing northeast. The main elevation difference is minimal, exhibiting a spatial configuration that faces the waterfront

while backed by mountains. This configuration forms an arcuate enclosure with the surrounding hillsides, opening up towards the waterfront area. The surrounding mountainous terrain, with its higher elevations, creates a picturesque green landscape (Figure 1).

3 Design Concept

3.1 Village Vision

Drawing upon insights gained from extensive preliminary research on the landscape characteristics, spatial configurations, and constituent elements of the Miao traditional Village, we aim to capture the essence of Miao cultural village planning. This essence emphasizes adaptability to local environmental conditions and a harmonious blend with nature. To materialize this vision, we draw inspiration from the functional spatial layout of the “Communes Under the Great Wall” and integrate it seamlessly with the unique site conditions. Our conceptual design embodies the traditional form of a village, prioritizing ecological and natural perspectives to create a sustainable and respectful spatial narrative.



Fig. 1. Field drawing of village design

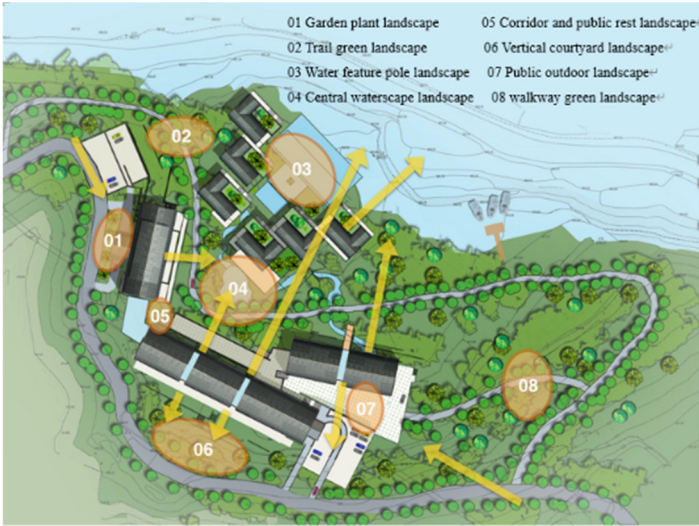


Fig. 2. The landscape design map

3.2 Regional Distinctiveness

We strive to uncover the unique expressive language of local architecture, aiming to meet the modern functional demands of the villagers while maintaining authenticity and cultural continuity. Inspired by Liang Sicheng's masterful approach to harmonizing form and function, exterior and interior, in the classical architecture of Central University for Nationalities, we aim to blend contemporary building materials with native stone and wood. This innovative approach not only optimizes construction costs but also ensures that the buildings fully resonate with the regional cultural heritage, thus preserving the essence of the local architectural vernacular.

3.3 Contemporary Interpretation

The design aims to comprehensively quench the present and future demands of local villagers for a modern living environment, seamlessly integrating contemporary functional spaces and infrastructure into the intentional layout and regional identity of the village (Figure 2). Leveraging the rich historical and ethnic cultural resources of the Qianhu Miao Village, which attracts a significant number of tourists, the project incorporates signature spaces such as ethnic hotels and exhibition areas dedicated to showcasing locally sourced agricultural products with unique ethnic flavors. The objective is to craft a modern, environmentally comfortable, and ecologically sustainable new village, where residential spaces harmoniously coexist with locally distinctive industries, fostering a vibrant, authentic, and integrated living environment.

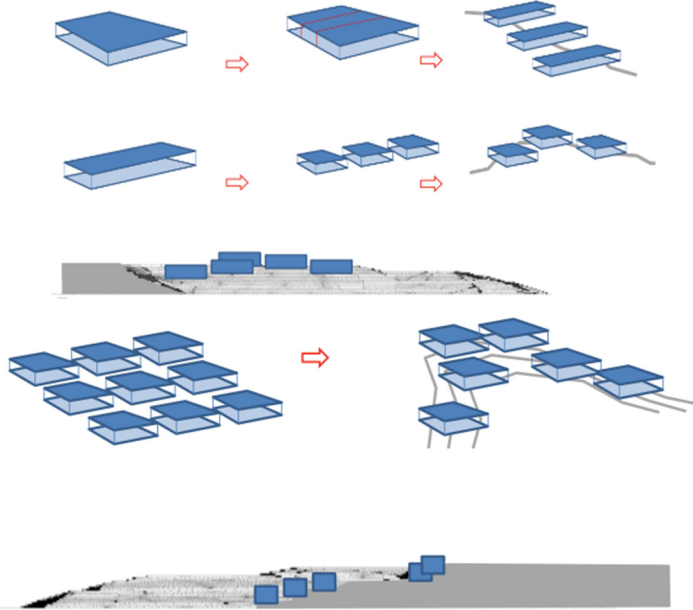


Fig. 3. Map of pattern distribution of village base

3.4 Design Layout

The functional spaces of the main residential buildings are divided into multiple units, arranged along the terrain to maximize space utilization while also creating additional living and observation areas (Figure 3). This layered approach introduces green vegetation and landscapes into the living spaces, fostering a strong connection with nature. The layout of the hotel area for tourist accommodation and the specialized industrial business zone follows a similar approach, adhering to the contours of the land. The relationship between each unit transitions from parallel to vertically staggered arrangements, leveraging the unique terrain features to maximize daylight exposure and scenic vistas. This design approach not only enhances the visual connectivity but also fosters interaction and connectivity among the units, breaking down any perceived isolation. For the design of the landscape around the building the principle of "taking into account both inside and outside, paying attention to the level" is followed. When the user is outside, the line of sight rises and falls with the terrain, presenting different scenery

4 Functional Zoning

The design seamlessly integrates with the natural contours of the land, creating an arcuate enclosure with the surrounding slopes and an inviting waterfront orientation (Figure 4). Functionally, the multi-purpose hall serves as a hub for reception, dining, collective activities, and administrative offices. The residential area is composed of

multiple buildings, while the collective business zone encompasses tourist accommodation and specialized industrial spaces. Additional amenities include collective parking lots, livestock farms, and observation piers. The centrally located green landscape area, with its captivating water features, takes advantage of the expansive views offered by the gentle slopes and valleys.



Fig. 4. The total effect of landscape design map

4.1 Interconnectivity of Functional Zones

Strategically located along the main road, the multi-purpose zone facilitates tourism reception and ethnic dining experiences. Indoor and outdoor passageways connect this zone to the residential area, while outdoor passageways lead to the collective business zone. The residential area, as the heartbeat of the village, is well-connected to other functional zones via multiple roads. Besides parking facilities, it boasts outdoor public spaces for residents' relaxation and socialization. The livestock farm, situated away from the residential area, ensures separation between humans and animals, enhancing the overall hygiene of the village. The collective business zone, with its prime location offering breathtaking views, caters to tourist accommodation and the sale of local specialties. Both outdoor secondary roads and pedestrian paths seamlessly connect to the observation piers.

4.2 Traffic Flow Analysis Diagram

The traffic flow organization ensures convenient access for residents and vehicles. The two parking lots and multi-purpose hall are seamlessly integrated with the main road, while a secondary road efficiently connects various units of the village. Pedestrian paths, designed for ease of navigation, connect various functional spaces and enhance the overall experience of the landscape.

4.3 Landscape Distribution and Visual Analysis

The design of the landscapes surrounding the buildings is guided by the principle of harmonious integration with the natural environment, emphasizing both interior and exterior spaces. As users navigate the outdoor spaces, their line of sight is treated to varying landscapes that complement the undulating terrain. Careful consideration of building openings maximizes natural lighting and brings the outdoor scenery indoors, creating a visually appealing and engaging environment. This approach offers users a refreshing and engaging visual experience. Qianhu Miao Village is rich in traditional handicrafts with Miao characteristics, such as silver jewelry, batik, Miao embroidery, bamboo and straw weaving (Figure 5), etc.



Fig. 5. Traditional Miao embroidery

5 Conclusion

Using ethnographic field research methods, this study examined the spatial structure, landscape characteristics, and architectural features of the most representative Miao villages in Qiandongnan, with the Xijiang Miao Village serving as a case study. The research established the fundamental ethnic styles and principles that should guide the planning and design of new Miao villages.

In the midst of new urbanization this study proposes an innovative approach to the protection of traditional Miao villages and the construction of new ethnic villages in Qiandongnan. In the specific design case, the study analyzed the terrain, visual conditions, and landscape resources of the project site, adhering to the design strategies derived from the research. In terms of new village construction, the traditional Miao

village intentions are seamlessly integrated into modern ethnic villages. This approach creates a more stereoscopic, diverse, and modern living and functional space while minimizing the occupation of farmland and forestland. This not only stimulates economic growth but also addresses employment issues for local villagers, mitigating social issues like "empty-nester" and "left-behind children" typically associated with traditional urbanization processes. Therefore, in the process of urbanization, it is necessary to protect the ethnic characteristics of traditional villages. According to the regional characteristics and national cultural characteristics, protect and inherit the selection principles of villages and settlements of various ethnic groups such as "near the mountain and near the river, occupying the gorge with the mountain behind the mountain, following the situation according to the mountain, surrounding the mountain along the river" and the traditional architectural cultural concept of people respecting nature, conforming to nature, protecting nature, and integrating nature with man. Pay attention to the coordination and unification of village buildings with the natural mountains and rivers around the village, ancient trees and leech forests, lotus ponds and pastoral features, and promote the harmonious coexistence of man and nature.

Acknowledgments

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