

Research on Element Extraction and Cultural and Creative Development Strategy of Tuyugou in the Background of Cultural and Tourism Integration

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Abstract: Under the background of cultural-tourism integration becoming the core strategy for national cultural and tourism development, the in-depth exploration of regional cultural elements and the development of cultural and creative products are key pathways to promote the upgrading of characteristic cultural and tourism industries. Taking Xinjiang's Tuyugou as the research object, this paper analyzes the existing problems in its current cultural and creative development and proposes targeted development strategies, aiming to provide theoretical support and practical references for the high-quality development of Tuyugou's cultural and tourism industry, while enriching the research system of regional cultural and creative development in ethnic minority areas under the perspective of cultural-tourism integration.

Keywords: Cultural-tourism integration; Tuyugou; Element extraction; Cultural and creative development; Strategy research

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1. Introduction

In recent years, the national policy has continuously strengthened the two-wheel drive of cultural tourism integration and non-heritage revitalization. The "14th Five-Year Plan for Culture and Tourism Development" issued by the State Council clearly proposes to "promote the in-depth integration and development of intangible cultural heritage and tourism, which provides top-level design support for the development of intangible cultural heritage^[1]. The Ministry of Culture and Tourism, together with multiple departments, issued the Notice on Promoting the High-quality Inheritance and Development of Traditional Crafts, emphasizing "excavating regional cultural IP and cultivating characteristic cultural and creative brands"

^[2]. Tuyugou, located in Shanshan County, Turpan City, Xinjiang, is an important node along the Silk Road that combines historical culture and ethnic characteristics. It boasts multiple cultural labels such as “China’s Historical and Cultural Famous Village”, “the oldest existing Uyghur village in Xinjiang”, and “one of the first stations for the eastward spread of Buddhism.” However, cultural elements have not been systematically explored, and cultural and creative products lack distinctiveness and competitiveness, making it difficult to meet tourists’ demand for in-depth cultural experiences. Therefore, it is necessary to achieve the synergistic enhancement of cultural value and tourism economy through scientific element extraction and precise development strategies.

2. Extraction of core culture and tourism elements of Tuyugou

The cultural value of Tuyugou stems from its unique characteristics of “multicultural integration and millennia-old heritage”, while its natural landscapes are shaped by the distinctive geographical environment of the Turpan Basin. Ethnic village cultural landscapes integrate ethnic values into cultural scenery, forming distinct cultural landscape types that encompass ethnic architecture, settlements, traditional attire, land-use practices, religious beliefs, seasonal festivals, and customs. These ethnic village cultural landscapes represent a heritage type with distinct ethnic features, established by China’s ethnic minorities within specific natural ecosystems through sustained land use centered around villages ^[3]. Together, these elements form the core material repository for cultural and creative development. Through systematic analysis of Tuyugou’s cultural resources using the semiotic framework of “connotation and extension”, this study explores their significance.

2.1. Historical and cultural elements: Cultural symbols of a thousand years of fusion

Mural Symbols: The murals inside the grottoes cover themes such as Buddha’s Jataka tales, flying apsaras, and donor portraits, blending Gandhara art characteristics with Central Plains painting techniques. For example, the “flying apsaras” in Cave 44 feature flowing ribbon lines and colors dominated by earth red and ochre, while the “Buddha’s Jataka tales” in Cave 20 combine the Western Regions-style pearl-patterned motifs with the Central Plains-style cloud patterns in the figures’ clothing.

The cave architecture adopts the typical cave architecture of Buddhism in the Central Region, such as the cave with a central pillar and a square cave. The central pillar is carved with a Buddha niche and relief, and the cave roof is the structure of a dome and a flat roof, which reflects the architectural wisdom of the ancient Central Region craftsmen.

Architectural Elements of Ancient Villages: The traditional architecture of Mazha Village in Tuyugou is typically constructed with yellow clay, employing a rammed earth structure. The walls are built or constructed using raw earth, and the roofs are covered with a mixture of grass and clay ^[4].

Elements of the Ancient Silk Road and Historical Relics: Beacon Tower Ruins at the East Entrance of Tuyugou. The Han Dynasty “Chiting” Ruins, constructed with rammed earth and trapezoidal in shape, served as crucial military defense and communication facilities along the ancient Silk Road.

2.2. Natural ecological elements: Landscape symbol of the Gobi oasis

The mountains flanking Tuyugou Valley are quintessential Danxia landforms, with the “Flame Mountain” and “Tuyugou Canyon” serving as iconic visual symbols. Their vivid hues and striking contrast make them

ideal for developing color palettes and design inspirations for cultural and creative products.

Oasis and River Valley Vegetation Symbols: The “Gu Sang” tree, with its thick trunk and lush foliage, serves as the village’s “feng shui tree”, embodying the emotional memories of local residents. The “grape trellis”, a vine plant with a grid-like structure, is a quintessential representation of Turpan’s regional characteristics, and its form can be transformed into structural designs for cultural and creative products.

Climate and Product Elements: Fruit Symbols: “Seedless White Grapes” with small grains and high sweetness are a National Geographical Indication product, and their fruit morphology and “grape leaf” patterns can serve as cultural and creative elements; “Dried Mulberries” with purple-black color and oval shape are local specialty dried goods, whose color and morphology possess transformation potential.

The climate symbols of “high temperature” and “intense sunlight” characterize the Tu-Yu-Gou region, giving rise to the Karez irrigation system—a testament to human ingenuity in adapting to nature. The Karez’s unique structure of “vertical shafts, underground channels, and open channels” can be repurposed into functional designs for cultural and creative products, such as multi-tiered storage boxes.

3. Current status and issues of cultural and creative development in Tuyugou under the background of cultural and tourism integration

3.1. Analysis of geographical and climatic environment

“Tuyugou” is a phonetic translation of the Uyghur word “Tuyu Ku”, originally meaning “lost place.” Located at the foot of the Flaming Mountains, it is a perilous valley running through the north and south of the Flaming Mountains. Its terrain dictates that almost all residential buildings are constructed along the mountain from north to south, reflecting a close bond with the Flaming Mountains. Mazha Village, backed by the western side of the southern entrance of Tuyugou, is also known as Mazha Aleidi Village, meaning “the village before the holy tomb.” It is named after the Aishabu Kehf Mazha and is a historically significant traditional Uyghur village. The main characteristics of its layout and distribution are: water is diverted into the residential area, with houses built along the water; residences are clustered, often grouped by ethnicity and religion, with a mosque in the center. From north to south, there are the Subashi ruins, Subashi Thousand Buddha Caves, Subashi ancient tombs, as well as the nearby famous Tuyugou Thousand Buddha Caves and ancient tomb clusters. In 2005, it was officially designated as a China Historical and Cultural Village by the Ministry of Construction and the Cultural Relics Bureau, becoming the first ancient village in Xinjiang to receive this honor. However, in today’s era of multicultural development, the lack of in-depth research on local residential culture has led to a rupture in regional cultural continuity, and the rural landscape has also suffered human destruction ^[5].

3.2. Development status

The single product category lacks a distinctive cultural identity. Tuyugou’s current cultural and creative offerings mainly include: postcards featuring local landscapes, Xinjiang-themed keychains and fridge magnets, and basic packaging of local specialties like raisins. These products suffer from severe homogenization, failing to delve into cultural depth or fully showcase Tuyugou’s multicultural characteristics.

Fragmented development with inadequate systematic planning: The cultural and creative industries in Tuyugou are primarily driven by local small businesses and tourism cooperatives, with limited participation from specialized cultural tourism enterprises and design teams, resulting in a lack of systematic planning

during development.

Limited distribution channels and insufficient brand recognition: Currently, sales of Tuyugou's cultural and creative products mainly rely on physical stores within the scenic area and tourism service centers, while online channels are limited to WeChat Moments and Taobao stores operated by a few local merchants, lacking professional brand promotion and marketing strategies.

3.3. Diagnosis of core problems

Superficial Cultural Interpretation: Element extraction is fragmented. For example, earth architecture is used literally as a visual element without conveying its underlying wisdom, resulting in cultural products that lack depth and emotional resonance.

Low-End Product Development: Current products are primarily entry-level, focusing on ornamentation or utility. There is a lack of mid-to-high-end products that emphasize experiential value and collectability.

Fragmented Industrial Chain: A complete "design-production-sales" chain is absent, with a particular weakness in the design phase that hinders effective cultural transformation.

Unfocused Branding and Promotion: The brand lacks a clear position and fails to highlight its unique multicultural features to engage target audiences. Limited promotional channels further restrict brand influence.

4. Core strategies for cultural and creative development in Tuyugou under the background of cultural and tourism integration

Optimize the raw material supply chain. Establish a stable and reliable raw material supply system to ensure the quality and stable supply of cultural and creative products. Collaborate with local suppliers to procure high-quality Xinjiang local raw materials, reduce transportation costs, and promote regional economic development; Enhance production and processing capabilities. Introduce advanced production technologies and processes to improve the quality and production efficiency of cultural and creative products. Establish production lines covering design, manufacturing, packaging, and quality inspection to ensure products meet market standards and consumer demands; Build an efficient logistics and distribution system. Improve the logistics network to achieve timely delivery of cultural and creative products. Collaborate with courier companies to establish comprehensive distribution channels, while utilizing internet technology to optimize order processing and tracking; Increase marketing efforts. Conduct brand promotion and marketing activities through various channels to establish the unique image of Xinjiang cultural and creative products. Utilize social media, online platforms, and offline experience stores to showcase the cultural connotations and artistic value of cultural and creative products ^[6]. The current state and challenges of cultural and creative development in Tuyugou Village are examined through the conservation principles of "protection first, emergency rescue, rational utilization, and inheritance development", alongside the framework of "government leadership, social participation, clear responsibilities, and collaborative efforts." Balancing preservation and development is crucial for sustainable conservation of village cultural landscapes, and it forms the basis for their mutual reinforcement and complementary benefits. The ultimate goal of preserving these cultural landscapes is to develop them, fully unlocking their heritage value to serve the socio-economic, cultural, educational, and tourism development of the local community ^[3].

4.1. Establishment of the database of cultural elements of Tuyugou

The local government spearheaded the initiative, collaborating with university design teams to systematically document the historical, cultural, natural, and folk heritage elements of Tuyugou, ultimately establishing the “Tuyugou Cultural Elements Database.”

4.2. Promoting the symbolic transformation of cultural elements

As an independent and self-consistent symbolic system, Xinjiang regional culture contains unique structures and intrinsic values, providing an inexhaustible source of inspiration for cultural and creative product design. A thorough analysis and exploration of its cultural elements and core are key to achieving high-quality development of cultural and creative products ^[7]. Visual Symbol Transformation: Simplifying and reconstructing cave mural patterns, raw earth architectural arches, and Uyghur cultural geometric motifs to create modern design-inspired visual symbols. For instance, the flying celestial ribbon motif is transformed into a “curved” brand logo, while the raw earth arches are adapted into “curved” product shapes. Color Symbol Transformation: Extracting the “red, yellow, orange” hues from the Tuyugou Danxia landform and the “earth red, ochre” tones from cave murals, these colors are applied to product design and packaging.

4.3. Developing Tuyugou’s core cultural IP

With the distinctive feature of “multicultural integration” in Tuyugou as its core, the study will develop a unique cultural IP. The IP positioning focuses on creating the “Tuyugou: A Thousand-Year-Old Silk Road Village” as the core IP, highlighting its integration characteristics to differentiate it from single-cultural IPs like Dunhuang and Kashgar.

4.4. Develop “multi-level, multi-type” cultural and creative products

Basic-tier products: Centered on “practicality + commemorative value”, these incorporate cultural symbols into everyday items—feather-patterned canvas bags, notebooks featuring raw earth-arched designs, and Danxia-themed stationery sets—to fulfill tourists’ basic souvenir needs. Priced between 50–200 yuan, they boost market penetration. Mid-to-high-tier products: Focusing on “collectibility + cultural significance”, these include high-value items like 3D-printed miniature replicas of grotto murals, handcrafted earthenware tea sets blending traditional techniques with motifs, and folk-tale embroidered tapestries. Targeting 200–1000 yuan, they attract cultural enthusiasts and collectors.

5. Conclusion

This study examines the cultural-tourism integration framework, systematically extracting core cultural and tourism elements from Tuyugou to establish a tripartite framework encompassing historical culture, natural ecology, and intangible folk heritage. It identifies challenges in Tuyugou’s cultural and creative development, including fragmented elements, low-end products, incomplete industrial chains, and weak brand recognition. The research proposes targeted strategies across four dimensions: element transformation, industrial chain development, brand communication, and collaborative mechanisms. The findings indicate that Tuyugou’s cultural and creative development must adopt a “culture-centric, market-oriented, experience-driven” approach. This requires not only deep exploration of multicultural elements but also precise adaptation to

tourist needs, coupled with multi-stakeholder collaboration to achieve synergistic development. Such an approach will realize a win-win scenario for cultural and economic value, ultimately transforming Tuyugou's tourism industry from a "sightseeing-oriented" model to an "experience-oriented" paradigm.

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