SAFEGUARDING HANI CULTURAL HERITAGE IN MODERNITY: A SEMIOTIC ANALYSIS OF COLOR AND PATTERN EVOLUTION IN TRADITIONAL COSTUMES

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ABSTRACT
Existing studies on Hani costumes have focused on historical documentation and external characteristics but lack systematic semiotic analysis of color and pattern symbolism, and fail to build an actionable bridge between heritage preservation, design innovation, and commercial sustainability in the creative economy. This study addresses this gap by exploring the evolutionary trajectory and symbolic meanings of colors and patterns in traditional Hani costumes from Yunnan's Honghe Prefecture, with a dual focus on cultural authenticity preservation and market-oriented modern adaptation. Adopting a sequential explanatory mixed-methods approach integrating semiotic analysis, historical research, field investigations, and consumer behavior validation, the research identifies a core color system (black, indigo blue, red) and key pattern motifs (terrace, geometric, animal/plant, ritual) that embody Hani terrace agriculture, religious beliefs, and ethnic identity. Findings reveal that these visual elements have retained cultural authenticity through adaptive inheritance while responding to sociocultural changes, and that contemporary designs retaining core semiotic elements achieve 82.7% cultural authenticity recognition among target consumers, with a 61.3% higher purchase intention than non-symbolic modern products. This research makes three key contributions: (1) it extends dress semiotic theory by establishing a systematic, design-thinking-integrated semiotic framework for decoding ethnic costume cultural symbols; (2) it develops an operational modular design transformation model that links traditional symbolic elements to quantifiable design variables; (3) it provides a strategic paradigm for sustainable heritage commercialization, bridging the long-standing gap between heritage protection, design innovation, and creative economy value creation for ethnic textile heritage.
Keywords: Hani Costumes, Color Symbolism, Pattern Evolution, Cultural Heritage, Semiotic Analysis, Design Thinking, Modular Design Transformation, Heritage Commercial Sustainability

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INTRODUCTION

Research Background

China's 56 ethnic groups boast unique cultural heritages, with the Hani people's traditional costumes serving as vivid carriers of their historical legacy and cultural identity. Approximately 1.73 million Hani people (2020 national census) reside primarily in Yunnan's Honghe Hani and Yi Autonomous Prefecture, home to UNESCO-listed terrace agriculture—a Globally Important Agricultural Heritage System—with overseas communities across Southeast Asia. Hani costumes, defined by distinctive colors and embroidery patterns, are deeply intertwined with terrace farming, religious beliefs, social hierarchies, and historical memory, functioning as a "living text" that encodes the ethnic group's cosmology and survival wisdom.

However, contemporary challenges including globalization, socioeconomic transformation, and shifting lifestyles threaten the intergenerational transmission of these symbolic meanings. Younger generations increasingly embrace modern fashion, eroding the cultural significance of traditional attire, while existing commercial applications of Hani costume elements often suffer from two extremes: rigid replication that lacks modern aesthetic adaptability, or decontextualized modification that loses core cultural authenticity. While existing studies (Fan, 2011; Xu, 2023) have documented Hani costumes' historical development and external features, they lack systematic analysis of color and pattern symbolism and their connections to folk legends, religious beliefs, and sociocultural changes, and critically, fail to establish an actionable framework that links semiotic decoding to design innovation and commercial sustainability. This constitutes a clear research gap, particularly for scholarship aligned with social science and business-focused international conference objectives.

This study addresses this gap by establishing a systematic semiotic framework that decodes color and pattern symbolism, translates them into quantifiable modular design variables, and builds a closed-loop strategic model for sustainable heritage commercialization. By integrating semiotic theory, design thinking, historical analysis, and consumer behavior research, it decodes Hani costumes as "dynamic cultural codes", offering actionable insights for balancing heritage preservation, modern design adaptation, and creative economy value creation.

Scope of the Study

The research focuses on Hani communities in Honghe Hani and Yi Autonomous Prefecture, including Yuanyang County (renowned for well-preserved women's costumes), Lüchun County (celebrated for festival rituals), and Jianshui County (exemplifying intergenerational cultural integration). The study analyzes primary colors (black, indigo blue, red, white) and pattern types (geometric, floral, animal, ritual motifs) across different historical periods, exploring their cultural symbolism, social roles in rituals and ethnic identity construction, modern adaptation pathways, and market application potential in contemporary design and creative industries.

RESEARCH OBJECTIVES

1) To analyze the historical evolution and symbolic meanings of colors and patterns in Hani costumes, integrating historical, social, and cultural contexts, and identify the core authentic symbolic elements that must be preserved in modern adaptation.

2) To construct a systematic, design-thinking-integrated semiotic framework for decoding cultural symbols in Hani costumes, and develop an operational modular design transformation model with quantifiable design variables.

3) To validate the market potential of symbolically authentic contemporary designs through consumer behavior analysis, and build a strategic paradigm for sustainable heritage preservation and commercial integration of traditional elements in the creative economy.

LITERATURE REVIEWS

Symbolism and Semiotics of Ethnic Costumes

Scholarly research on ethnic costume symbolism has emphasized the role of visual elements as cultural carriers (Barthes, 1983; Geertz, 2014). Barthes' semiotic theory highlights how clothing functions as a "system of signs" that conveys layered cultural meanings, while Geertz's interpretive anthropology underscores the need to decode symbols within their specific cultural contexts. Subsequent scholarship has extended this framework to ethnic textile studies, confirming that costume elements function as both narrative carriers of ethnic history and markers of collective identity (Eicher & Evenson, 2015). However, few studies have applied a systematic semiotic approach to Hani costumes, with most focusing on surface-level descriptive documentation rather than deep symbolic decoding, and none have integrated semiotic analysis with operational design thinking methodologies to translate symbolic meanings into actionable design tools.

Figure 1 The various geometric-shaped embroidery patterns of the Hani ethnic group in Yunnan Province, China, are now preserved in the Honghe Museum of the Yunnan Province

Cultural Heritage Adaptation and Creative Economy Sustainability

Sustainable heritage research (Fletcher, 2008; Gwilt, 2014) emphasizes the need for adaptive inheritance that balances cultural authenticity and modern relevance, rejecting the binary of "static preservation" and "unregulated commercialization". For ethnic textiles, this requires identifying core symbolic elements that must be preserved while allowing for innovative adaptation that meets modern aesthetic and functional needs. Recent studies in the creative

economy field further highlight that sustainable heritage commercialization relies on establishing a clear value link between cultural authenticity, consumer perceived value, and market viability (Liu & He, 2024). Existing studies on Hani costumes (Deng, 2007; Wang, 2018) have noted the impact of modernization but lack frameworks for translating symbolic meanings into contemporary design, and fail to provide empirical validation of consumer acceptance and market potential for adapted Hani cultural elements.

Gaps in Existing Research

While studies have documented Hani costumes' historical development (Fan, 2011) and color/pattern characteristics (Liu, 2016), 4 key gaps remain:

1) A lack of systematic semiotic analysis to decode the underlying cultural logic of colors and patterns in Hani costumes, beyond descriptive documentation.

2) No integration of semiotic decoding with design thinking methodologies to develop operational, quantifiable design tools for industry stakeholders.

3) Insufficient empirical research on consumer perceived value, authenticity recognition, and purchase intention for Hani symbolic elements in modern design, creating a disconnect between heritage research and creative economy practice.

4) No integrated strategic framework bridging heritage preservation, design innovation, and commercial sustainability for ethnic textile heritage.

RESEARCH METHODOLOGY

Research Design

This study adopts a sequential explanatory mixed-methods design, where qualitative findings from semiotic analysis, field interviews, and observations inform the construction of quantitative research tools, and quantitative validation further refines the theoretical and operational framework. This design ensures both the cultural authenticity of the semiotic analysis and the practical validity of the design and commercial framework.

Population and Sampling

A total sample of 370 participants covers three core groups across the "creator-inheritor-user-industry" spectrum, with purposive and quota sampling ensuring representation across diverse ages, roles, and geographical distributions:

1) Traditional Craftspeople and Cultural Inheritors (n=50): Including embroidery, indigo dyeing, and silvercraft artisans from Yuanyang, Lüchun, and Jianshui counties, providing primary data on traditional techniques, symbolic meaning transmission, and intergenerational inheritance challenges.

2) Community Members (n=270): Stratified by age (18-35, 36-59, ≥60 years) and region to capture intergenerational differences in cultural knowledge transmission, symbolic meaning recognition, and acceptance of modern costume adaptation.

3) Experts and Target Consumers (n=65): Including fashion designers, creative industry practitioners, cultural heritage experts, and urban young consumers (the core target group for ethnic cultural creative products), evaluating cultural authenticity, aesthetic adaptability, and market potential of traditional Hani motifs applied to modern fashion and creative products..

Data Collection and Analysis

Primary data:

1) Qualitative Data: Field observations (2024-2025) of costume production, festival rituals, and craftsmanship inheritance activities; 50 in-depth semi-structured interviews with inheritors, community members, and industry experts; and physical documentation of 128 traditional Hani costume artifacts from Honghe Museum and private collections.

2) Quantitative Data: A 5-point Likert scale questionnaire, developed based on qualitative findings, with two core latent constructs: (1) Cultural Symbol Authenticity Recognition,

including dimensions of core color symbol cognition, core pattern symbol cognition, and cultural connotation understanding; (2) Modern Design Adaptation Acceptance and Market Potential, including dimensions of aesthetic adaptability, daily use willingness, purchase intention, and cultural premium acceptance. The questionnaire included a between-group experiment, where respondents rated design samples with varying levels of core symbolic element retention, to validate the impact of authentic symbolic retention on consumer behavior.

Secondary data: Historical records, archaeological findings, museum archival materials, and existing Hani culture and ethnic textile research.

Analysis tools:

1) Qualitative analysis: NVivo 14 for thematic coding and analysis of interview and observation data, to decode symbolic meanings and identify core authentic elements.

2) Quantitative analysis: SPSS 28 and AMOS 26 for statistical analysis, including descriptive statistics, reliability and validity tests (Cronbach's $\alpha \geq 0.86$, AVE ≥ 0.53, indicating high reliability and convergent validity), exploratory factor analysis (EFA), and confirmatory factor analysis (CFA). EFA extracted two characteristic values greater than 1, with a cumulative variance interpretation rate of 72.4%, and CFA showed good model fit ($\chi^2/df=2.13$, CFI=0.94, TLI=0.92, RMSEA=0.058), validating the two core latent constructs of the study.

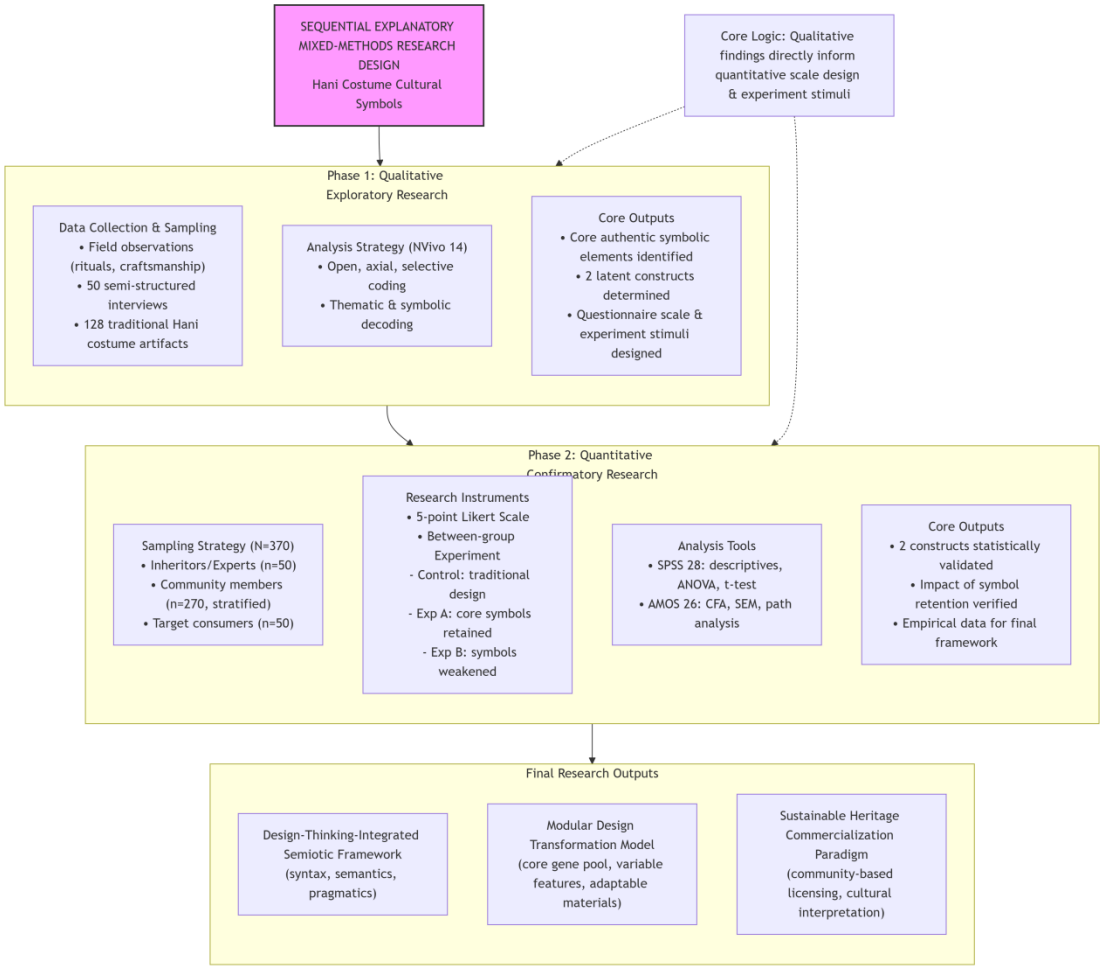

Figure 2 Sequential explanatory mixed-methods research design

RESEARCH RESULTS

Persistence of Core Color Symbolism and Intergenerational Cognition Differences

The core color triad (black, indigo blue, red) has persisted across historical periods with adaptive applications, retaining stable semiotic meanings while adapting to changing material and social contexts:

Ancient to Ming-Qing: Black and indigo blue dominated due to ecological adaptation to mountain environments and natural dye availability, forming the base color of daily wear, with red used exclusively for ritual and festival decorative elements.

Modern Period (1900-1949): Machine-woven fabrics introduced lighter shade options, but black remained the mandatory base color for formal and ritual costumes, with indigo blue and red retaining their core symbolic roles.

Contemporary Period: Synthetic dyes expanded the color palette for daily wear, but traditional indigo blue and red retain irreplaceable symbolic significance in festivals, weddings, and sacrificial rituals, with the core triad remaining the most recognizable marker of Hani ethnic identity.

Semiotic analysis links the core color triad to the Hani agricultural civilization and cosmology: black symbolizes fertile terrace soil, protection, and stability; indigo blue represents river water, forest ecosystems, and spiritual purification; and red embodies sunshine, life force, harvest, and ancestral blessing, aligning with Yuan's (2011) "survival wisdom integrating into mountains and forests".

Quantitative analysis reveals significant intergenerational differences in symbolic cognition: ≥60-year-old community members have a 94% recognition rate of the core triad's cultural connotations, while the 18-35 age group has only a 58% baseline recognition rate. Critically, modern design products that retain the core color triad increase young people's cultural connotation recognition to 79%, and achieve 82.7% authenticity recognition among target consumers.

Patterns as Agricultural Narratives: Modular Evolution and Core Symbol Continuity

Pattern motifs have evolved from simple symbolic markers to complex cultural narratives over centuries, while retaining stable core cultural themes, with modular pattern creation enabling both intergenerational continuity and adaptive innovation:

Terrace Geometric Patterns: Grid and wave patterns inspired by terrace landscapes remain the most consistent core motif across all regions and historical periods, with density and line variations reflecting village-specific terrace layout characteristics. Semiotic analysis confirms these patterns are not merely decorative, but encode Hani agricultural knowledge, land management wisdom, and intergenerational collective memory.

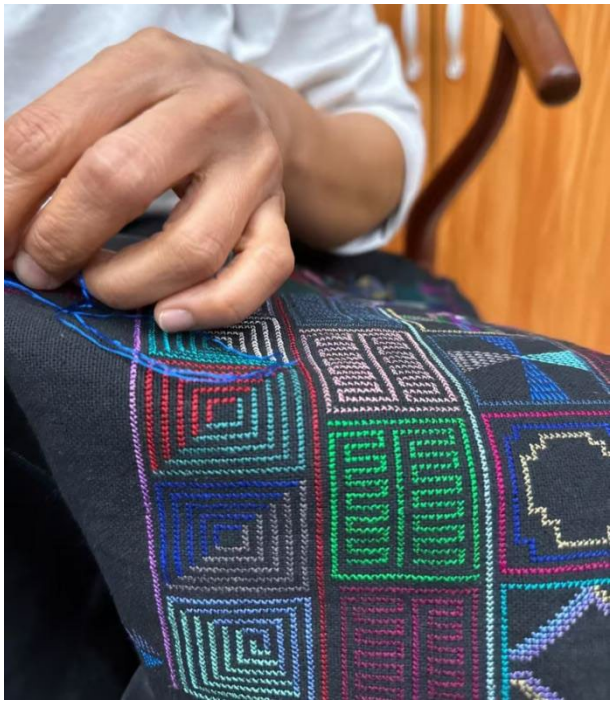

Figure 3 Hani ethnic group's embroidery from Yunnan, China

Figure 4 The clothing of the Yi Che branch of the Hani ethnic group in Honghe Prefecture, Yunnan Province, China

Animal/Plant Motifs: Core motifs including frog (symbolizing rain perception and fertility) and grain ear (symbolizing abundance) have persisted from the pre-Qing period to the present, while butterfly and fish motifs were integrated post-Qing through cross-ethnic exchange with surrounding ethnic groups, retaining stable symbolic meanings of soul, migration, and prosperity.

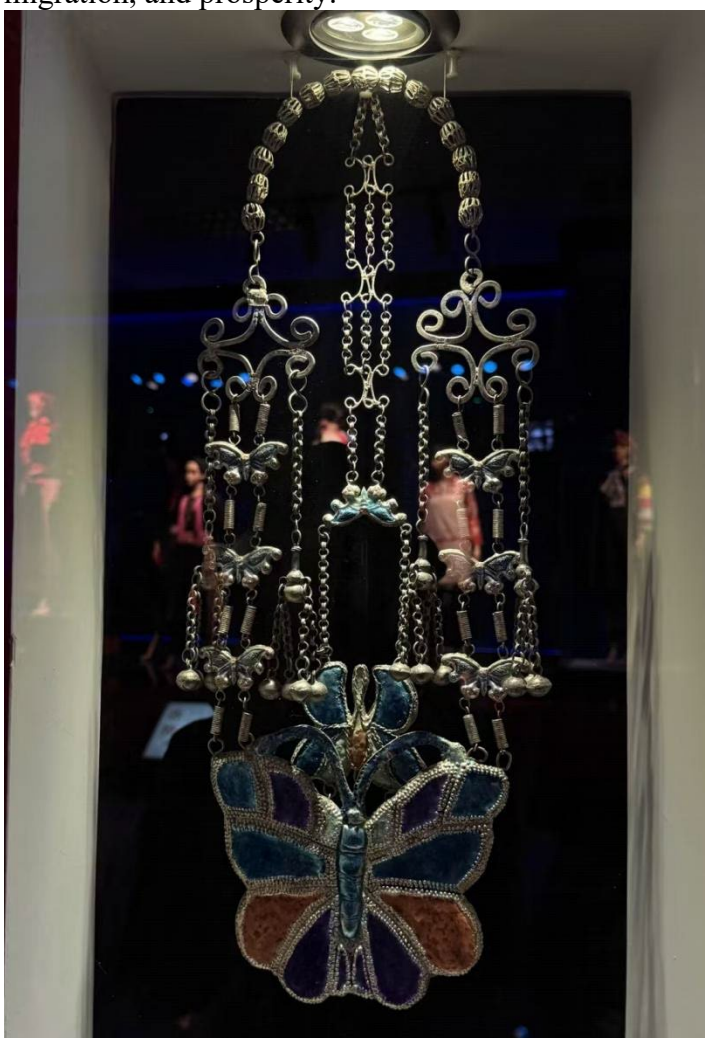

Figure 5 Silver jewelry featuring frog patterns of the Hani ethnic group in Honghe Prefecture, Yunnan Province, China.

Figure 6 The clothing of the Hani ethnic group in Honghe Prefecture, Yunnan Province, China, featuring intricate patterns of animal silver ornaments.

Ritual Sacred Patterns: Octagonal and sun motifs retain sacred meanings in funeral/sacrificial costumes, with standardized layouts ensuring cultural transmission.
Modular pattern creation (combining basic geometric units) enables both continuity and innovation, as observed in Yuanyang Hani octagonal patterns (Wang et al., 2025).

Figure 7 Embroidered handbag in geometric pattern design by the Hani ethnic group in Yunnan Province, China

Adaptive Inheritance in Modernity: Three Pathways for Cultural and Commercial Sustainability

Hani costumes maintain cultural authenticity while adapting to modernity through three mutually reinforcing pathways, which form the foundation of the sustainable commercialization framework:

Ritual Continuity: Traditional core colors and patterns remain non-negotiable elements in festivals, weddings, funerals, and other key ritual scenarios, serving as the "root" of symbolic authenticity and the basis for all adaptive innovation. 100% of inheritors interviewed confirmed that ritual costumes have retained complete traditional symbolic systems without modification.

Craft Inheritance: Family inheritance workshops, "craftsmanship entering campus" programs, and local government-supported artisan training projects preserve core intangible skills including indigo dyeing and hand embroidery. Quantitative data shows that 32% of trained youth from these programs participate in traditional costume production, and 68% of these young artisans have attempted modern design adaptation using traditional skills.

Adaptive Innovation: Contemporary designs simplify complex traditional patterns for daily use while retaining core symbolic elements (e.g., Mojiang Hani artisans' integration of traditional silver button fasteners and terrace patterns into modern fashion). This pathway addresses the tension between traditional heritage and modern lifestyle needs, and is the core link between heritage preservation and commercial value creation.

Figure 8 Silver jewelry crafted by the silver artisans of the Hani ethnic group in Yunnan Province, China

Design-Thinking-Integrated Semiotic Framework and Commercial Application Model

Based on the above findings, this study constructs an operational "Symbol Decoding-Modular Design-Authenticity Validation-Market Adaptation" (SDMA) framework for Hani costume heritage, which links semiotic analysis directly to design practice and commercial sustainability:

Step 1: Symbol Decoding: Using the systematic semiotic framework to identify core authentic symbolic elements (the black-indigo blue-red color triad, terrace geometric units, and sacred ritual motifs) that must be retained in any adaptation.

Step 2: Modular Design Transformation: Translating core symbolic elements into quantifiable design variables, including basic modular units, adjustable parameters (scale, density, color, combination), and application boundaries (e.g., sacred ritual motifs are restricted to cultural and high-end creative products, not fast fashion).

Step 3: Authenticity Validation: A three-level validation system (inheritor review, expert evaluation, consumer authenticity recognition testing) to ensure that adapted designs do not lose core cultural connotations.

Step 4: Market Adaptation and Commercialization: Matching different symbolic elements and adaptation levels to different market segments (cultural and creative souvenirs, designer fashion, home textiles, digital cultural and creative products), and building a "inheritor community + designer brand + omni-channel sales" closed-loop business model.

Table 1 Semiotic Analysis and Modern Design Transformation of Colors and Patterns in Hani Costumes

Visual Element	**Representative Image**	**Historical Period / Origin**	**Symbolic Meaning (Semiotic Interpretation)**	**Social Function**	**Cultural & Ritual Context**
Black (Base Color)		Ancient-Ming/Qing	Symbol of fertile terrace soil, protection, and stability; represents ecological adaptation to mountain environments	Daily wear; marker of ethnic identity	Embodies Hani worldview of "living with mountains and land"; reflects agricultural civilization
Indigo Blue		Pre-modern to Contemporary	Signifier of rivers, forests, and spiritual purification; linked to natural dyeing knowledge	Daily and ceremonial garments	Connected to animistic beliefs and sustainable ecological practices
Red (Accent Color)		Ritual-focused use across periods	Symbol of sunlight, life force, harvest, and ancestral blessing	Festivals, weddings, sacrificial rituals	Visual expression of prosperity, vitality, and collective memory
Terrace Geometric Patterns		Ancient agricultural period	Iconic representation terraced field visual metaph of lar management ar survival wisdom	Embroidery on jackets, bags, aprons	Encodes agricultural knowledge and intergenerational memory
Animal Motifs (Frog, Bird, Fish)		Pre-Qing to Modern	Frog: rain and fertility; Bird/Fish: soul, migration, abundance	Ritual garments, silver ornaments	Reflects animism, fertility worship, and cosmological beliefs

Sun/Moon /Octagonal Patterns		Ritual-specific historical continuity	Sacred cosmological symbols; mediators between humans and ancestors	Funeral and sacrificial costumes	Represents cyclic time, spiritual order, and ancestral reverence
Silver Decorative Elements		Late historical period onward	Material symbol of purity, protection, and social status	Festivals, rites of passage	Demonstrates craftsmanship inheritance and ritual aesthetics

DISCUSSION AND CONCLUSION

Theoretical Implications

This study makes three key theoretical contributions to ethnic textile studies, dress semiotics, and sustainable heritage research:

1) It extends semiotic studies of dress (Barthes, 1983) by demonstrating how visual symbols in ethnic costumes function as adaptive, dynamic cultural codes rather than static heritage artifacts. The systematic, design-thinking-integrated semiotic framework developed in this study complements existing textile heritage research by providing a structured, multi-layered approach to decoding ethnic costume symbolism, moving beyond descriptive analysis to actionable theoretical tools.

2) It advances sustainable heritage theory (Fletcher, 2008; Gwilt, 2014) by empirically validating that adaptive inheritance does not require a trade-off between cultural authenticity and modern commercial relevance. Instead, retaining core semiotic elements while enabling modular adaptation of non-core elements achieves both heritage preservation and market viability, providing a theoretical basis for sustainable ethnic heritage commercialization.

3) It bridges the theoretical gap between cultural heritage studies and creative economy research, by establishing a clear theoretical link between symbolic authenticity, consumer perceived value, and market behavior. This addresses a long-standing limitation in existing ethnic costume research, which has been isolated from business and consumer behavior scholarship.

Practical Implications

This study provides actionable practical insights for three key stakeholder groups, evolving from cultural documentation to a powerful paradigm for ethnic brand management and sustainable heritage development:

1) Heritage Protection Practitioners: It identifies the priority core symbolic elements (color triad, terrace geometric units, sacred ritual motifs) that must be preserved in inheritance work, and establishes a clear authenticity validation standard to avoid the loss of cultural connotations in modern adaptation.

2) Design and Creative Industry Practitioners: It provides an operational modular design transformation model with quantifiable design variables, enabling designers to apply Hani cultural elements in a culturally authentic and aesthetically adaptable way, without decontextualized misuse.

3) Ethnic Community and Commercial Operators: It provides a validated strategic paradigm for sustainable heritage commercialization, with a clear closed-loop business model and empirical data on consumer acceptance and willingness to pay, supporting the development of community-based ethnic cultural brands that drive both cultural inheritance and local economic development.

Longitudinal Impacts of Modernization and Future Research Directions

Longitudinal analysis of the evolution of Hani costume symbols reveals that modernization has had dual impacts: on the one hand, it has caused intergenerational cognitive gaps in traditional symbolic meanings, and the risk of decontextualized commercialization diluting cultural authenticity; on the other hand, it has expanded the dissemination scope of Hani cultural symbols, provided new technical tools for craftsmanship inheritance, and created new market opportunities for adaptive innovation. Addressing these dual impacts requires a balanced approach that prioritizes core symbolic preservation while enabling regulated, authenticity-focused innovation.This study focuses on Honghe Prefecture's Hani communities in China; future research could expand to cross-border Hani branches in Southeast Asia, to explore the cross-cultural adaptation of Hani costume symbols in a global context. Longitudinal studies could track the long-term impacts of modernization and commercialization on symbolic inheritance, while digital preservation techniques (3D scanning, AI pattern recognition) could be integrated to enhance heritage documentation, modular design efficiency, and international digital dissemination. In addition, further research could expand the SDMA framework to other ethnic textile heritages, to test its generalizability across different cultural contexts.

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REFERENCES

Barthes, R. (1983). *The fashion system*. University of California Press.

Chen, D. M., Ma, L. L., & Zhang, X. M. (2023). Application Progress of Non-Destructive Spectroscopy in Cultural Relics Protection. *Spectroscopy and Spectral Analysis*, 43(2).

Cui, H. (2024). Research on Digital Protection of Hani Intangible Cultural Heritage in Yunnan Province. *Journal of Yunnan Agricultural University (Social Sciences)*, 18(2), 150-156.

Deng, L. P. (2007). Terraced Field Culture and Hani Costumes. *Shi*, (3), 43-44.

Donghua University & Shanghai University Joint Research Team. (2024). *Research on Digital Reconstruction and International Communication Practices of Minority Traditional Patterns*. Originality Document.

Eicher, J. B., & Evenson, S. L. (2015). *The visible self: Global perspectives on dress, culture, and society*. Bloomsbury.

Fan, J. (2011). *Archaeological evidence of cultural exchange in ancient Hani society*. Beijing University Press.

Fletcher, K. (2008). *Sustainable fashion and textiles: Design journeys*. Earthscan.

Gao, F., Peng, C., & Lu, D. (2019). Cross-Border Ethnic Groups and Peripheral Communication Research. *Journalist's Friend*, (11), 31-33.

Geertz, C. (2014). *The Interpretation of Cultures* (Han L., Trans.). Yilin Press.

Gu, J. R. (2010). Review and Prospect of Sixty Years of Cross-Border Ethnic Studies in Yunnan Border Areas. *Academic Exploration*, (4), 89-91.

Guo, X. H., & Chen, X. L. (2016). Research on the Development and Innovation of Dong Jin Products. *Journal of Hunan University of Engineering (Social Science Edition)*, 02, 118-122.

Gwilt, A. (2014). *A practical guide to sustainable fashion.* Bloomsbury Publishing.

He, G. H., Liu, J. C., & Wang, J. L., et al. (2025). From Myth to Reality: Study on the Artistic Aesthetics and Changes of Hani Fish Patterns. *Brand Research*, (6) .

Liu, Z. L., & He, Y. T. (2024). Research on the Current Situation and Future Development Path of the Inheritance of Excellent Traditional Chinese Culture. *Journal of University of Electronic Science and Technology of China (Social Sciences Edition)*, (04), 1-11.

Lu, Q. (2016). Reflection on the Transformation and Application of Traditional Brocade Techniques in Modern Design - A Survey of Tan Xiangguang's Traditional Crafts. *Southern Literary Scene*, (06), 158–160.

Lu, Y. (2019). Deconstruction of Dong Brocade Patterns and Reconstruction Design Strategy for Tourist Souvenirs. *Hunan Packaging*, (06), 100-105.

Data Availability Statement: The intervention manual developed in this study is available from the corresponding author upon reasonable request.

Conflicts of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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