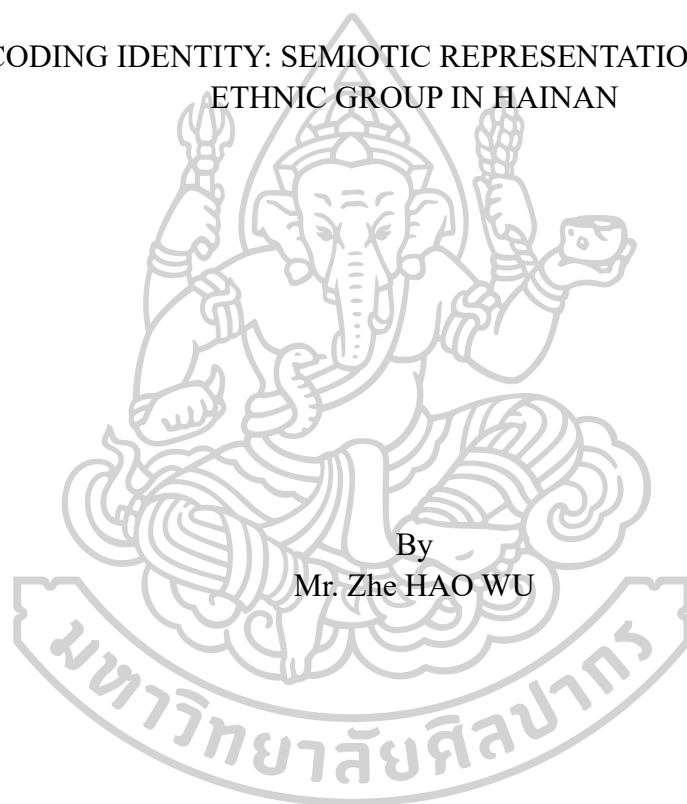




DECODING IDENTITY: SEMIOTIC REPRESENTATIONS OF THE LI
ETHNIC GROUP IN HAINAN



A Thesis Submitted in Partial Fulfillment of the Requirements
for Master of Fine Arts Program in Design
Silpakorn University
Academic Year 2025
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Mr.Zhe HAO WU

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Title Decoding Identity: Semiotic Representations of the Li
Ethnic Group in Hainan
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Faculty of Decorative Arts, Silpakorn University in Partial Fulfillment of
the Requirements for the Master of Fine Arts

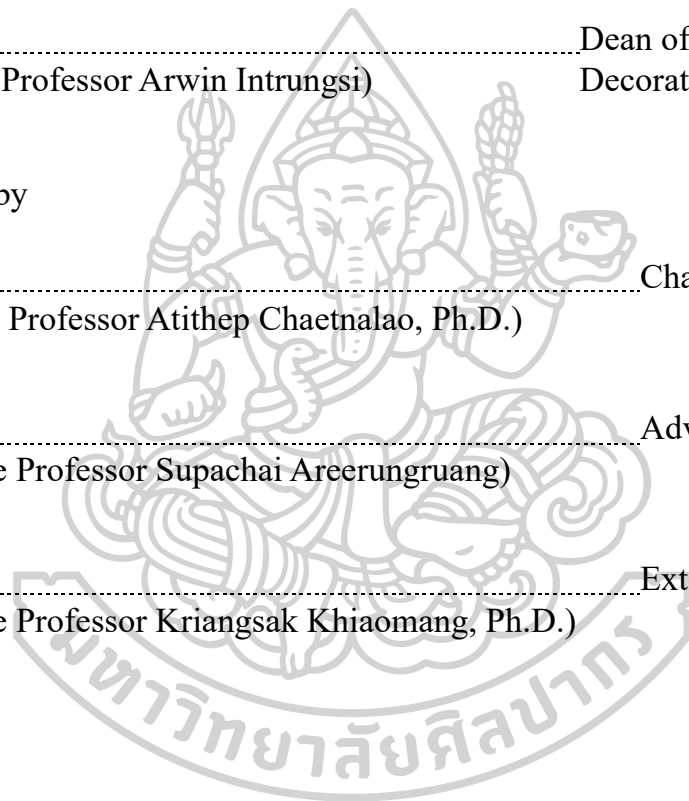
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Mr. Zhe HAO WU : Decoding Identity: Semiotic Representations of the Li Ethnic Group in Hainan Thesis advisor : Associate Professor Supachai Areerungruang

The Li ethnic group of Hainan, an indigenous community in China's tropical island region, comprises five main dialect subgroups with distinct differences in language, attire, and visual patterns. However, traditional Li motifs have often been treated as a uniform whole, leading to the neglect of subgroup-specific cultural features. In modern design, Li brocade patterns are frequently used as surface decoration, lacking semantic depth and media adaptability, which limits their communicative power and recognizability. This study focuses on the visual patterns of the five dialect subgroups and proposes a "motif-semantic-syntax" visual language system to enhance their expressive potential and cultural communication in contemporary design. The research aims to: (1) investigate and analyze the visual differences among the five subgroups; (2) interpret the semantics and structure of traditional patterns using semiotic theory; and (3) build a visual language framework and apply it in fashion, cultural products, and digital characters. Through field research, pattern collection, visual coding, and user feedback, the study demonstrates that a systematic visual language approach improves the semantic clarity, structural recognition, and adaptability of Li patterns across various media, especially enhancing engagement and cultural identification among younger audiences.



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Zhe HAO WU



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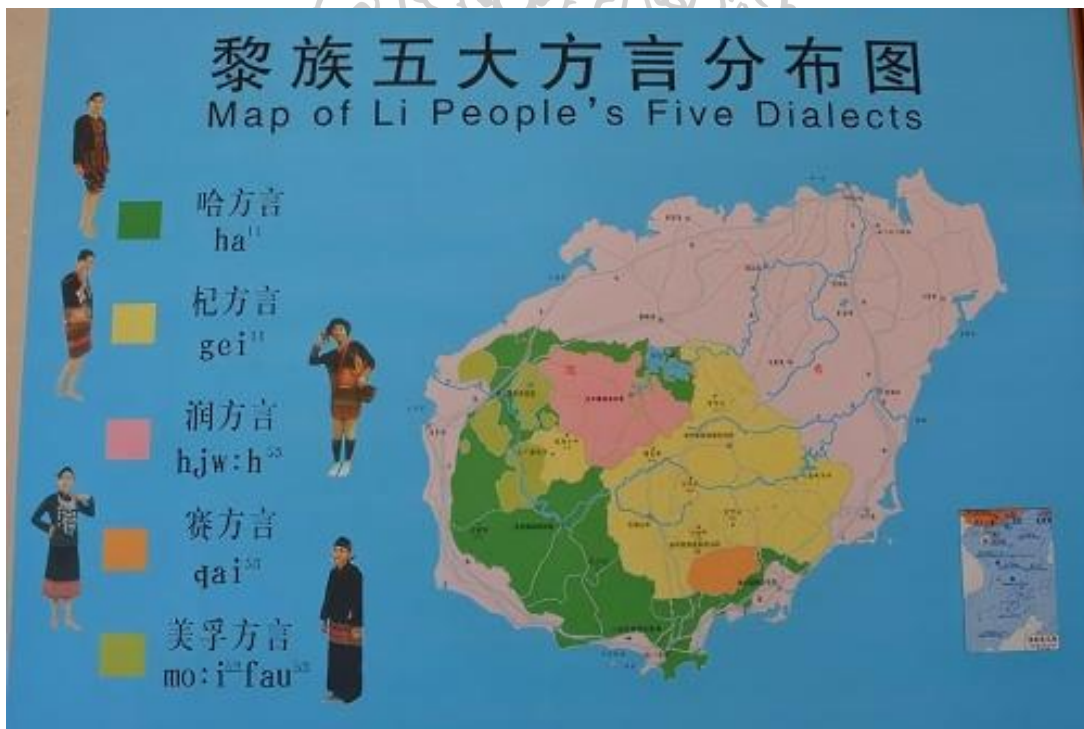
CHAPTER 1

INTRODUCTION

The Li ethnic group is the earliest known indigenous population of Hainan Island, with a history spanning several millennia. As one of the ethnic minorities in southern China, the Li people have developed a distinctive material and intangible culture through centuries of production and daily life. Among these, traditional motifs serve as vital carriers of cultural symbolism. Widely used in textiles, pottery, architectural decoration, and everyday utensils, Li patterns reflect the community's understanding of nature, society, and cosmology. At the same time, these motifs embody collective identity, historical inheritance, and spiritual beliefs (Figure 1)(Zhu, 2024).

Figure 1

Map of Li People's Five Dialects



Note. Photographed by the author.

The Li people are primarily distributed in the central and southern regions of Hainan Island, and their language can be categorized into five major dialect subgroups: Ha, Qi, Meifu, Sai, and Run. Each dialect region presents unique environmental, cultural, and historical conditions, which have led to distinct visual pattern traditions. For instance, animal motifs in the Meifu-speaking areas reflect a strong hunting culture, whereas the geometric patterns prevalent in Ha-speaking areas are more aligned with agrarian symbolism. In Li society, such motifs not only serve

decorative purposes but also function in social identification, ritual expression, and the conveyance of auspicious meanings. Many patterns are derived from ancestor worship, nature reverence, totemic beliefs, and production practices, representing the Li people's philosophy of harmonious coexistence with nature(Liu, 2024).

However, with the rapid advancement of modernization, the inheritance of traditional craftsmanship is facing significant challenges. First, the younger generation is experiencing a decline in cultural identity, leading to a severe loss of traditional weaving and patterning skills. Second, under the influence of globalization, external cultural forces have marginalized indigenous traditions, diminishing the influence and dissemination of Li visual culture. Lastly, in the context of modern media environments, how to revitalize these ancient cultural symbols in ways that align with contemporary aesthetics and communication demands remains an urgent issue(Chen, 2010b).

Li brocade, as a crucial component of Hainan's traditional culture, embodies the wisdom and diligence of the Li people and carries rich historical and cultural significance. Nevertheless, as urbanization and industrialization accelerate, this intangible cultural heritage is at risk of being lost. Exploring the application of Li brocade motifs in cultural and creative product design not only aids in safeguarding and passing down traditional culture but also fosters cultural innovation and contributes to the growth of the cultural industry(Dong, 2020).

The traditional spinning, dyeing, weaving, and embroidery techniques of the Li people represent a survival-oriented craft passed down through generations. Recognized as an element of China's intangible cultural heritage, these techniques contain strong regional characteristics and profound cultural meaning. Li brocade (Li Jin), in particular, stands as a unique intangible cultural heritage of Hainan, encapsulating the deep historical roots, ethnic traditions, and everyday wisdom of the Li people. Beyond its artistic value, Li brocade is also a reflection of the Li people's beliefs concerning life, nature, and religion—an essential medium for cultural transmission(Liu, 2020).

Field investigations have revealed a worrying trend: fewer women from local Li communities are mastering these traditional crafts. Young people are increasingly drawn to opportunities in urban areas, favoring occupations that provide immediate financial return over time-intensive artisanal practices. This generational shift has led to a declining number of cultural bearers. Thus, how to effectively preserve and revitalize the traditional culture of Li communities has become an urgent and pressing question(Si, 2017a).

As a representative cultural expression, Li brocade holds rich symbolic meanings and serves as a valuable source of visual decoding and design inspiration. Incorporating Li motifs and patterns into contemporary design not only facilitates the preservation and promotion of Li culture but also supports the creation of products that align with modern aesthetics and market demands. This integration expands the development potential of the Li cultural industry. The intricate weaving techniques of

Li brocade produce dynamic, culturally embedded patterns that reflect symbolic narratives rooted in historical traditions. These artistic motifs not only showcase refined craftsmanship but also offer fertile ground for cultural and creative product innovation. The fusion of Li motifs with contemporary design is both a tribute to traditional heritage and a response to modern consumer expectations—an embodiment of cultural continuity and creative transformation, reflecting the convergence of ethnic legacy and contemporary spirit (Zhou & Zou, 2024).

1.1 Research Problems

How can we construct a visual language system based on the patterns of the five dialects of the Li ethnic group, structure and visualize its cultural semantics, and effectively apply it to design media such as clothing, cultural creations, and digital images to enhance the recognition, understanding, and communication efficiency of Li culture?

1.2 Research Objectives

1. To investigate the cultural context and symbolic dimensions of the five dialects spoken by the Hainan Li people, with particular attention to their linguistic features, totemic imagery, traditional costumes, and decorative patterns.
2. To apply foundational semiotic frameworks—such as Saussure’s dyadic model of the sign (signifier and signified) and Peirce’s triadic model—to analyze and systematize Li cultural symbols for use in visual representation.
3. To design and critically evaluate a set of visual representations rooted in Li cultural heritage, assessing their effectiveness in conveying cultural meaning, establishing a coherent visual identity, and enhancing communicative potential.

1.3 Research Scope

This study is structured around three core components:

(1) Extraction and Semiotic Analysis of Visual Motifs from the Five Dialect Groups of the Li Ethnic Group

Based on the cultural differences among the five major dialect regions—Ha, Qi, Run, Sai, and Meifu—in terms of geography, language, belief systems, and ornamental traditions, this research systematically identifies and categorizes representative traditional Li brocade patterns, color schemes, and totemic symbols from each region. These elements are then analyzed using semiotic theory to classify their visual language structures and interpret their embedded cultural semantics.

(2) Construction of a Semiotic Visual Language and the Development of a Design Expression Framework

Building upon the cultural context and visual structure analysis, this study constructs a dialect-specific visual translation model. The model includes components such as graphic deconstruction, color coding, garment structure integration, and an

action-based semantic system. The result is a comprehensive visual grammar applicable across multiple media platforms. This system transcends decorative function, embodying cultural signification, legibility, and narrative capacity.

(3) Multi-Media Design Implementation and Applied Practice

Applying the constructed visual language framework, this study delivers design outcomes across three categories of physical and digital media:

Costume Design Module: Development of garments reflecting the stylistic characteristics of the five Li dialect regions, incorporating structural innovation, pattern reconfiguration, material texture selection, and semantic coordination in styling.

Digital Character System: Creation of digital IP characters for each dialect group, each featuring unique voice markers, motion semantics, and visual traits rooted in regional traditions.

Cultural and Creative Product Design: Production of a series of tangible cultural products, including canvas bags, silk scarves, decorative pendants, and commemorative items, integrating traditional visual elements with contemporary design strategies.

1.4 Research Significance

1.4.1 Theoretical Significance

(1) **Enriching the Dimensions of Ethnic Cultural Studies from a Semiotic Perspective**
Traditional semiotic studies have predominantly focused on linguistic systems. Although recent years have seen a gradual expansion into the field of visual design, the application of semiotic theory to the visual translation of Chinese minority intangible cultural heritage—particularly intra-ethnic subgroups such as the five dialects of the Li people—remains scarce. By treating Li brocade patterns as visual signifiers and constructing an analytical framework that integrates Peirce's triadic model, Barthes' theory of myth re-coding, and Eco's concept of the "open work," this study broadens the scope of semiotics and fosters a deeper dialogical mechanism between cultural context and visual form.

(2) **Constructing a Semiotic Model of "Dialectal Diversity + Visual Constructivism"**
Existing visual studies of ethnic patterns often neglect internal subgroup distinctions, rely on abstract visual collages, and fail to maintain functional integration between pattern and meaning, thus limiting their capacity to convey complex cultural narratives. This research introduces a dialect-based entry point for visual system design and proposes a four-fold semiotic modeling approach centered on the interaction between language–pattern–semantics–medium. This model offers a transferable theoretical framework for the visual articulation of other culturally rich and totemically diverse ethnic groups.

1.4.2 Practical Design Significance

(1) **Expanding the Application of Li Brocade Patterns Across Diverse Media Platforms**

Traditionally, Li brocade motifs have been confined to garments, sashes, and woven tools, and they often face limitations such as "incompatibility with digital media" or a "lack of dynamic semantic expressiveness" in contemporary contexts. By reconstructing their semiotic structures and semantic logics, this study enables these motifs to be revitalized in modern design contexts—including digital illustration, 3D modeling, interactive installations, functional fashion structures, and material texture innovations—facilitating the transformation of Li patterns from heritage artifacts into contemporary visual expressions.

(2) Building an IP-Based Communication System for the Five Dialect Groups

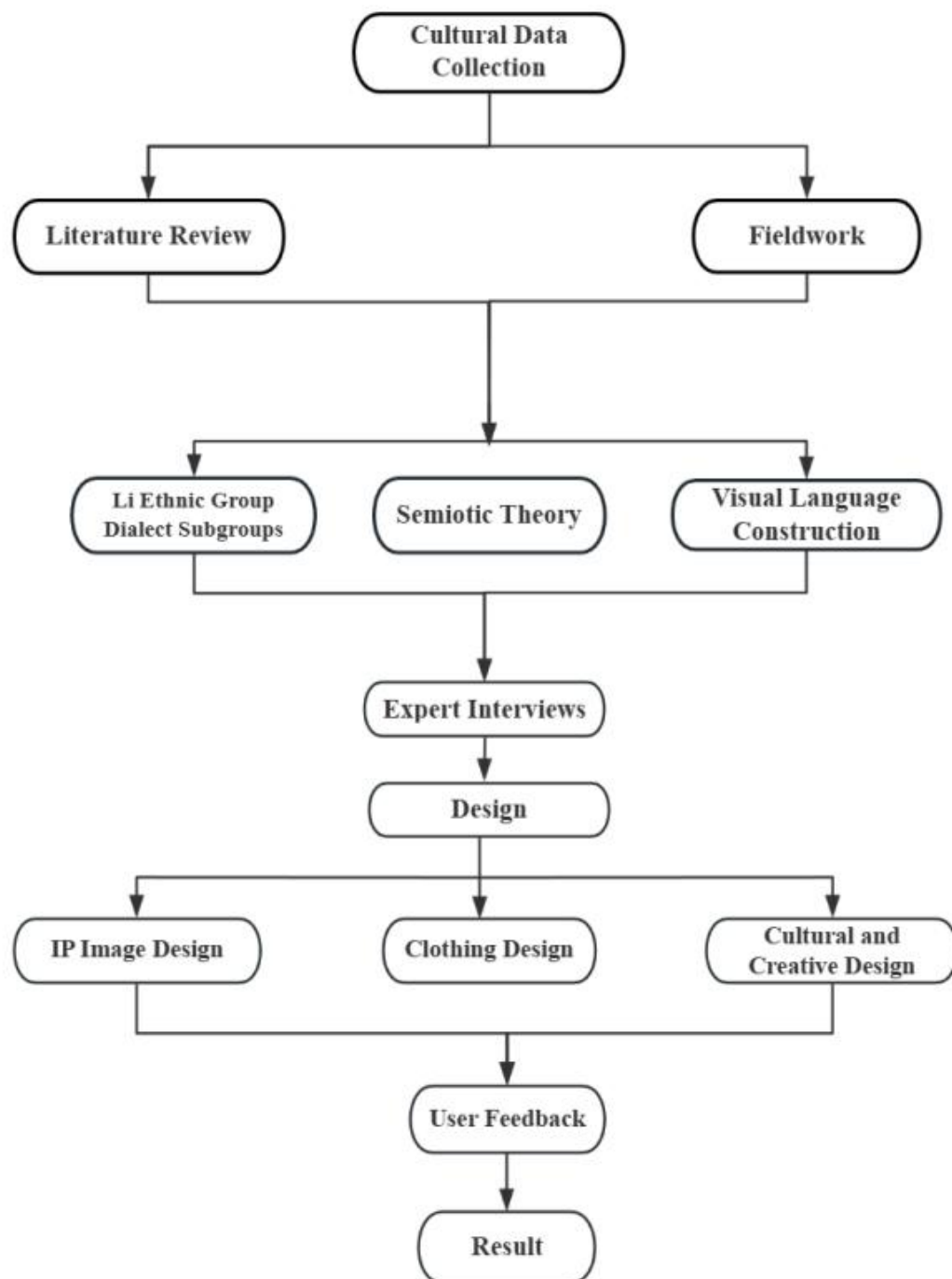
Cultural differences among the five dialect groups are not limited to linguistic distinctions but also manifest in their pattern belief systems, chromatic logic, mythological narratives, and spatial semantics. These elements provide a natural foundation for visual character development. Through IP design strategies, each dialectal culture can be conceptualized as a unique character entity, capable of gaining communicative vitality in diverse media environments, thus forming an integrated yet distinct visual cultural system.

(3) Providing a Design-Oriented Model for the "Visual Revitalization" of Cultural Heritage

Design's role in cultural heritage should extend beyond documentation and restoration to include re-expression and re-production. This study positions the contemporary expression of ethnic motifs as a process of "re-coding," whereby design methods facilitate the translation from internal ethnic sign systems to modern communicative grammar. This approach offers a potential solution to the challenges of "design generalization" and "cultural hollowing" that often arise in current intangible cultural heritage preservation efforts.

1.5 Research Framework

Figure 2
Research Framework



Note. Analyzed by the author.

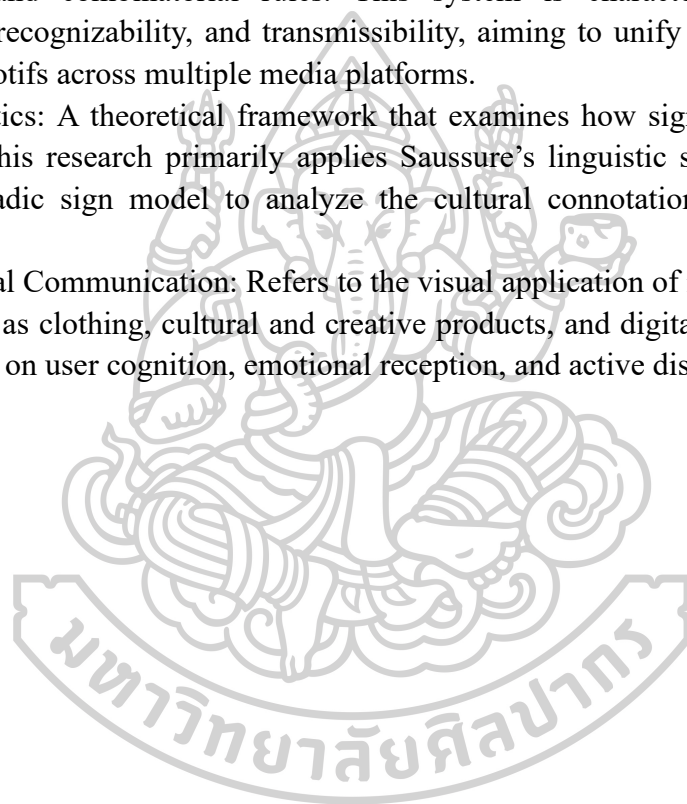
1.6 Definitions of Terms

Li Five Dialects: Refers to the five linguistic sub-branches within the Li ethnic group: Ha, Qi, Run, Sai, and Meifu. Each sub-branch exhibits distinct differences in visual motifs, cultural semantics, and traditional attire, serving as a critical foundation for constructing motif-based differentiation.

Visual Language System: In this study, it denotes a systematic framework of pattern expression formed through the extraction of visual elements, semantic encoding, and combinatorial rules. This system is characterized by structural coherence, recognizability, and transmissibility, aiming to unify the expressive logic of ethnic motifs across multiple media platforms.

Semiotics: A theoretical framework that examines how signs carry and convey meaning. This research primarily applies Saussure's linguistic structural theory and Peirce's triadic sign model to analyze the cultural connotations embedded in the motifs.

Cultural Communication: Refers to the visual application of motif systems across media such as clothing, cultural and creative products, and digital carriers, as well as their effects on user cognition, emotional reception, and active dissemination.



CHAPTER 2

LITERATURE REVIEW

2.1 The Origin of the Li Ethnic Group

The Li ethnic group is an indispensable component of Hainan's cultural landscape, possessing a rich and complex historical heritage that is deeply intertwined with the broader historical context of Hainan Island. According to the *Tongxi Qianzhi* (Records of Tongxi), "The Li people take colored silk from China, separate the dyed threads and shells, and weave them into brocade"(Zhou & Zou, 2024). Historical records such as Fan Chengda's *Guihai Yuhengzhi*² note that "Li raw materials" and "Li woven fabrics" were already widely traded on the mainland during the Song dynasty. As one of China's long-standing ethnic minorities, the Li people trace their ancestry back more than 3,000 years to the Shang and Zhou periods, with their forebears having settled on Hainan Island during that era. By the Ming and Qing dynasties, the Li population had spread throughout the island, undergoing a prolonged process of historical accumulation and development that gave rise to their distinctive and splendid ethnic culture(Cao, 2025a).

The origin of the Li people is deeply rooted in Hainan's history. Scholarly opinions regarding the ethnogenesis of the Li have varied over time. However, since the founding of the People's Republic of China, researchers have integrated literature, archaeology, linguistics, and prior studies to conclude that the Li primarily originated from the ancient Yue peoples, especially closely linked to the Luoyue subgroup within the broader Baiyue cultural complex. Hainan Island lies within the Baiyue cultural distribution zone extending "from Jiaozhi to Kuaiji." In the sixth year of the Yuanding era under Emperor Wu of Han (111 BCE), General Lu Bode led Han forces to pacify the Southern Yue region and established the Zhuyai and Dan'er commanderies on Hainan Island, marking the island's formal incorporation into the Han imperial territory(Xu & Hu, 2024).

Archaeological evidence suggests that the ancestors of the Li settled on Hainan Island approximately 3,000 years ago during the Yin-Zhou period, living in primitive matrilineal clan communities. They engaged in agricultural activities such as hoe-farming alongside hunting and fishing. The social system of the Li during their matrilineal clan period is documented in both historical texts and modern ethnographic surveys. In these primitive matrilineal societies, women played a crucial role in agricultural production, and the preserved marriage custom of "not falling into the husband's family" may be a vestige of the matrilineal clan's paired marriage system. Other customs, such as naming kinship groups after flora and fauna, reflect remnants of exogamous clan systems and totemic beliefs from the primitive social stage(Liu, 2020).

The Li language belongs to the Tai-Kadai language family within the Sino-Tibetan linguistic phylum and is closely related to the languages of the Zhuang, Buyi, Dong, Shui, and Dai peoples. Cultural practices such as hair-cutting and tattooing, chicken divination, and nest dwelling, all characteristic of ancient Yue peoples, can still be observed among the Li people of Hainan today (Zhou & Zou, 2024).

2.1.1 Li Brocade (Li Jin)



The profound ethnic culture of the Li people has been shaped by their rich history and unique geographical environment. Li brocade weaving and embroidery represent one of the material cultural forms embodying the traditional pattern arts of the Li ethnic group, permeating various aspects of their daily life. Li brocade boasts a history spanning over a thousand years and encompasses four major craft processes: spinning, dyeing, weaving, and embroidery. Spinning includes activities such as spinning yarn, color matching, thread combining, and pattern setting. Dyeing primarily involves the use of plant-based dyes for coloration. Weaving refers to the production of diverse patterned textiles on a waist-loom using multiple weaving techniques. Embroidery denotes the practice wherein Li women stitch various floral and geometric patterns onto cotton, hemp, and other fabrics using colored threads (Cao, 2025a).

The core of Li culture is embedded in their unique language — the Li language. Although this language has never been formally codified in written script, it has thrived through oral transmission, imparting a resilient vitality to the cultural traditions passed down across generations. The preservation of the Li language extends beyond mere communication; it resembles a melody resonating through time, carrying the wisdom, stories, and aspirations of the Li people.

The Li ethnic group is further divided into five dialectal regions: Ha, Qi, Run, Meifu, and Sai (see Figure 1). Additionally, the distinct dialect regions have given rise to variations in weaving techniques and brocade designs (see Table 1) (Wu, 2018a).

Table 1

The Traditional Attire of the Five Major Dialect Regions of the Li Ethnic Group

<p>The Ha dialect, historically referred to as the "Ting dialect," encountered issues of obscurity and ambiguity regarding the character “停” during the editorial process of the Traditional Culture of the Li Ethnic Group pictorial anthology. To enhance readability and accessibility, the relevant authorities decided to replace it with the more commonly understood character “哈.”</p>	
<p>The Qi dialect, also known as the Qi branch, constitutes one of the subdivisions within the Li ethnic group. Its speakers are primarily concentrated in regions such as Baoting, Qiongzong, and Wuzhishan. As late as the early 1950s, the Wuzhishan area retained the unique hemu land management system, which persisted locally. However, with the progression of time, by 1950, except in areas where the hemu system remained, men increasingly adopted Han-style clothing, and women gradually discontinued the widespread use of traditional facial tattooing styles.</p>	

The Run dialect is a branch of the Li ethnic group that has preserved the traditional *guantouyi* (over-the-head garment) style. The Run dialect has sometimes been colloquially referred to as the “local” Li by outsiders using a Chinese homophone, implying “indigenous Li people.” In contrast, the term “Run” is the designation used for this group by speakers of other Li dialects.



The Meifu dialect incorporates the term “Meifu,” which signifies “foreign” or “external.” According to oral tradition, this group originated from prolonged interactions and intermingling between the Han Chinese and the Li people, resulting in a distinct branch within the Li ethnicity. Consequently, their customs and lifestyle exhibit certain differences compared to the other four dialect groups.



The Li people generally refer to themselves as “Sai,” which is their intrinsic ethnonym. The Sai dialect is primarily spoken in Baoting County, where the community has long coexisted with Han Chinese populations and has been profoundly influenced by Han culture. Historically, speakers of the Sai dialect commonly wore Han-style clothing, reflecting distinctive cultural traits that sharply contrast with those of other Li dialect groups.













Note. Analyzed by the author.

2.1.2 Classification of Li Brocade Patterns

The Li brocade patterns from different dialect regions each possess distinctive characteristics. For instance, the Ha dialect region emphasizes anthropomorphic and animal motifs, whereas the Qi dialect region predominantly features exaggerated human figures and patterns related to hunting activities. The Run dialect region is characterized mainly by human and dragon motifs; the Sai dialect region focuses on frog and floral patterns; and the Meifu dialect region highlights human, deer, bird, and Chinese character motifs. The diversity of patterns in Li ethnic attire reflects the unique cultural traits of each dialect area. Beyond their pictorial and documentary functions, these patterns also embody the aesthetic sensibilities and rich imaginative capacity of Li women, thereby compensating for the absence of a written script within the Li culture. See Table 2(Chen, 2010b).

Table 2
The meaning of human figure pattern

	Ha Dialect	Qi Dialect	Run Dialect	Sai Dialect	Meifu Dialect
Patterns					
Pattern Extraction					
Specificities	Figurative, Symmetrical forms, with Exaggerated and rough shapes	Focus on linearization and emphasis on local details	Exaggeration, deformation of the way to hold the pair, highlighting the characteristics of the eye, concise writing	Single shape, distinctive corners, small size	Multiline Twill, Positive View Angle, Figurative, Simplified Lines

Note. Analyzed by the author.

The Li people hold a profound reverence for the forces of nature, regarding the natural world as sacred and inviolable. Mountains, rivers, lakes, seas, flora, and fauna

are all integral components of their belief system. This veneration of nature permeates their daily lives, rituals, and brocade patterns, reflecting a cultural ethos that seeks harmonious integration between humans and the natural environment. Rooted in the animistic philosophy that “all things possess spirits,” their worship extends broadly to include plants, animals, man-made objects, and ancestors, encompassing both living and non-living entities. Natural elements such as the sky, earth, wind, and rain serve as focal points of their spiritual devotion, while specific plants like the strychnine tree and lacquer tree are regarded as soulful guardians. Ancestor worship constitutes a vital element of Li culture, with ancestors revered as custodians of ethnic identity and sources of wisdom. Through rituals, offerings, and prayers, gratitude is expressed and ancestral wisdom transmitted, enabling the community to derive meaning and guidance in life(Cheng Tan et al., 2024).

Due to the absence of a written script, the Li’s traditional culture is preserved and conveyed through oral transmission, song and dance, and graphic representations. Within these cultural vehicles, traditional attire plays a significant role—not merely as daily necessities but as key markers of social identity and vital carriers of ethnic heritage. Li traditional clothing can be regarded as a vibrant “encyclopedia” and foundational repository of ethnic culture(Kong et al., 2024).

As an outstanding embodiment of the Li’s traditional spinning, dyeing, weaving, and embroidery craftsmanship, Li brocade (Lijin) boasts a history spanning over three millennia and is acclaimed as a “living fossil” of China’s textile industry, composing a magnificent chapter in the nation’s textile heritage. In 2009, Li’s traditional textile arts were inscribed by UNESCO on the first list of “Intangible Cultural Heritage in Urgent Need of Safeguarding,” recognizing their exceptional contribution to traditional handicrafts. Li brocade is celebrated for its unique and exquisite craftsmanship, elegant and rustic aesthetic, and profound cultural significance, ranking among the most challenging and culturally refined forms of textile art. UNESCO has accorded it high praise(Yuanyuan Chen & Xiaoling Xu, 2024).

In 2019, Li’s traditional spinning, dyeing, weaving, and embroidery techniques became the first Chinese—and second worldwide—intangible cultural heritage project exhibited at the UNESCO headquarters. This milestone brought the ancient art of Li brocade to the international stage, garnering widespread attention and acclaim. The successful introduction of Li brocade to UNESCO not only broadened global awareness of this ancient artistic tradition but also established a model for the protection and transmission of China’s intangible cultural heritage. The cultural treasures and traditional craftsmanship of the Li people are increasingly valued and recognized, contributing actively to the preservation of global cultural diversity and the promotion of Chinese traditional culture(Zhou, 2007).

2.2 Development of Li Brocade

The intricate patterns of Li brocade narrate the story of cultural inheritance among the Li people, linking them to their roots and ethnic identity. Essentially,

traditional Li clothing and handicrafts serve as tangible expressions connecting the Li to their cultural heritage. As noted in the article *A Brief Discussion on the Ethnic Cultural Characteristics of Li Costume*¹, clothing is not only an external manifestation of ethnic cognition but also a symbol and medium of cultural transmission. The evolution of clothing is closely related to the natural environment inhabited by humans, particularly influenced by climatic conditions. Moreover, regional modes of production have played a significant role in shaping the development of clothing (Zhang et al., 2024a).

Li traditional attire has undergone a prolonged process of transformation. Ancient texts contain numerous records concerning Li dress; for instance, a record from the first year of Emperor Wu's Yuanfeng reign mentions that people wore simple single-layer garments with a central opening referred to as "guantou." This ancient "guanshou garment" style has persisted to the present day, with Li women still preserving this design characterized by long sleeves, no collar, no buttons, and a central "V"-shaped neckline. The *Book of Han: Treatise on Geography* records customs of the Dan'er and Zhuyai commanderies: "The people all wear cloth like single-layered garments, with an opening in the center, called guantou. Among China's ethnic groups, the clothing of the Hainan Li stands out for its remarkably well-preserved form and outstanding artistry. Their handcrafted garments exhibit unique characteristics while skillfully integrating distinct cultural and religious elements (Wu, 2012) (See Figure 3).

Figure 3

Li Ethnic Brocade



Note. Photographed by the author.

Li women have demonstrated remarkable ingenuity and craftsmanship through prolonged engagement in social production and daily life, drawing inspiration from nature, labor, and life experiences to create a diverse array of patterns in Li brocade. The motifs on Li ethnic clothing are varied and abundant, including geometric patterns, water ripple motifs, mountain-shaped patterns, Chinese character motifs, human figures, animal motifs (such as dragons, phoenixes, fish, deer, frogs, shrimp, birds, butterflies, etc.), plant motifs (such as flowers, trees, fruits), motifs representing production tools, scenes from daily life, and natural phenomena such as thunder, lightning, sun, moon, water, and fire. These decorative patterns not only serve as the primary embellishments on clothing but also function as significant cultural identifiers, reflecting Li society's production practices, cultural life, romantic and marital customs, religious beliefs, and auspicious symbols or idealized images found in their folklore (Deng, 2020; Zhu, 2024).

The compositional structure of Li brocade patterns is predominantly based on a central "mother" motif, typically featuring human or frog motifs as the dominant element at the core, while flora, fauna, and other patterns serve as secondary, less conspicuous embellishments. This rigorous and hierarchical design approach underscores the Li people's profound respect for both cultural-humanistic and natural elements. Through its rich array of patterns and distinctive craftsmanship, Li brocade embodies the cultural traditions and aesthetic sensibilities of the Li people, and the inheritance and development of their clothing culture contribute uniquely to the multicultural tapestry of the Chinese nation (Li & Rao, 2021).

Various adornments (see Figure 4), including tattoos, headdresses, hair ornaments, and earrings, are also integral components of Li brocade culture. Each adornment possesses a distinctive visual design and serves as an important medium for cultural expression and transmission.

Figure 4

Li traditional ornaments



Note. Photographed by the author.

The evolution of Li brocade craftsmanship is a continuous historical process spanning several millennia. Although the development of the Li people was relatively slow before the Song dynasty, maintaining characteristics from the Zhou and Qin periods, significant acceleration occurred after the Song dynasty. This acceleration was driven by the strengthening of feudal rule in Li areas and intensified trade with the Han Chinese. The pace of change was especially pronounced during the Ming and Qing dynasties, with the clothing of the Li people speaking the Sai dialect standing out prominently in this evolution(Jiao, 2020).

Regarding male attire across the five major Li dialect regions, except for the Qi and Meifu dialect areas, Han-style clothing was generally adopted, sometimes supplemented by red or black headscarves. Meanwhile, Li women's clothing also underwent certain transformations due to increased external interactions(Zhu et al., 2021).

Among the various Li clothing styles, a considerable number are rooted in the worship of nature and religious beliefs, collectively termed as "special Li clothing." These garments are not directly related to modesty, protection against the cold, aesthetics, or wealth, but embody a profound and mysterious significance. The

cultural content embedded in these special garments is connected to primal nature worship and certain religious beliefs, with ancestral veneration playing a dominant role. On one hand, these garments express the Li people's remembrance and reverence for their ancestors; on the other, they reveal the primitive religious beliefs across the Li dialect regions, constituting both customary practice and conscious faith.

2.3 Extraction and Interpretation of Li Patterns

Li brocade patterns are typically characterized by their vibrant and intricate designs, embodying unique artistic features. Their distinctive appeal lies in several aspects, including representational imagery, abstraction, rich content, diverse structural characteristics, and unique compositional arrangement (Pei, 2015).

2.3.1 Representational Imagery of Patterns

Representational imagery refers to the ability of a pattern to vividly convey specific themes or scenes through lifelike images and detailed depictions, allowing viewers to instantly grasp its meaning. Upon close examination of Li brocade patterns, one is often captivated by their vivid portrayals, which intricately weave figures, animals, plants, and elements of daily life into the textile. The representational nature of Li brocade is rich and multifaceted; its patterns clearly illustrate various life scenes, natural landscapes, and cultural symbols. This representational quality is evident in every detail. For instance, a single brocade may depict scenes of agricultural activities (see Figure 5), with elements such as rice stalks, paddy fields, and mountains rendered clearly within the design. Each human figure, animal motif, and botanical element is meticulously crafted and finely detailed, enhancing the overall vividness and expressive power of the pattern. This representationality positions Li brocade not merely as an artistic artifact but also as a cultural medium and a reflection of everyday life (Wu, 2019a).

Figure 5

Li ethnic agricultural patterns



Note. Photographed by the author.

2.3.2 Abstraction in Patterns

Abstraction denotes the artistic process of simplifying, exaggerating, or deforming concrete objects or images, enabling patterns to convey more generalized, profound artistic expressions. In artistic creation, abstraction often manifests through the manipulation of form, color, and line, allowing works to transcend the constraints of realistic shapes and details, thereby expressing more abstract meanings and emotions. Within Li brocade, abstraction is primarily manifested in the design and stylistic representation of patterns. Li women employ techniques such as exaggeration, simplification, and deformation to artistically reinterpret natural imagery and scenes, resulting in patterns that exhibit higher degrees of generalization and universality (Xin, Zhou, & Kong, 2024).

Firstly, the abstraction in Li brocade patterns is reflected in the simplification and generalization of natural motifs. Instead of directly depicting specific natural objects, the patterns express various elements of nature through simple geometric shapes and lines, such as straight lines, parallel lines, squares, triangles, and rhombuses. Furthermore, the use and combination of color enhance the abstraction; black or deep blue often serve as the foundational hues, complemented by vivid reds, yellows, greens, and whites. The interplay of contrast and harmony within these colors creates visually rich effects that augment the patterns' abstraction and artistic expressiveness. Additionally, the clear hierarchical composition within the patterns reinforces both abstraction and artistic appeal. Through its geometric forms, color application, and compositional structure, the abstraction in Li brocade patterns elevates their artistic quality and visual impact.

Additionally, the clear hierarchical compositional structure within the patterns also contributes to their abstract quality and artistic impact. Through the deliberate use of geometric shapes, color application, and composition, the abstraction of Li brocade patterns achieves a high degree of artistic sophistication.

2.3.3 Richness of Pattern Content






Li brocade patterns are renowned for their rich and diverse content, vividly reflecting the profound cultural heritage, emotional depth, and reverence for nature held by the Li people. From a cultural and humanistic perspective, the patterns predominantly feature anthropomorphic motifs, encompassing themes related to daily life, family, love, and the natural world. The Li people deeply believe in animism and respect the power of nature; thus, their anthropomorphic patterns frequently depict scenes from everyday life such as farming, hunting, and marriage (Xin et al., 2024).

Through special symbols and motifs, Li brocade vividly conveys the rich spiritual world of the Li people. In a sense, these anthropomorphic patterns encapsulate the history and cultural core of the Li ethnic group. The five subgroups of the Li exhibit distinctive stylistic features in their pattern designs, particularly evident in women's tube skirts and the hems of upper garments, where diverse artistic forms

and styles are displayed. For example, Table 3 illustrates the anthropomorphic patterns of the five major Li dialect groups (Su et al., 2023).

Table 3

Illustrates the anthropomorphic patterns of the five major Li dialect groups

Human pattern	Dialect	Technique
	Sai Dialect	Various Techniques
	Meifu Dialect	Bing Dyeing (or Bing Resist Dyeing)
	Qi Dialect	Jacquard (or Brocade weaving)
	Run Dialect	Double-sided Embroidery
	Ha Dialect	Jacquard (or Brocade weaving)

Note. Analyzed by the author.

2.3.4 Interpretation of Lisu Patterns and Symbols

2.3.4.1 Human Figure Motifs

Human figure motifs are common patterns in Lisu brocade textiles, often depicting aspects of daily life such as farming, fishing, and marriage ceremonies (see Figure 6), as well as traditional festivals, dances, and rituals.

Figure 6
Li Brocade Wedding Patterns



Note. Photographed by the author.

The design of human figure patterns is characterized by vividness and delicacy, skillfully expressing Li people's life and culture through the combination of lines and colors. The human motifs in Li brocade serve as decorative elements rich in cultural significance and artistic connotation, most frequently appearing in women's clothing. Among these, the frog-shaped human figure motif originates from frog imagery, which has been transformed and adapted into figures bearing basic human traits, such as standing postures and body contours. These patterns often retain frog-like features such as the head and limbs, reflecting the Li people's worship and reverence for frogs. Building upon this foundation, more figurative human patterns clearly present human characteristics, including details such as earrings, tattoos, and tools held in hand. These motifs emphasize detailed rendering to highlight various attributes of the figures, resulting in more complex and intricate imagery (Li, 2024).

Composite human figure patterns further elaborate on everyday productive and social activities, such as horseback riding, farming, herding cattle, and weddings, based on the figurative human motifs. Simplified human patterns maintain the basic framework of the imagery by removing decorative serrations and rotational elements, thereby emphasizing the fundamental features of the figures and facilitating easier interpretation of the patterns' meanings (Wang, 2024).

While human figure motifs vary in form, their basic structure remains consistent, predominantly composed of diamond shapes of varying sizes. Through deformation and arrangement, these motifs depict human movement. The frog-shaped human

figure derives directly from frog imagery, visually representing the frog's limbs extended in a jumping posture. The evolved human figure motifs retain features of the frog patterns but invert the hand and leg positions, resembling a frog-human hybrid(Li, 2024).

One of the most iconic human figure motifs is the "Great Strength Deity" pattern, characterized by a unique composition that incorporates numerous exaggerated and abstract decorative elements atop the original human figure design, symbolizing the sacred power associated with ancestral worship. Although the fundamental structure of the "Great Strength Deity" pattern aligns with that of typical human motifs, it features enlarged body proportions, more detailed facial decorations, and even expressive facial features (Wang, 2024).

Human figure motifs are among the most concrete in Li patterns, vividly depicting a rich array of bodily movements while also conveying narrative depth. To facilitate a clearer observation of the specific characteristics of these human patterns, a series of simplified line drawings based on the brocade motifs has been produced (see Table 4).

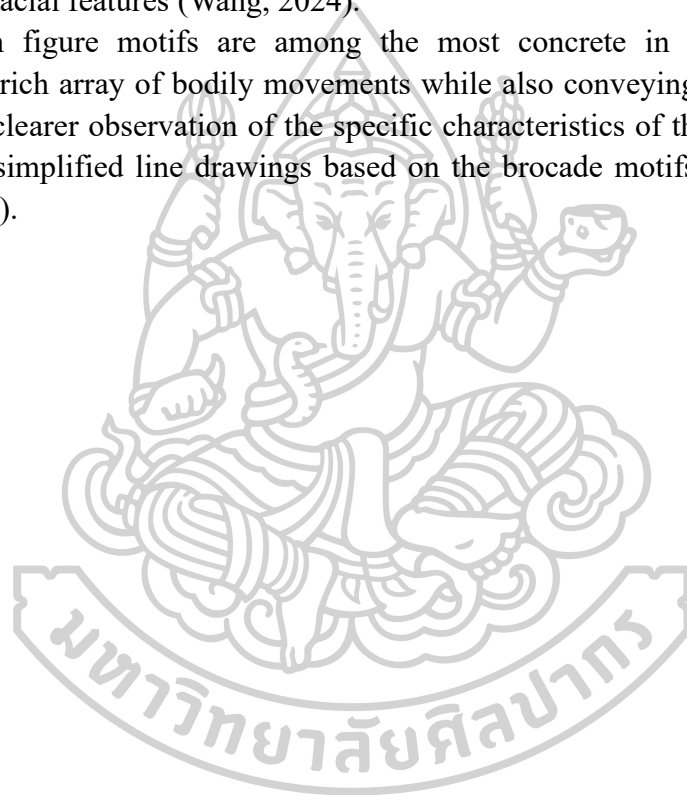
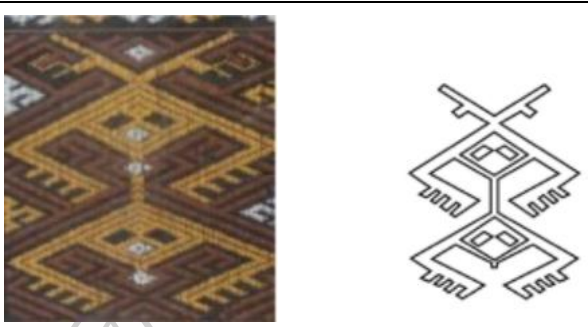
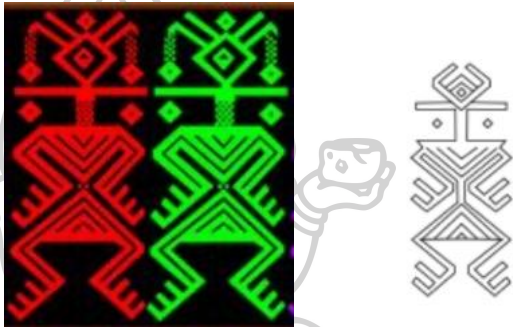




Table 4
 Illustrations of Various Types of Human Motifs

Motif Name	Illustration
Ancestral Motif	
Figurative Human Motif	
Simplified Human Motif	
Hercules Motif (or Powerful Deity Motif)	

Note. Analyzed by the author.

For the Li people, in the absence of a written language, patterns have remained a vital medium for cultural transmission. The colors and styles of Li brocade patterns accurately reflect the aesthetic concepts and artistic standards of different historical periods, thereby showcasing the cultural development trajectory of the Li ethnic group.

These patterns document the evolution of Li culture and exhibit essential distinctions from the motifs of other ethnic groups.

2.3.4.2. Animal Motifs

Animal motifs commonly depict local fauna such as water buffaloes, waterfowl, fish, dogs, and cats, as well as mythological creatures like dragons. These patterns are characterized by simple forms and are often rendered through geometric shapes. Among them, the frog motif (see Figure 7) is one of the most prevalent patterns.

Figure 7

Frog motif



Note. Photographed by the author.

The frog worship of the Li ethnic group originates from the primitive religious beliefs of the Li ancestors when they first settled on Hainan Island, a practice that has persisted for over 3,000 years. Although the consciousness of frog worship has gradually diminished in modern society, its traces remain evident in Li traditional culture and everyday artifacts. Frog motifs can be categorized into three types: realistic, stylized, and simplified. The realistic motifs depict frogs with lifelike accuracy, the stylized motifs exaggerate certain features for artistic effect, and the simplified motifs use concise lines to create a strong sense of abstraction. According to legend, the toad once aided the Li people in defeating their enemies and is thus regarded as a symbol of good fortune. Consequently, frog motifs also embody meanings associated with fertility, prosperity, and favorable weather conditions for bountiful harvests (Li, 2024; Wei, 2024).

Within Li decorative patterns, each animal motif carries distinct symbolic significance—for instance, the dragon motif represents peace and harmony under heaven, while the ox motif (Figure 8) symbolizes social productivity.

Figure 8
Ox motif



Note. Photographed by the author.

The deer symbolizes auspiciousness and longevity, while the dog represents good omens and serves as a protector against evil spirits. The tortoise motif embodies immortality and long life. The bird motif (Figure 9) are constructed utilizing a diamond-shaped structure (Wang, 2024).

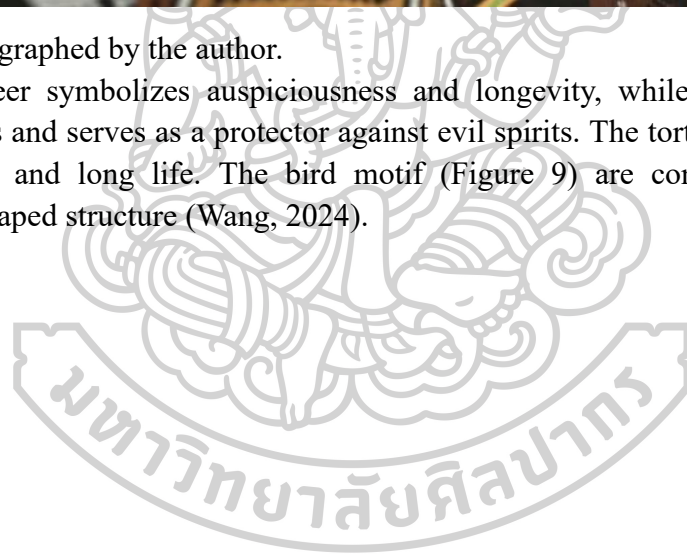


Figure 9
Bird motif



Note. Photographed by the author.

This image vividly depicts the scene of birds overlooking from the sky. The deer pattern originates from the reverence for deer and is endowed with symbolism related to love. The tortoise motif represents longevity, as the Li people regard the tortoise as a spiritual creature believed to bring auspicious energy. Consequently, it has become a mysterious animal imbued with rich cultural connotations. In tortoise patterns, the embroidered “卍” (swastika) character symbolizes “longevity,” conveying wishes for boundless life, wealth, and peace. The butterfly motif signifies happiness, freedom, and beauty, reflecting the Li people's yearning for a life of freedom. The unique craftsmanship employed in the production of Li brocade exaggerates the animal patterns, imbuing them with distinctive charm and power(Wei, 2024).

2.3.4.3. Plant Patterns

The plant motifs in Li brocade reflect the Li people's love and appreciation for the rich vegetation in their natural surroundings. These patterns typically use vibrant colors and intricate decorations to portray the forms and characteristics of plants,

presenting a vivid three-dimensional effect and natural beauty. Plant motifs play a significant role in Li brocade designs and often include indigenous plants as well as symbolically significant species such as “xiangcai” (Figure 10), banyan aerial roots, “Niaopangga,” and “pancaguang,” along with various abstract tree forms. Variations in plant motifs correspond to differences in regional geography and vegetation, reflecting the distinct terrains and flora of various areas. These plants are commonly used by the Li people to decorate brocade textiles. Particularly, the kapok tree, one of the primary raw materials for Li brocade, is extensively incorporated into the decoration of woven garments(Cheng Tan et al., 2024).

Figure 10

Plant motifs



Note. Photographed by the author.

Plant motifs rarely serve as the main subject; instead, they typically appear as decorative elements surrounding the primary patterns. These botanical motifs symbolize the Li people's longing for growth and fertility, representing a life state characterized by deep roots, flourishing leaves, and vibrant vitality(Wu, 2019a).

2.3.4.4. Daily Life Tool Patterns

The patterns of everyday tools in Li brocade reflect the Li people's emphasis on and appreciation for practical implements. These tool motifs primarily consider functionality and depict various aspects of daily life. Common examples include patterns of pots, bowls, and rattan boxes, which are rendered through simple yet vivid

lines that outline the shapes and features of everyday utensils. At the same time, these tool patterns serve decorative and embellishing functions within Li brocade, enriching the overall visual composition. Moreover, these motifs express the Li people's insights and understanding of life, embodying their respect for and transmission of traditional lifestyles (Dong, 2020).

2.3.4.5. Geometric Patterns

Geometric patterns in Li brocade (see Figure 11) refer to motifs composed of various geometric shapes, typically presented through combinations of lines and colors, exhibiting a rich sense of geometric aesthetics and decorative effects. These geometric patterns appear both as integral components of the overall brocade design and as decorative details such as borders and edgings. The patterns may include simple geometric shapes such as straight lines, circles, triangles, and squares, as well as more complex forms like diamonds, hexagons, and spirals(Liu, 2020).

Figure 11

Geometric patterns



Note. Photographed by the author.

Each pattern in Li brocade carries unique symbolic meanings. Geometric motifs, with their concise structures, often complement other intricate patterns by regulating the overall pattern density and enhancing a sense of openness and translucency. As an indispensable decorative element, geometric motifs enrich the layering and variation of the overall design, providing an aesthetically pleasing experience. The Li people's affinity for geometric patterns originates from their early primitive cognitive framework, favoring the composition of diverse motifs through simple geometric lines. This abstract mode of expression reflects their perception of the surrounding world and shapes the distinctive characteristics of Li brocade patterns(Si, 2017a).

2.4 Overview of Relevant Semiotic Theories

2.4.1 Concept of Semiotics

Signs serve as tools for storing and recalling information and act as material means for expressing thoughts and emotions. Human cognition and language communication are fundamentally inseparable from signs. Signs function through their formal representation, narration, and transmission of information, serving as carriers of meaning. All cultural forms are both the materialization of semiotic activity and the objectification of human essence. Semiotics is the discipline that studies signs and their roles within human culture and cognition. It encompasses the generation, dissemination, interpretation, and influence of signs, aiming to deepen the understanding of their significance in language, art, culture, and social interaction (Krampen, 1987).

Humans live in a world of signs. As scholar Zhu, Su, Ji, & Sheng defined in *Semiotics: Principles and Deduction*, a sign is “a perception that carries meaning.” Signs are mediators of human cognition, serving as the external forms and material carriers of information (Eco, 1979). By bearing certain meanings and content, they refer to or represent other entities. Semiotics emerged in the 19th century, originating from linguistics and evolving through explorations in structural linguistics, logic, cultural philosophy, and aesthetics, leading to the birth of modern semiotics. The foundation of modern semiotics was laid by Swiss linguist Ferdinand de Saussure and American philosopher Charles Sanders Peirce, who approached the discipline respectively from linguistic and pragmatic-logical perspectives. In the 1960s, various epistemological and methodological frameworks of structuralist linguistics emerged. The four dominant semiotic theoretical systems are: Peirce’s triadic sign theory, Saussure’s dyadic sign theory, Greimas’s Continental semiotic theory, and Eco’s general semiotic theory (Shaumyan, 1987).

In design, the use of signs involves the process of interpreting signs. Within semiotics, the concepts of the signifier and the signified provide a broad and suitable framework for analyzing signs. The signifier refers to the external form of a sign—such as books, architecture, or patterns—that is visually perceivable. In the context of Dunhuang cultural and creative design, the external form of landscapes can serve as design elements. The signified refers to the internal meaning of the sign, such as symbolism, cultural significance, or Li ethnic patterns. In visual design of Li ethnic patterns, elements can be extracted and integrated with relevant semiotic theories to guide the design process (Moriarty, 2004) (see table 5).

Table 5
Definition of a Sign

Sign	Signifier	Signified
Definition	The appearance of the sign; the visually perceivable external form	The intrinsic meaning carried by the sign; an immaterial form
Example	Shape, color, texture	Culture, consciousness, love

Note. Analyzed by the author.

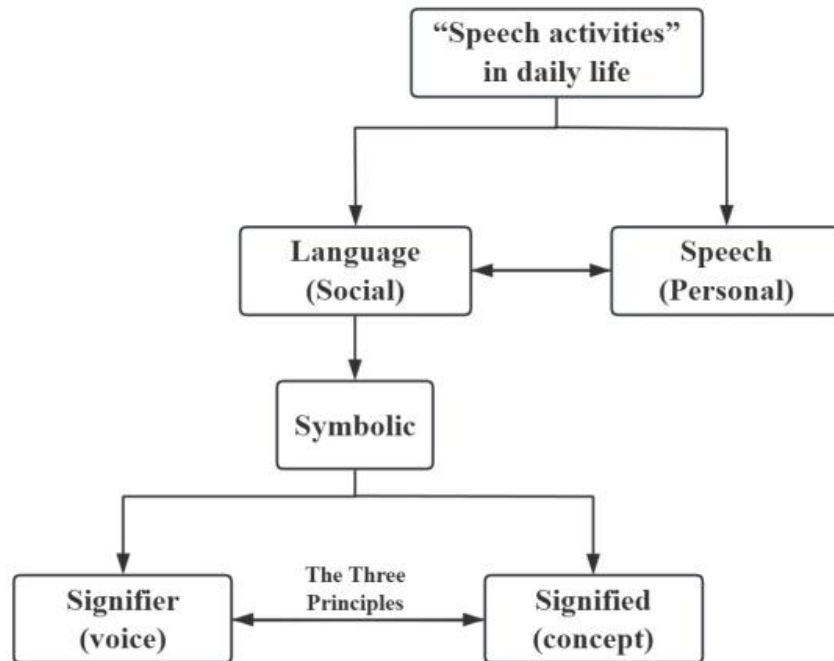
2.4.2 Development of Semiotics

The development of semiotics has undergone various models. This study focuses primarily on the most renowned theories: Saussure's dyadic model of the sign, Peirce's triadic model, and Morris's product semantics perspective, in order to lay a theoretical foundation for the subsequent visual design research of the five dialects of the Li ethnic group (Goharipour, 2020).

Saussure's semiotic theory was proposed by the Swiss linguist Ferdinand de Saussure, who made significant contributions to linguistics and philosophy and is regarded as the "father of semiotics". In his work *Course in General Linguistics*, he introduced the dyadic theory of the sign, dividing the sign into two components: the "signifier" and the "signified." The signifier refers to the concrete form or mode of expression of the sign, such as sounds, written characters, images, etc.—in other words, the perceivable external form of the sign (Yakin & Totu, 2014). The signified refers to the concept, object, or idea that the sign represents; it is the mental concept or association evoked by the sign. The sign is not a physical or objective reality but a product of human cognition, a kind of non-material psychological entity. The relationship between the signifier and the signified is arbitrary rather than necessary (see figure 12) (Zhang, 2004).

Figure 12

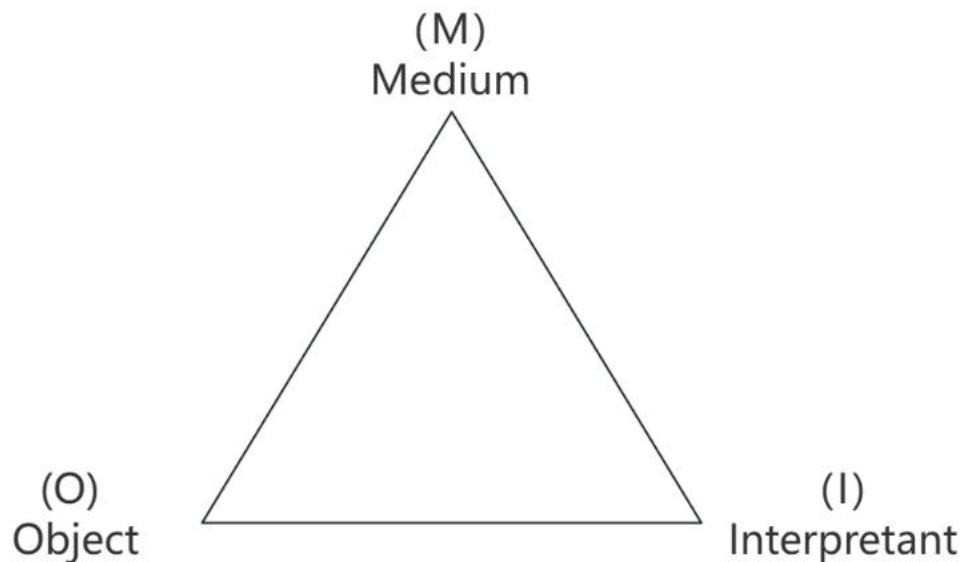
Illustration of Saussure's symbolic view of language



Note. Analyzed by the author.

Charles Sanders Peirce, an American logician and philosopher, proposed the semiotic theory known as the "triadic model of the sign." The core concept of this theory is a triadic unity, consisting of three elements: the Representamen (M), the Object (O), and the Interpretant (I). These three components represent different relationships between the sign and reality. In Peirce's model, the connection between the sign and its object is established through the interpretation process carried out by the interpretant (I), with the sign functioning as a mediator between thought and reality (Figure 13). The sign itself does not inherently possess reference or expression; rather, it is endowed with meaning and significance through human cognition, which interprets and assigns meaning to the sign, using it as a tool for human development. This model is dynamic in nature. Peirce's triadic classification is widely recognized by semioticians as one of the most significant frameworks in semiotic theory (Bateman, 2018).

Figure 13
Peirce's Triadic Theory of Signs



Note. Analyzed by the author.

American philosopher Charles W. Morris conducted comprehensive research on semiotics from the perspectives of logic and semantics. He regarded the essence of signs as lying in the process of semiosis, which is a form of human behavior. Morris proposed that semiotics functions as a metalanguage, with its study divided into three sub-disciplines: syntactics, which examines the formal relationships among signs; semantics, which investigates the relationship between signs and their referents; and pragmatics, which explores the relationship between signs, their context, and the interpreter (Morris, 1938).

Table 6 Three Categories of Semiotic Theories

	Saussure	Peirce	Morris
Country	Swiss Linguist	American Logician and Philosopher	American Philosopher
Semiotic Theory	The Binary Structure Theory of Signs	The Triadic Theory of Signs	Semiotics of Language
Classification	Signifier and Signified	Medium (M), Object (O), Interpretant (I)	Syntax, Pragmatics

Note. Analyzed by the author.

Exploration of Semiotics in the Visual Design of Li Ethnic Group's Five Dialectal Embroidery Patterns.

This study regards signs as carriers of cultural information, aiming to excavate representative and culturally rich visual symbolic elements within the regional cultural contexts of the five dialectal areas of the Li ethnic group. These elements are then translated and integrated into contemporary visual design and cultural product development. By systematically extracting, analyzing, and reconstructing the cultural symbols embedded in traditional Li embroidery patterns, the design not only preserves the original ethnic cultural characteristics but also adapts them into expressive forms suitable for modern media dissemination (Shinar et al., 2003).

In the design process, products function not only as utilitarian objects but also as media for cultural transmission, forming a close connection with the regional cultural themes of the Li people. Leveraging the encoding and decoding mechanisms of visual design language, the design enhances the emotional connection and cultural identity between the product and consumers, thereby enabling the visualization, recognizability, and interactivity of Li's five dialect cultures within contemporary social contexts. Ultimately, through cultural products endowed with regional distinctiveness and cultural warmth, the dissemination power and influence of traditional Li culture in modern life scenarios are significantly enhanced (Yu, 2025).

2.5 Semiotic Study of the Li Ethnic Group's Five Dialects

2.5.1 Cultural Symbol Characteristics of the Five Dialects of the Li Ethnic Group

The Li culture is one of the most representative minority cultural systems in southern China, especially within the five dialectal areas of Hainan Island (namely Mefu, Qi, Run, Sai, and Ha dialects), where a rich system of regional cultural symbols has developed. From a semiotic perspective, the embroidery patterns of the five dialects are not mere visual motifs but constitute a "cultural symbol system" laden with profound cultural significance (Wang, 2022). Their characteristics can be analyzed from the following two dimensions:

2.5.1.1 Regional Characteristics: The "Symbolic Ecology" within the Tropical Island Cultural Context

The five dialects are distributed across diverse geographical zones of Hainan Island, influenced by tropical rainforest, hills, and river valleys, which shape unique local cultural structures in clothing, diet, totem worship, and pattern traditions. The cultural symbols across the dialect regions share these common features:

Totemic patterns that follow the natural landscape, embodying a philosophy of respectful coexistence with nature; for example, the Ha dialect area commonly features “snake patterns” and “mountain shapes,” reflecting this reciprocal relationship between humans and nature(Kong et al., 2024).

Symbolic carriers tied to specific spatial and social contexts: traditional embroidery patterns are closely linked to the wearer’s identity, age, and marital status, with distinct embroidery techniques and pattern distributions varying across regions.

Style adaptations according to locality: the Sai dialect region favors geometric zigzag motifs, reflecting the aesthetic of mountainous settlements, whereas the Run dialect region prefers plant and life symbols, signifying fertility and prosperity.(Kong et al., 2024)

2.5.1.2 Cultural Characteristics: Visual Metaphors Expressing Traditional Social Structures of the Li Ethnic Group

Li cultural symbols possess profound cultural depth and social orientation. As a typical non-literate civilization, the Li’s knowledge system and historical memory are primarily transmitted through visual patterns, oral traditions, and ceremonial rituals(Xu & Hu, 2024). Within a semiotic framework, these motifs are not merely decorative elements but visual representations of ethnic identity, tribal order, and cultural values, concretely manifested in:









Symbolization of identity and social hierarchy: traditional patterns are often restricted to specific groups, such as the “volcano pattern” used exclusively on the wedding garments of adult women, symbolizing their transition to a new life stage(Liu, 2024).

Coexistence of mythological and ritual symbols: many motifs derive from Li mythology, for instance, images like the “sunbird” and “tree of life” frequently appear on festive textiles to invoke blessings and ward off evil(Qi & Ma, 2005).

Dynamic cultural transmission: Li brocade, as a core material cultural carrier, integrates language, music, and weaving skills, serving as a vital medium for intercultural exchange among the five dialect groups. The chanting of women during weaving is a tangible example of the fusion of oral and visual symbol transmission(Li, 2024a).

The chanting of women during weaving is a tangible example of the fusion of oral and visual symbol transmission(Broenen, 2001). The following represent the fundamental motifs associated with the five dialects of Hainan, upon which all subsequent derivative designs are based (Table7-Table 11).

Table 7
A Compilation of Traditional Motifs from the Ha Dialect

Pattern	The dialect to which it belongs	Explain
	The Hah dialect	Simplified humanoid pattern
	The Hah dialect	Simplified humanoid pattern
	The Hah dialect	Simplified humanoid pattern
	The Hah dialect	Simplified humanoid pattern
	The Hah dialect	Simplified humanoid pattern
	The Hah dialect	Simplified humanoid pattern
	The Hah dialect	Simplified humanoid pattern
	The Hah dialect	Simplified humanoid pattern



The Hah dialect

Simplified humanoid pattern



The Hah dialect

Figurative human-shaped patterns



The Hah dialect

Figurative human-shaped patterns



The Hah dialect

Figurative human-shaped patterns



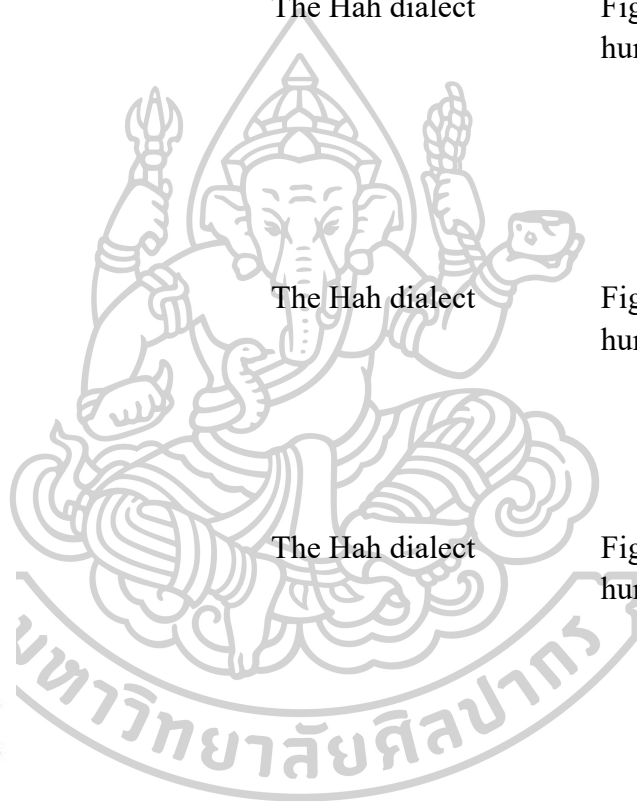
The Hah dialect











Figurative human-shaped patterns



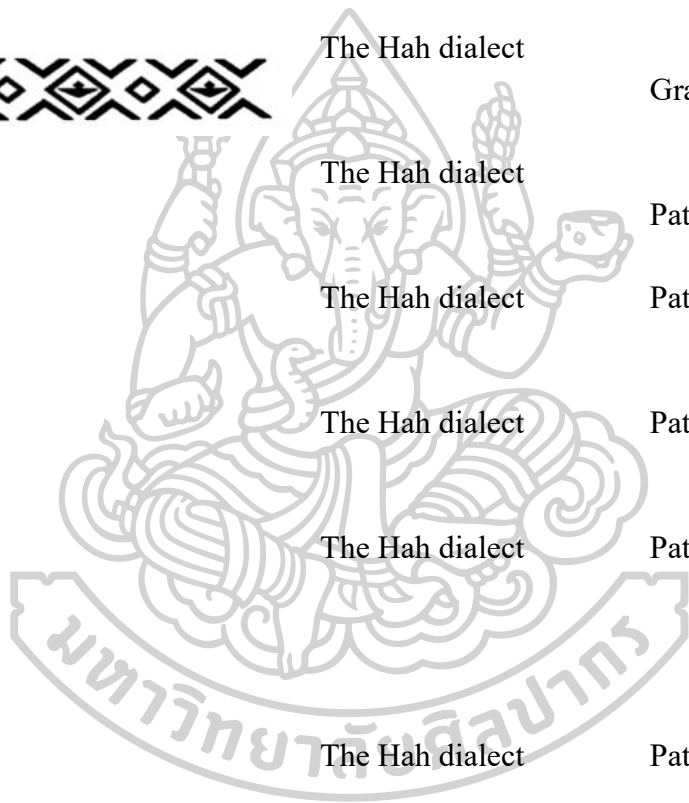
The Hah dialect

Figurative human-shaped patterns



	The Hah dialect	Figurative human-shaped patterns
	The Hah dialect	Concrete frog pattern
	The Hah dialect	Concrete frog pattern
	The Hah dialect	Concrete frog pattern
	The Hah dialect	Concrete frog pattern
	The Hah dialect	Simple-shaped frog pattern
	The Hah dialect	Simple-shaped frog pattern
	The Hah dialect	Simple-shaped frog pattern
	The Hah dialect	Simple-shaped frog pattern
	The Hah dialect	Simple-shaped frog pattern

	The Hah dialect	Simple-shaped frog pattern
	The Hah dialect	Simple-shaped frog pattern
	The Hah dialect	Simple-shaped frog pattern
	The Hah dialect	Grass pattern
	The Hah dialect	Pattern
	The Hah dialect	Pattern
	The Hah dialect	Pattern
	The Hah dialect	Pattern
	The Hah dialect	Pattern
	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern





The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



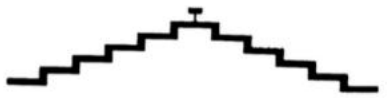
The Hah dialect

Geometric pattern



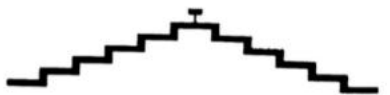
The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern








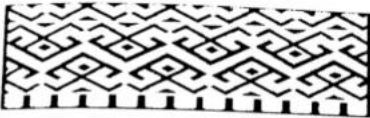


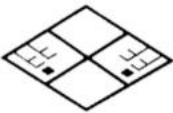
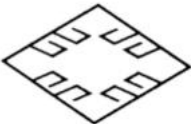

The Hah dialect

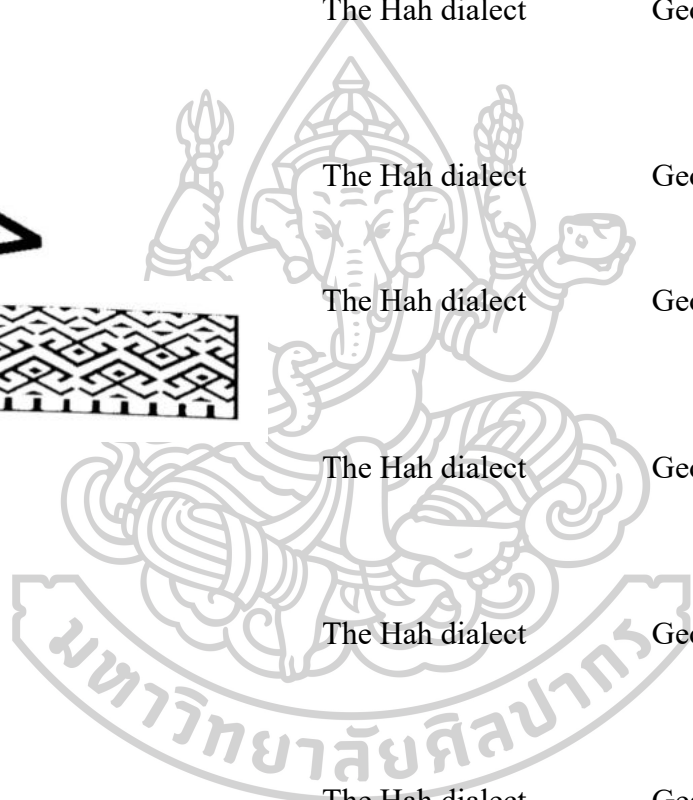
Geometric pattern



The Hah dialect

Geometric pattern

	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern
	The Hah dialect	Geometric pattern





The Hah dialect

Geometric pattern



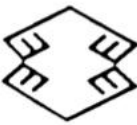
The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern





The Hah dialect

Geometric pattern



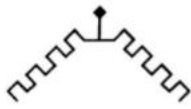
The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



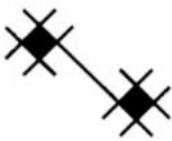
The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



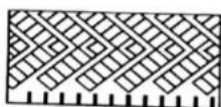
The Hah dialect

Geometric pattern



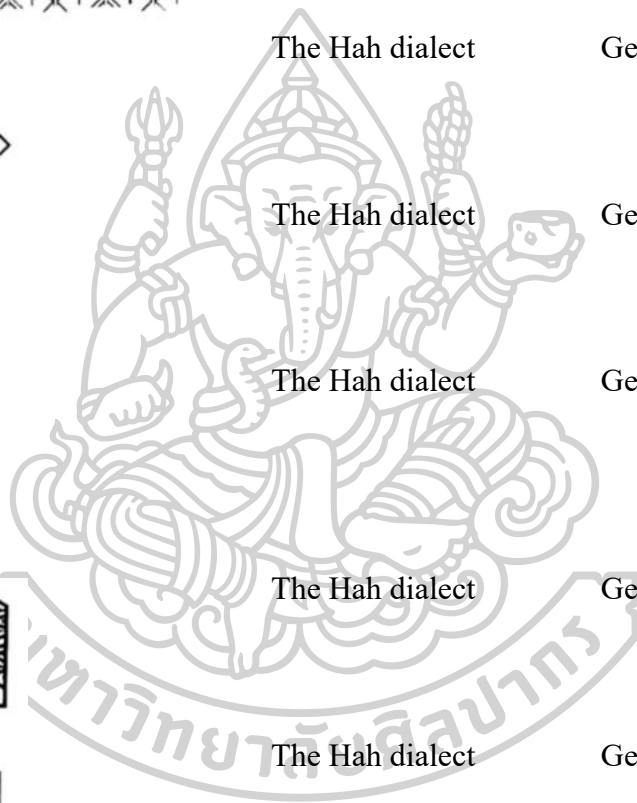
The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern





The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



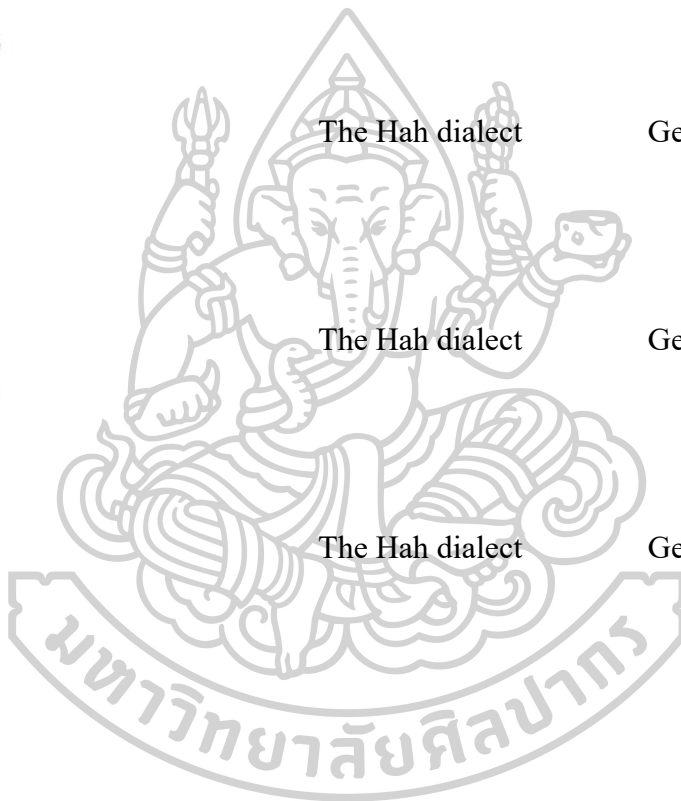
The Hah dialect

Geometric pattern



The Hah dialect

Geometric pattern



The Hah dialect

Character patterns



The Hah dialect

Character patterns

Note. Data collected and analyzed by the author.

Table 8
A Compilation of Traditional Motifs from the Sai Dialect

Pattern	The dialect to which it belongs	Explain
	Sichuan dialect	Simplified human-shaped pattern
	Sichuan dialect	Simplified human-shaped pattern
	Sichuan dialect	Simplified human-shaped pattern
	Sichuan dialect	Frog-like humanoid pattern
	Sichuan dialect	Frog-like humanoid pattern
	Sichuan dialect	Frog-like humanoid pattern
	Sichuan dialect	Frog-like humanoid pattern
	Sichuan dialect	Frog-like humanoid pattern



Sichuan dialect

Frog-like humanoid pattern



Sichuan dialect

Simplified frog pattern



Sichuan dialect

Simplified frog pattern



Sichuan dialect

Simplified frog pattern



Sichuan dialect

Simplified frog pattern



Sichuan dialect

Simplified frog pattern



Sichuan dialect

Composite pattern



Sichuan dialect

Composite pattern



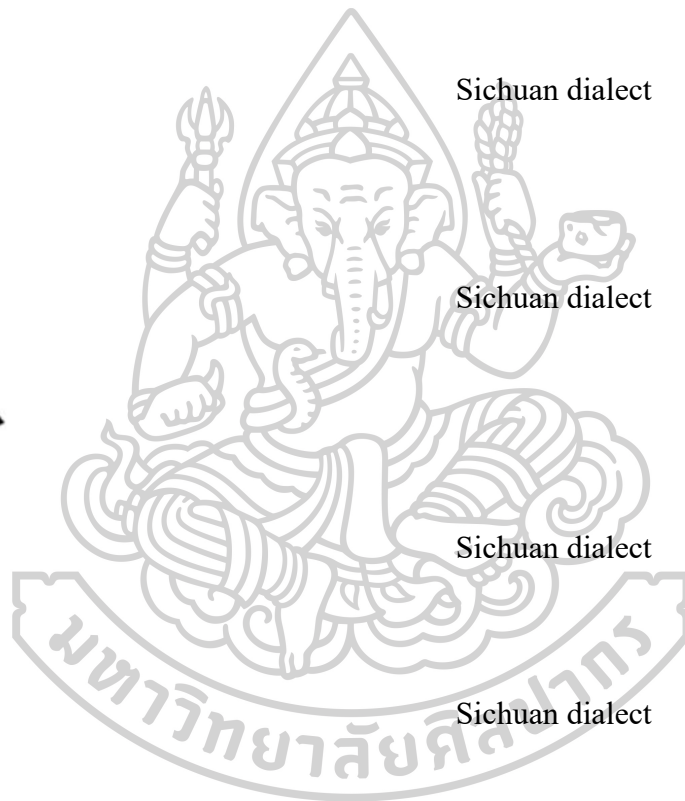
Sichuan dialect

Geometric pattern



Sichuan dialect

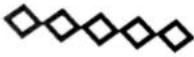
Geometric pattern





Sichuan dialect

Geometric pattern



Sichuan dialect

Geometric pattern



Sichuan dialect

Geometric pattern



Sichuan dialect

Geometric pattern

Sichuan dialect

Geometric pattern



Sichuan dialect

Geometric pattern



Sichuan dialect

Geometric pattern



Sichuan dialect

Geometric pattern



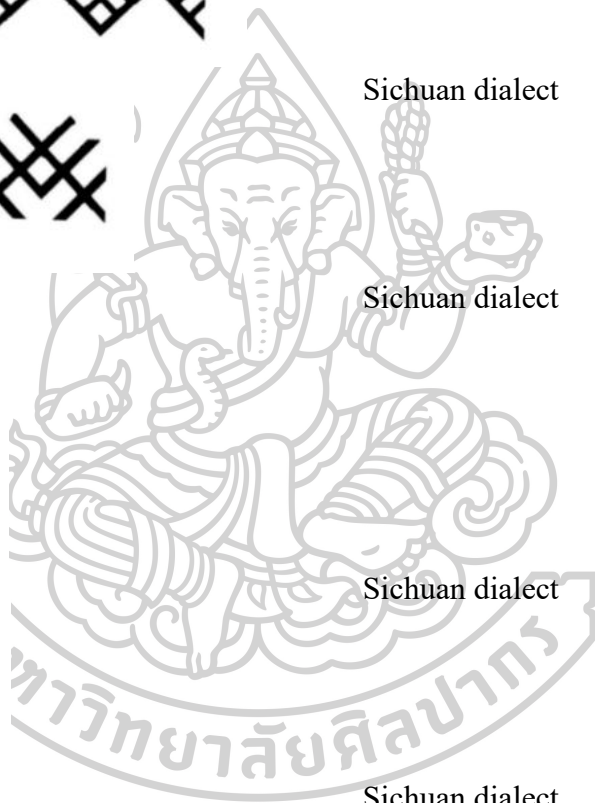
Sichuan dialect

Geometric pattern



Sichuan dialect

Geometric pattern





Sichuan dialect

Geometric pattern



Sichuan dialect

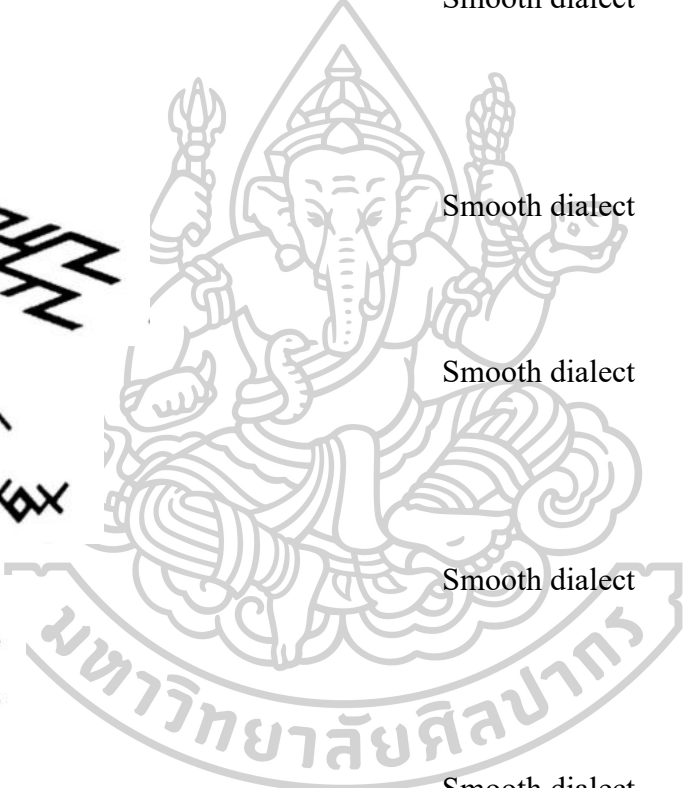
Geometric pattern

Note. Data collected and analyzed by the author.

Table 9
A Compilation of Traditional Motifs from the Run Dialect

pattern	The dialect to which it belongs	explain
	Smooth dialect	Simplified human-shaped pattern
	Smooth dialect	Simplified human-shaped pattern
	Smooth dialect	Simplified human-shaped pattern
	Smooth dialect	Simplified human-shaped pattern

	<p>Smooth dialect</p>	<p>Simplified human-shaped pattern</p>
	<p>Smooth dialect</p>	<p>Simplified human-shaped pattern</p>
	<p>Smooth dialect</p>	<p>Simplified human-shaped pattern</p>
	<p>Smooth dialect</p>	<p>Simplified human-shaped pattern</p>
	<p>Smooth dialect</p>	<p>Simplified human-shaped pattern</p>
	<p>Smooth dialect</p>	<p>Simplified human-shaped pattern</p>
	<p>Smooth dialect</p>	<p>Simplified human-shaped pattern</p>
	<p>Smooth dialect</p>	<p>Simplified human-shaped pattern</p>
	<p>Smooth dialect</p>	<p>Frog-like humanoid pattern</p>





Smooth dialect

Frog-like humanoid pattern



Smooth dialect

Frog-like humanoid pattern



Smooth dialect

Frog-like humanoid pattern



Smooth dialect

Frog-like humanoid pattern



Smooth dialect

Frog-like humanoid pattern



Smooth dialect

Frog-like humanoid pattern



Smooth dialect

Frog-like humanoid pattern



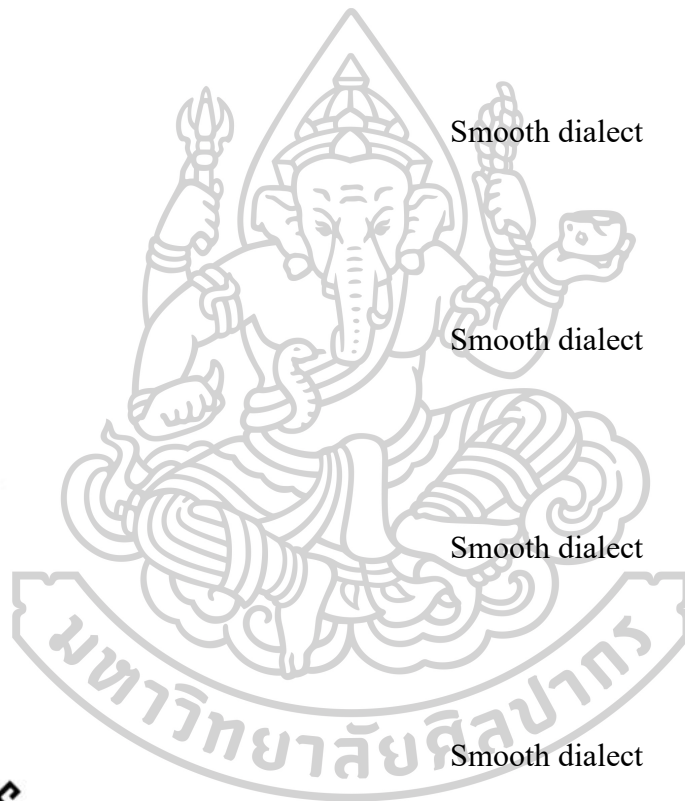
Smooth dialect

Frog pattern



Smooth dialect

Frog pattern





Smooth dialect Deer pattern



Smooth dialect Deer pattern



Smooth dialect Bird pattern



Smooth dialect Bird pattern



Smooth dialect Fish pattern



Smooth dialect Fish pattern



Smooth dialect Fish pattern



Smooth dialect Simplified frog pattern



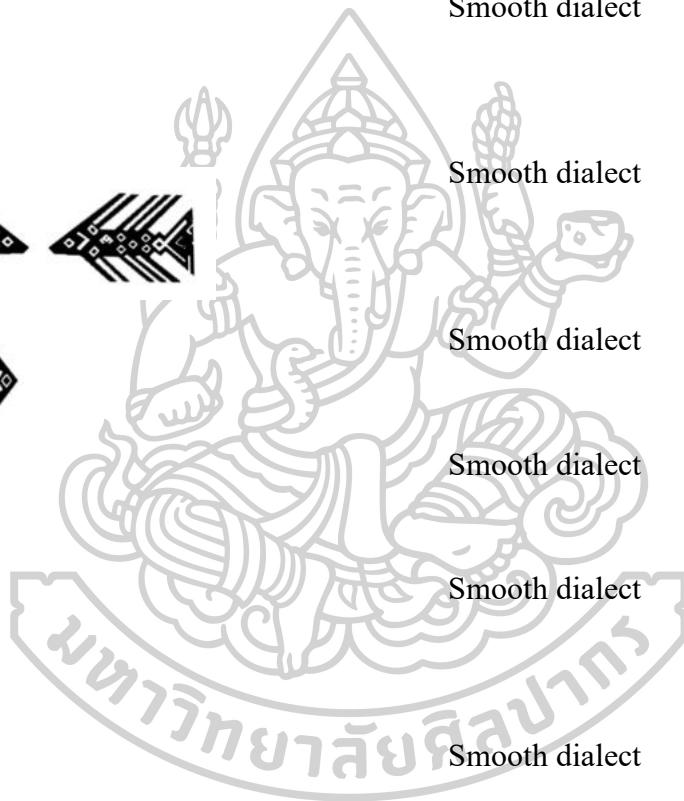
Smooth dialect Simplified frog pattern



Smooth dialect Simplified frog pattern



Smooth dialect Simplified frog pattern





Smooth dialect

Simplified frog pattern



Smooth dialect

Simplified frog pattern



Smooth dialect

Simplified frog pattern



Smooth dialect

Simplified frog pattern



Smooth dialect

Simplified frog pattern



Smooth dialect

Simplified frog pattern



Smooth dialect

Simplified frog pattern



Smooth dialect

Simplified frog pattern



Smooth dialect

Simplified frog pattern



Smooth dialect

Simplified frog pattern



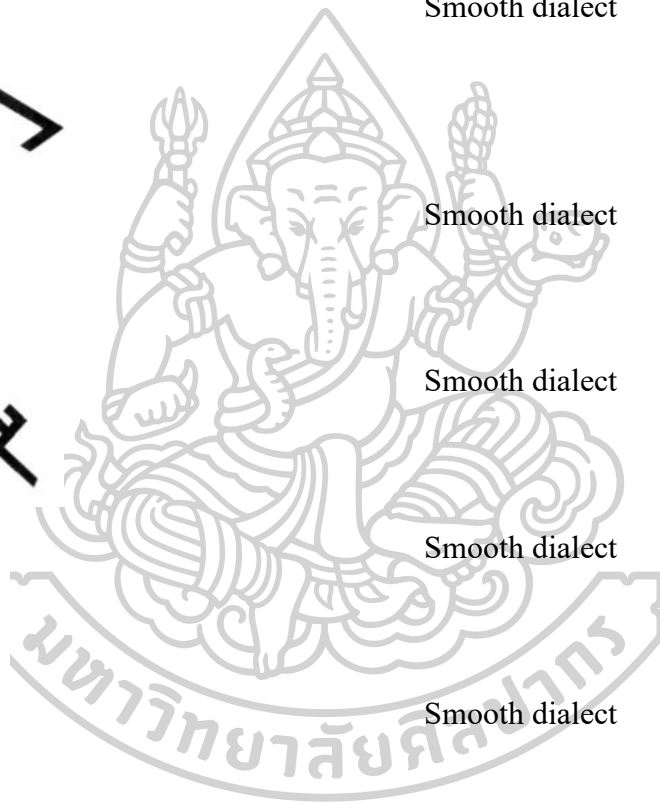
Smooth dialect







Geometric patterns



Smooth dialect




Geometric patterns



	Smooth dialect	Geometric patterns
	Smooth dialect	Geometric patterns
	Smooth dialect	Geometric patterns
	Smooth dialect	Geometric patterns
	Smooth dialect	Geometric patterns
	Smooth dialect	Geometric patterns

Note. Data collected and analyzed by the author.

Table 10
A Compilation of Traditional Motifs from the Qi Dialect

Pattern	The dialect to which it belongs	Explain
	Qi dialect	Simplified human-shaped pattern
	Qi dialect	Simplified human-shaped pattern
	Qi dialect	Simplified human-shaped pattern



Qi dialect

Simplified human-shaped pattern



Qi dialect

Simplified human-shaped pattern



Qi dialect

Frog-like humanoid pattern



Qi dialect

Frog-like humanoid pattern



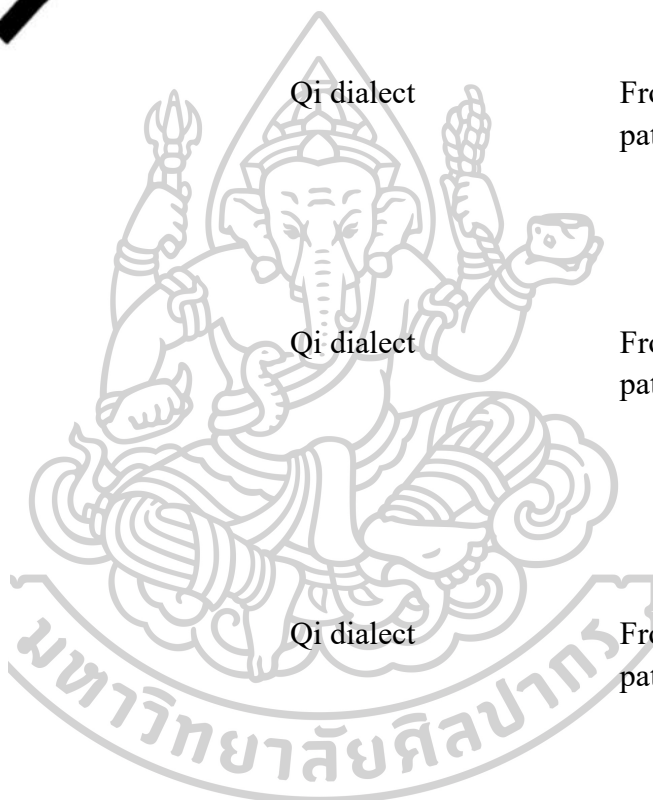
Qi dialect

Frog-like humanoid pattern



Qi dialect

Frog-like humanoid pattern



มหาวิทยาลัยศิลปากร



Qi dialect

Frog-like humanoid pattern



Qi dialect

Frog-like humanoid pattern



Qi dialect

Frog-like humanoid pattern



Qi dialect

Frog-like humanoid pattern



Qi dialect

Frog-like humanoid pattern





Qi dialect

Frog-like humanoid pattern



Qi dialect

Frog-like humanoid pattern



Qi dialect

Frog-like humanoid pattern



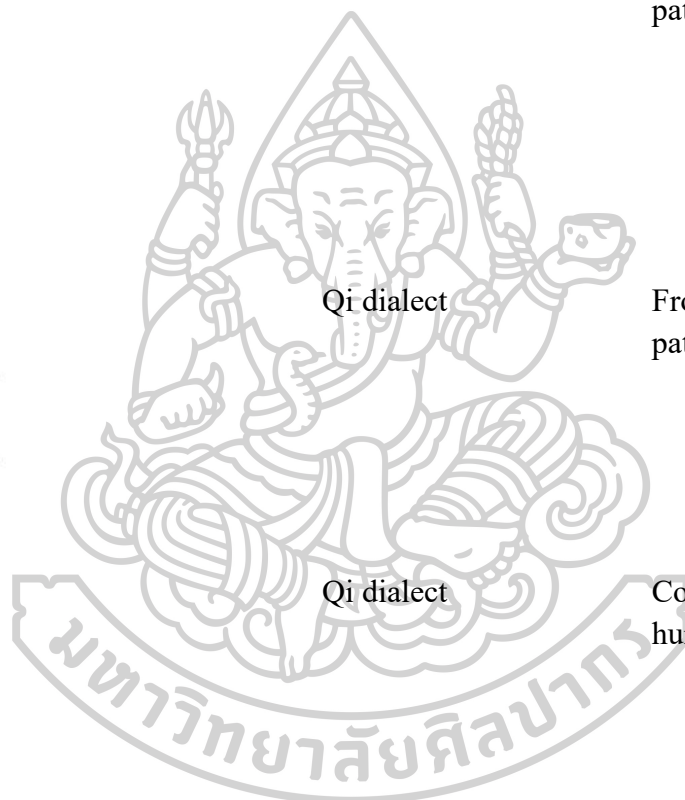
Qi dialect

Concrete human-shaped patterns



Qi dialect

Concrete human-shaped patterns





Qi dialect

Concrete human-shaped patterns



Qi dialect

Crab pattern



Qi dialect

Crab pattern



Qi dialect

Crab pattern



Qi dialect

Concrete frog pattern



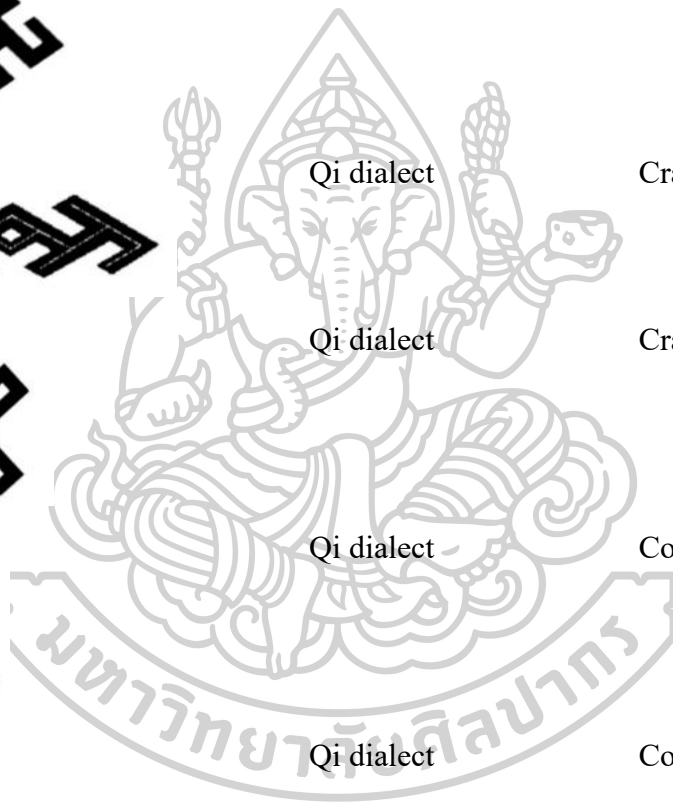
Qi dialect

Concrete frog pattern

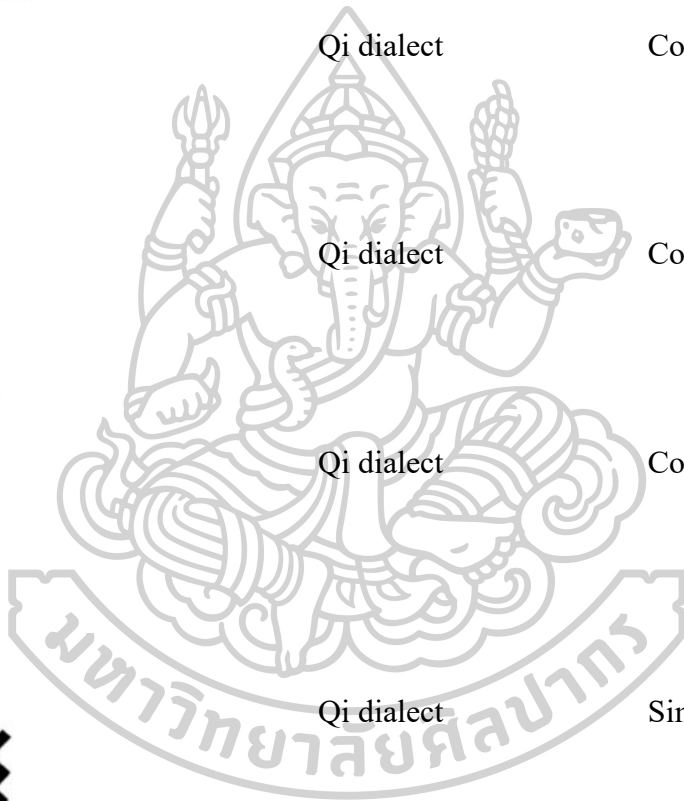


Qi dialect

Concrete frog pattern



	Qi dialect	Concrete frog pattern
	Qi dialect	Concrete frog pattern
	Qi dialect	Concrete frog pattern
	Qi dialect	Concrete frog pattern
	Qi dialect	Concrete frog pattern
	Qi dialect	Simplified frog pattern
	Qi dialect	Simplified frog pattern
	Qi dialect	Simplified frog pattern





Qi dialect

Simplified frog pattern



Qi dialect

Simplified frog pattern



Qi dialect

Simplified frog pattern



Qi dialect

Simplified frog pattern



Qi dialect

Simplified frog pattern



Qi dialect

Simplified frog pattern



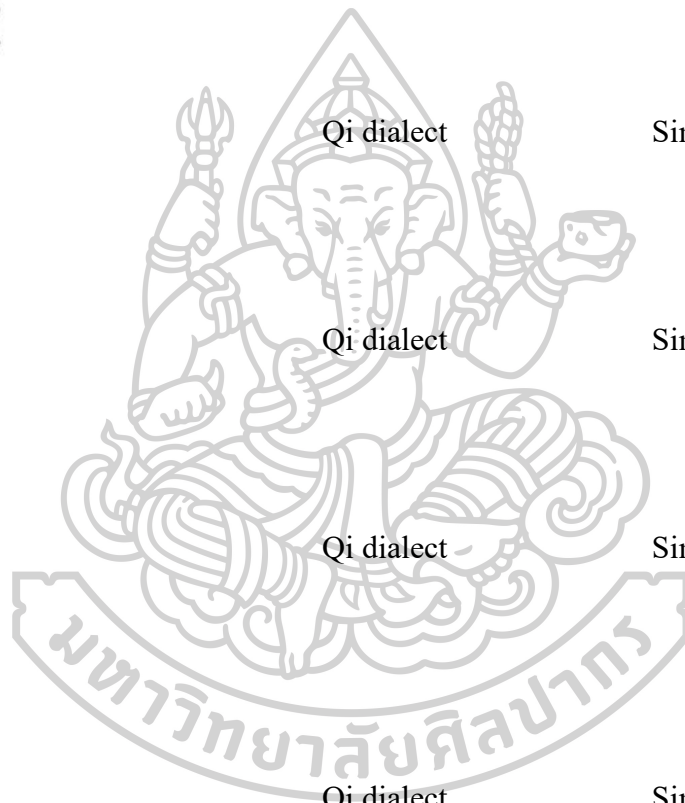
Qi dialect






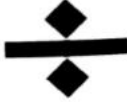









Simplified frog pattern

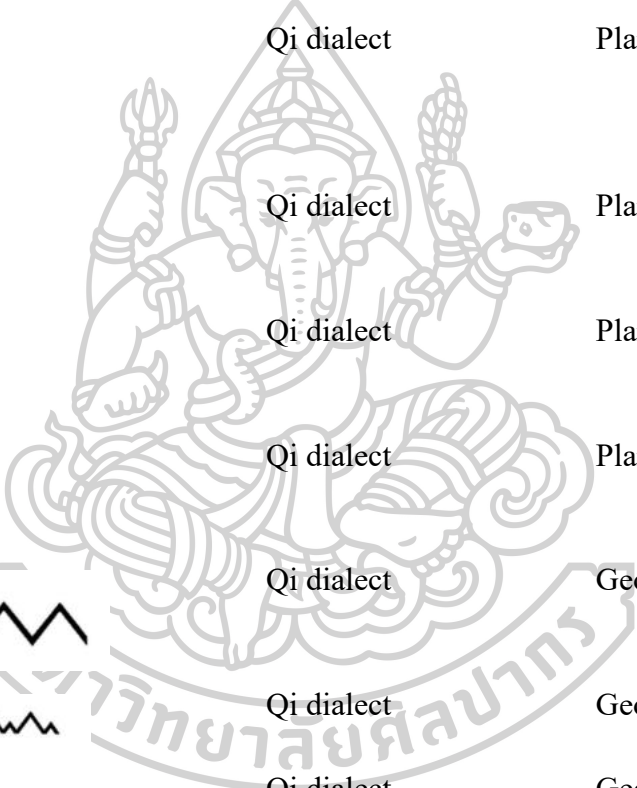


Qi dialect

Simplified frog pattern



	Qi dialect	Plant patterns
	Qi dialect	Plant patterns
	Qi dialect	Plant patterns
	Qi dialect	Plant patterns
	Qi dialect	Plant patterns
	Qi dialect	Plant patterns
	Qi dialect	Plant patterns
	Qi dialect	Geometric pattern
	Qi dialect	Geometric pattern
	Qi dialect	Geometric pattern
	Qi dialect	Geometric pattern
	Qi dialect	Geometric pattern
	Qi dialect	Geometric pattern
	Qi dialect	Geometric pattern
	Qi dialect	Geometric pattern





Qi dialect

Geometric pattern



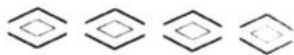
Qi dialect

Geometric pattern



Qi dialect

Geometric pattern



Qi dialect

Geometric pattern



Qi dialect

Geometric pattern



Qi dialect

Geometric pattern



Qi dialect

Geometric pattern



Qi dialect

Geometric pattern



Qi dialect

Geometric pattern



Qi dialect

Geometric pattern



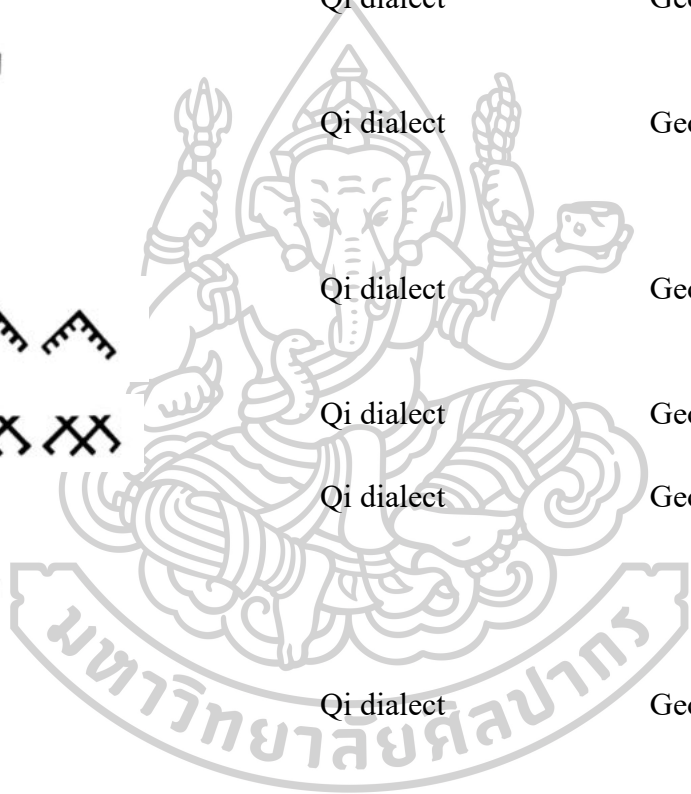
Qi dialect

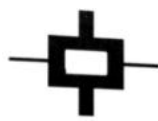




Geometric pattern



Qi dialect





Geometric pattern



	Qi dialect	Geometric pattern
	Qi dialect	Geometric pattern
	Qi dialect	Geometric pattern
	Qi dialect	Geometric pattern
	Qi dialect	Character patterns

Note. Data collected and analyzed by the author.

Table 11
A Compilation of Traditional Motifs from the Meifu Dialect

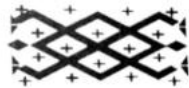
Pattern	The dialect to which it belongs	Explain
	Meifu dialect	Simplified human-shaped pattern
	Meifu dialect	Concrete human-shaped patterns
	Meifu dialect	Concrete human-shaped patterns
	Meifu dialect	Cow pattern



Meifu dialect Cow pattern



Meifu dialect Stone pattern



Meifu dialect Stone pattern



Meifu dialect Dog pattern



Meifu dialect Butterfly pattern



Meifu dialect Horse pattern



Meifu dialect Horse pattern



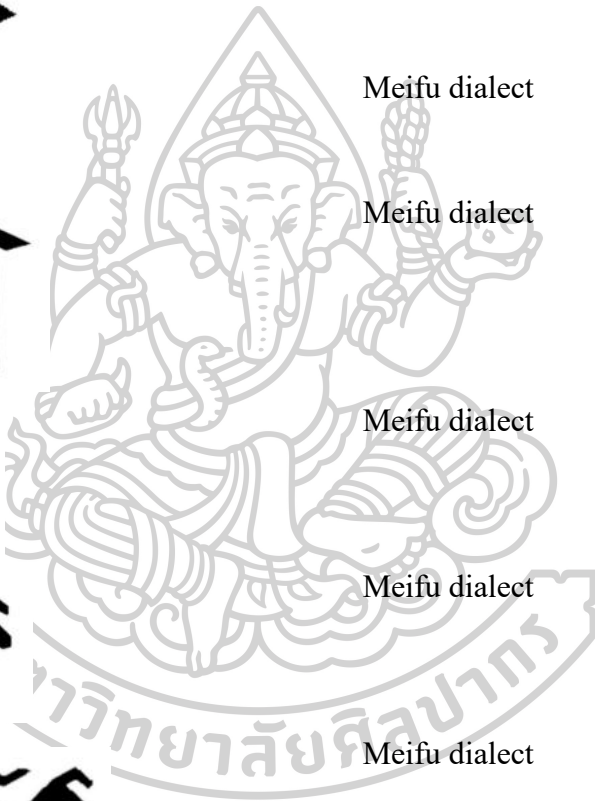
Meifu dialect Horse pattern



Meifu dialect Deer pattern














Meifu dialect Deer pattern

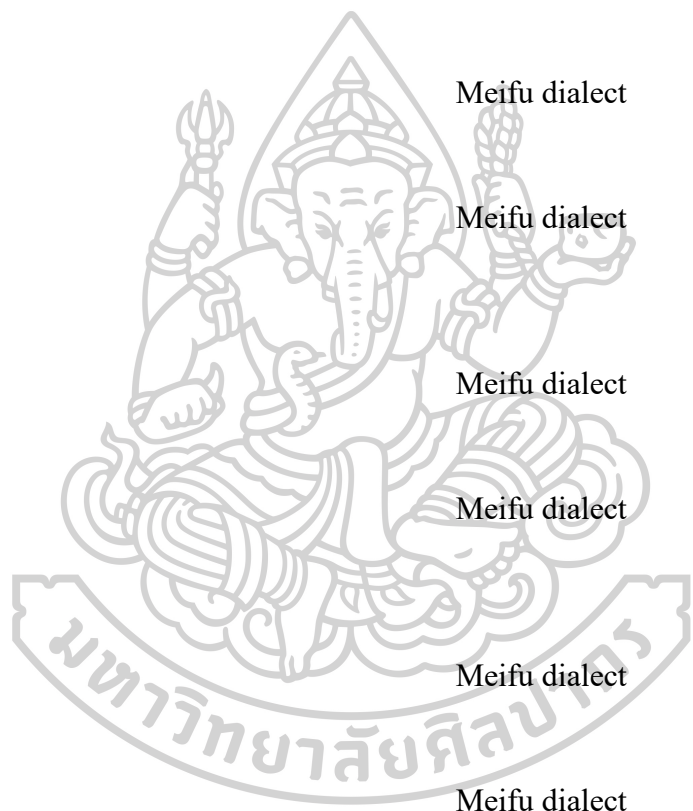


	Meifu dialect	Concrete frog pattern
	Meifu dialect	Concrete frog pattern
	Meifu dialect	Concrete frog pattern
	Meifu dialect	Concrete frog pattern
	Meifu dialect	Concrete frog pattern
	Meifu dialect	Concrete frog pattern
	Meifu dialect	Concrete frog pattern



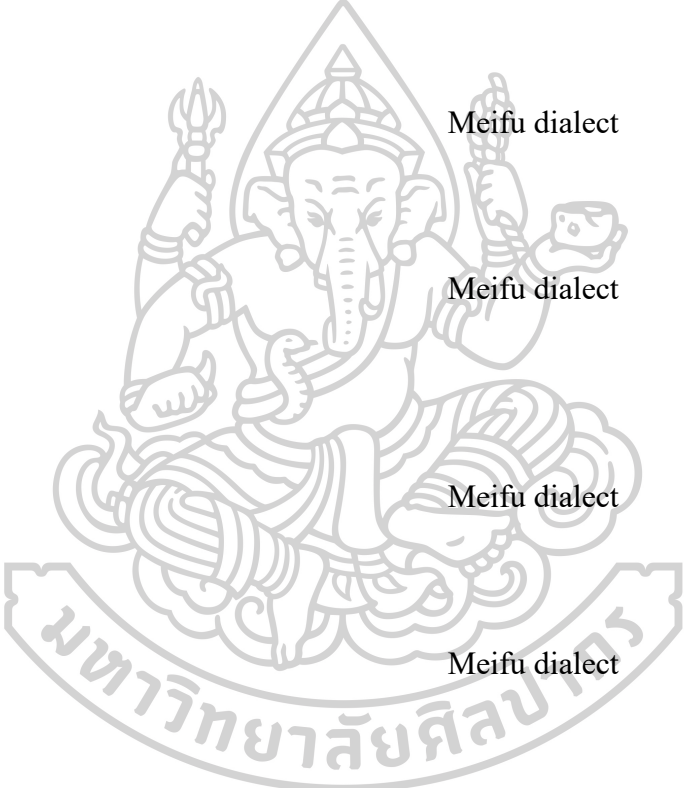
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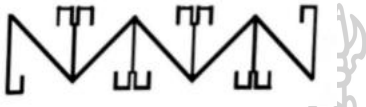







	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern

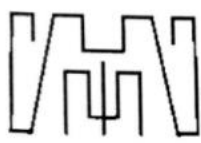


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	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Simplified frog pattern
	Meifu dialect	Geometric patterns
	Meifu dialect	Geometric patterns
	Meifu dialect	Geometric patterns
	Meifu dialect	Geometric patterns
	Meifu dialect	Geometric patterns
	Meifu dialect	Geometric patterns



	Meifu dialect	Geometric patterns
	Meifu dialect	Geometric patterns
	Meifu dialect	Geometric patterns
	Meifu dialect	Geometric patterns
	Meifu dialect	Geometric patterns
	Meifu dialect	Geometric patterns
	Meifu dialect	Symbolic patterns
	Meifu dialect	Symbolic patterns
	Meifu dialect	Symbolic patterns
	Meifu dialect	Symbolic patterns
	Meifu dialect	Symbolic patterns



Meifu dialect

Symbolic patterns



Meifu dialect

Symbolic patterns



Meifu dialect

Symbolic patterns



Meifu dialect

Symbolic patterns



Meifu dialect

Symbolic patterns



Meifu dialect

Symbolic patterns



Meifu dialect

Symbolic patterns



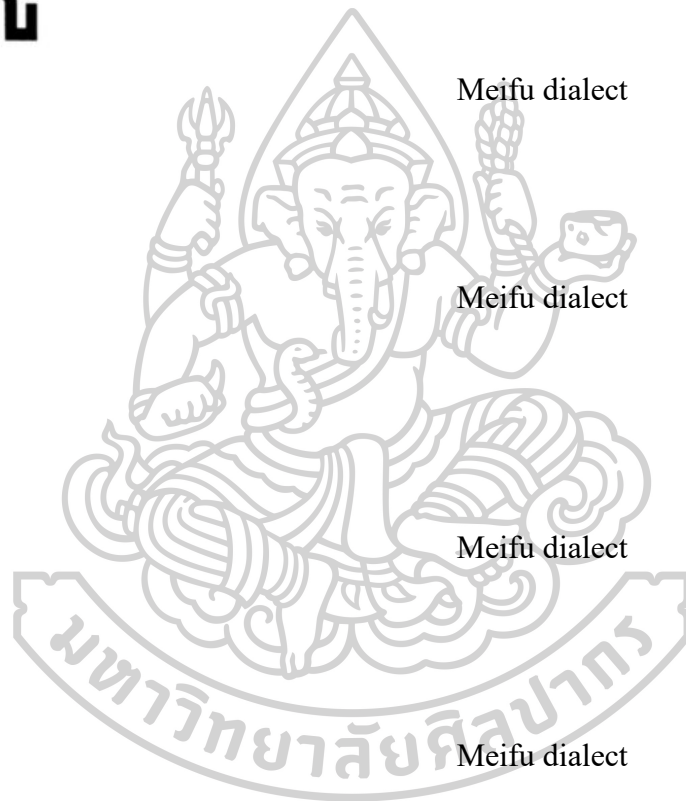
Meifu dialect

Symbolic patterns



Meifu dialect

Symbolic patterns



Note. Data collected and analyzed by the author.

Building upon the foundational motifs collected from the five dialect groups of Hainan, a systematic classification was carried out and presented in the table below. These primary patterns not only reflect the aesthetic principles of their respective dialect regions but also serve as the basis for subsequent derivative designs. With this visual and structural foundation in place, the following section delves into a semiotic interpretation of these motifs, exploring their cultural meanings through the lens of sign theory.

2.5.2 Interpretation of the Cultural Symbols of the Five Dialects of the Li Ethnic Group

The five dialect groups of the Li ethnic group—Ha, Qi, Mefu, Sai, and Run—have each developed distinct traditional pattern systems through long historical evolution. Due to differences in geographical environment, social structure, modes of production, and belief systems, the motifs of each dialect area exhibit unique stylistic traits, symbolic meanings, and semiotic features. By applying Peirce’s triadic model of signs (icon, index, and symbol) alongside Saussure’s theory of signifier and signified, these patterns can be semiotically classified and interpreted within their respective cultural contexts (Table 12).

Table 12

Classification of the five Li dialects

Dialect Area	Pattern Type	Symbolic Meaning	Semiotic Classification	Description
Ha Dialect	Geometric Patterns (e.g., triangles, diamonds)	Represents rice farming culture and social hierarchy	Indexical Sign	Geometric patterns are commonly found in weaving and pottery. Triangular and diamond shapes symbolize agricultural practices and social structures. The triangle also represents communication with the heavens, linked to ancestor worship.
Meifu Dialect	Animal Motifs (e.g., deer, fish)	Reflects totem worship	Iconic Sign	Animal motifs, such as deer, fish, and birds, reflect totemic beliefs

birds)

and ancestor worship. These patterns are realistic representations of life, vitality, and spiritual connections.

Sai Dialect
 Mythological Elements (e.g., sun, thunder god)
 Reflects mythological beliefs
 Symbolic Sign

Patterns inspired by mythological beliefs, such as the sun symbolizing divine power and the thunder god representing authority, carry symbolic meanings rooted in cultural and religious contexts.

Run Dialect
 Human Figures (e.g., dance figures)
 Represents sacrificial culture
 Iconic Sign

Human figures, particularly those depicting dance scenes, symbolize ritual practices, ancestor worship, and the unique cultural traditions of the Li people. These motifs are realistic depictions of human forms.

Qi Dialect
 Abstract Symbols (e.g., whirlpools, wavy lines)
 Represents ocean culture
 Indexical Sign

Abstract patterns, such as whirlpools and wavy lines, evoke natural phenomena like ocean currents and water, reflecting the Li people's strong connection to maritime culture and the natural world.

Note. Analyzed by the author.

Following the classification of dialects and their respective symbolic meanings, it is necessary to further explore one of the most representative and widely used motifs in Li culture — the human figure pattern. This motif plays a crucial role across the five Li dialects, especially in Li brocade weaving, where it serves as a rich carrier of Li cultural heritage.

In the visual design based on the five Li dialects of Hainan, semiotic theory plays a pivotal role in transforming traditional cultural elements into visually expressive symbols with contemporary relevance. The core of the design strategy lies in the recognizability of symbols and their cultural communicative functions. Visual imagery is no longer merely pursued for aesthetic appeal but constructed as encoded information carrying profound cultural meanings(Zhou, 2007).

Firstly, the design develops a visual language through the semiotic extraction of concrete cultural elements from Li culture, including totems, traditional costumes, color schemes, and decorative patterns. These elements function as “signifiers” pointing to specific “signified” cultural concepts, consistent with Ferdinand de Saussure’s linguistic sign model. The encoding process ensures that each visual form not only reflects the distinct visual features of specific dialect groups (Sai, Ha, Qi, Run, Meifu) but also conveys their unique historical and cultural identities(Yuanyuan Chen & Xiaoling Xu, 2024).

Secondly, Charles Sanders Peirce’s triadic model of signs — icon, index, and symbol — is implicitly applied in constructing these visual images. The appearance mimics traditional Li clothing and facial patterns (icons); particular gestures or accessories imply cultural practices or social roles (indexes); while abstract patterns, such as deer, waves, feathers, and boats, serve as symbols communicating spiritual beliefs, myths, and values(Bansal et al., 2024).

For example: Sai dialect imagery uses feather headdresses and red-black woven patterns to symbolize rituals and identity; Ha dialect incorporates pottery and animal totems representing fertility and family life; Qi dialect employs boat-shaped tattoo totems evoking the group’s maritime traditions; Run dialect features flowing wave-line patterns expressing nature worship and harmony; Meifu dialect emphasizes facial tattoos and deer imagery symbolizing strength and transformation(Li, 2024a).

These symbols are subsequently reconstructed and modernized during the design process to achieve two objectives: cultural identification and communicative adaptability. Through abstraction, simplification, color adjustment, and proportion modification, the designs retain ethnic essence while becoming more accessible and appealing to a broader audience(Sun & Ab Aziz, 2023).

As the visual translation of ethnic cultural symbols shifts from traditional media toward broader communicative contexts, especially with the rise of digital media, the adaptability and reception of these symbols are reshaped. The digital environment presents both opportunities and challenges for dissemination, necessitating the development of semiotic strategies to maintain and strengthen the cultural meanings embodied in these symbols. Whether modernized signs can effectively convey their

cultural connotations to diverse digital audiences has become a key issue in contemporary visual communication design(Twenge et al., 2019).

2.6 Research on Ethnic Cultural Visual Design and Multimedia Expression

In recent years, propelled by the national strategy of “cultural confidence” and the implementation of “intangible cultural heritage revitalization” policies, the pathways for ethnic cultural visual expression have undergone profound transformations. The dissemination of traditional ethnic patterns has shifted from static, isolated displays to dynamic, systematic, cross-media expressions. The role of design has evolved from mere “reproduction” to the “reconstruction of cultural language,” emphasizing the construction of visual systems and cross-media adaptability. This study focuses on the contemporary expressive transformation of ethnic patterns, with an emphasis on four major media pathways: apparel, cultural and creative products, digital imagery, and exhibition spaces, while further analyzing structural issues faced by current multimedia integration(Zhang, 2021).

2.6.1 Contemporary Expressive Transformation of Ethnic Patterns

In the context of modern design, traditional ethnic patterns have undergone a transformation from “symbol extraction” to “visual system construction.” Early design practices often employed ethnic patterns as mere decorative elements, emphasizing formal aesthetics while neglecting their semantic load, resulting in superficial cultural expression and aesthetic homogenization. Recently, design research has increasingly focused on the semantic structure, cultural narrative function, and communicative adaptability of patterns(Nagel, 1994).

Chen Xiaan (2016) proposed: “The contemporary expression of ethnic patterns should transcend graphic imitation to construct a ‘visual grammar system’ with linguistic functions.” He identified three structural functions of patterns: visual morphemes (basic graphic symbols) — grammatical structures (pattern composition logic) — communicative adaptation (media function linkage). This view aligns with the semiotic triadic structure of “signifier — signified — cultural context,” enhancing cultural depth in visual communication(Chen, 2016).

Moreover, current design trends are progressively advancing toward “dynamic semantic generation.” For instance, “pattern animation” and “interactive semantic maps” have been introduced in digital platforms, enabling ethnic patterns to dynamically generate cultural semantic content based on user behavior, reflecting contextual adaptability and regenerative dissemination power of patterns(Alqudah & Khasawneh, 2024).

2.6.2 Comparative Analysis and Selection of Media Pathways

Within the context of multimedia communication, different media pathways exhibit distinct advantages and limitations in conveying ethnic pattern visual

expressions. Through systematic review and analysis of existing literature and cases, the following three pathways have emerged as the most potent in terms of dissemination potential and cultural expressiveness(Ohm, 2012):

(1) Apparel Pathway: Dual Binding of Everyday Use and Cultural Identity

Ethnic patterns gain the strongest everyday visibility through “wearing,” making apparel a key path for the visual cultural integration into daily life. Apparel’s closeness and mobility transform ethnic patterns from static decorations into dynamic disseminators(Han, 2020). Especially within the contemporary social psychology of “wearing ethnicity as identity expression,” clothing serves as an important symbolic channel for cultural identity construction(Xia & Wang, 2013).

Furthermore, modern ethnic apparel design is increasingly shifting from “retro restoration” toward “structural embedding,” meaning that patterns correspond symbolically with body parts based on garment functional zones. This approach not only enhances visual aesthetics but also establishes symbolic connections between ethnic patterns and the wearer’s body, thereby stimulating deeper cultural belonging(Ohm, 2012).

(2) Digital IP Imagery Pathway: Emotional Communication and Cross-Platform Extension

Digital imagery, such as virtual humans and IP characters, has become one of the most powerful tools for visual communication in the current media environment. Research indicates that the “anthropomorphized + personalized + interactive” characteristics of digital IPs enable stronger emotional expression(He, 2021). Once ethnic patterns are integrated into character design (in hairstyles, costumes, emoticons, etc.), they transition from mere symbols to “storytelling entities” capable of deeply bonding emotionally with users.

Simultaneously, digital visual patterns possess high replicability and diverse dissemination channels (social media, short videos, games, etc.), with their visual styles and cultural tags more readily accepted and spread among younger audiences. Patterns activated through character narratives reinvigorate their underlying cultural archetypes, establishing a multi-tiered dissemination mechanism from “visual beauty” to “cultural identity(Heang & Chuong, 2025).”

(3) Cultural and Creative Product Pathway: High Frequency Usage and Participatory Communication Advantages

Cultural and creative products combine “functionality” and “cultural resonance,” bringing ethnic patterns from exhibition halls into users’ hands. Cultural communication scholars argue that cultural creative dissemination emphasizes “light media, high frequency, low investment, high participation,” representing an effective path for cultural cognition from “viewing” to “usage” to “emotional memory”(Li & Xiao, 2021).

Particularly through strategies such as “pattern modularization + user DIY + scene co-creation,” cultural creative products establish a “user participatory” dissemination model. Patterns cease to be untouchable historical heritage and become

cultural assets that can be recombined, collaged, and interpreted. This meets modern demands for personalized, entertaining, and convenient cultural consumption and constitutes the most efficient and subtly educational carrier (Langlois, 2013).

(4) Limitations Compared to Exhibition Pathway

Although exhibition spaces (e.g., museums, art exhibitions) can create immersive experiences, their audience is concentrated, duration limited, and media fixed, making it difficult to form long-term, everyday, and interactive dissemination chains. Exhibitions primarily serve the functions of “knowledge output” and “cultural display” but struggle to establish active user participation and feedback mechanisms. Therefore, their effectiveness is relatively limited in design strategies aimed at widespread penetration and impact on younger generations (Bock, 2009).

In summary, apparel, visual characters, and cultural and creative products constitute the most advantageous contemporary expression pathways for ethnic patterns, with the three complementing each other (see Table 13).

Table 13

Mode of expression

Dimension	Apparel Pathway	Visual Character Pathway	Cultural & Creative Pathway
Communication Frequency	High (Everyday Wear)	High (Social Media)	High (Portable Use)
Cultural Expression Approach	Embodiment, Structuration	Personification, Narrativization	Functionalization, Participation
User Emotional Connection	Strong (Identity Expression)	Strong (Character Resonance)	Strong (Participatory Creation)
Interaction Mechanism	Passive Reception + Identification	Interactive Dialogue + Emotional Identification + Participation	Active Combination + Creative Participation
Adaptation to Media Trends	Aligned with Fashion Consumption Trends	Adapted to Digital Social Contexts	Meets Personalized Cultural Consumption

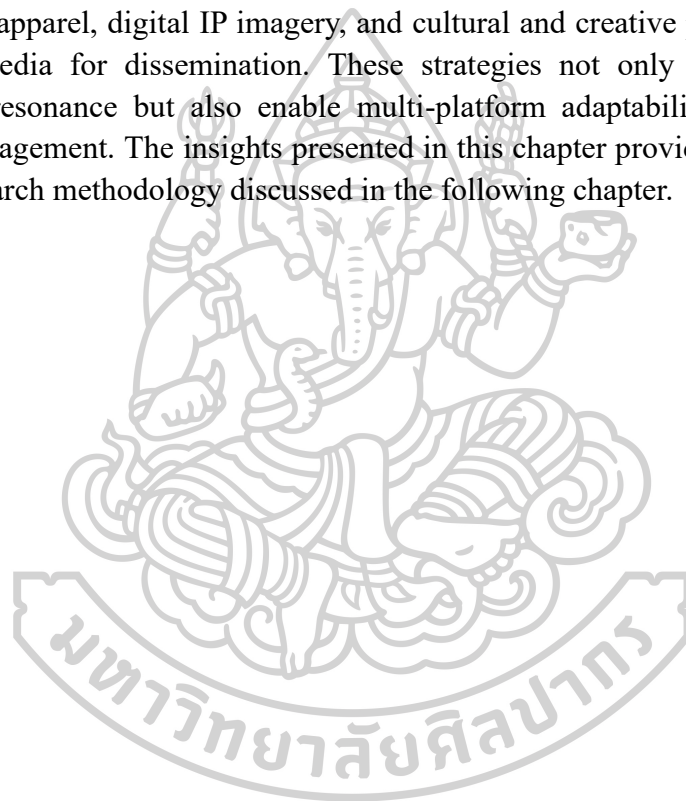
Note. Analyzed by the author.

Therefore, in the visual design practice focusing on the patterns of the five dialects of the Li ethnic group, the choice of a triadic pathway combining apparel,

visual pattern, and cultural and creative products not only offers profound cultural narrative expressiveness but also provides cross-media and multi-platform dissemination potential along with strong adaptability to contemporary contexts.

2.7 Chapter Summary

This chapter systematically examined the foundational motifs of the five dialects of the Lì ethnic group and interpreted their symbolic meanings through a semiotic lens. By applying theories from Peirce and Saussure, the chapter highlighted the cultural depth and structural logic embedded in traditional patterns. Furthermore, it explored contemporary pathways for the expressive transformation of ethnic motifs, identifying apparel, digital IP imagery, and cultural and creative products as the most effective media for dissemination. These strategies not only enhance visual and emotional resonance but also enable multi-platform adaptability and participatory cultural engagement. The insights presented in this chapter provide a theoretical basis for the research methodology discussed in the following chapter.



CHAPTER 3

RESEARCH METHODOLOGY

This study aims to explore the cultural symbols embedded in the five dialects of the Li ethnic group based on semiotic theory and to reconstruct and disseminate these symbols through contemporary visual design methods, thereby enhancing the communicative power and recognizability of Li culture. This chapter provides a detailed description of the research framework, process, methodology, sample selection, research instruments, and data analysis strategies employed to ensure the study's scientific rigor, systematic approach, and operational feasibility.

3.1 Research Framework and Strategy

This study adopts a Mixed Methods Research approach, integrating qualitative and quantitative methods. On one hand, qualitative methods—such as literature review, field investigation, and expert interviews—are employed to gain an in-depth understanding of the cultural connotations and semiotic systems within the five Li dialects. On the other hand, quantitative methods—including surveys and user testing—are used to quantify user acceptance and feedback on the visual design proposals, thereby facilitating mutual support between theory and practice and enhancing the explanatory power and applicability of the findings. The research is structured into four phases:

- Phase One: Literature Review and Situational Analysis
- Phase Two: Expert Interviews and Questionnaire Design
- Phase Three: Visual Design Development
- Phase Four: Evaluation and Effectiveness Verification

3.2 Phase One: Literature Review and Field Investigation

3.2.1 Literature Analysis

Initially, a systematic review of literature on the history of the Li people, distribution of the five dialects, cultural connotations, and ethnic totems, costumes, and patterns is conducted. Subsequently, the focus shifts to the application of semiotic theories (Saussure and Peirce's frameworks) in ethnic visual design to establish the theoretical analytical framework of this study. Additionally, research outcomes related to IP characters in visual communication design, indigenous cultural redesign, and cultural dissemination strategies are examined to inform and support subsequent design efforts.

3.2.2 Field Investigation

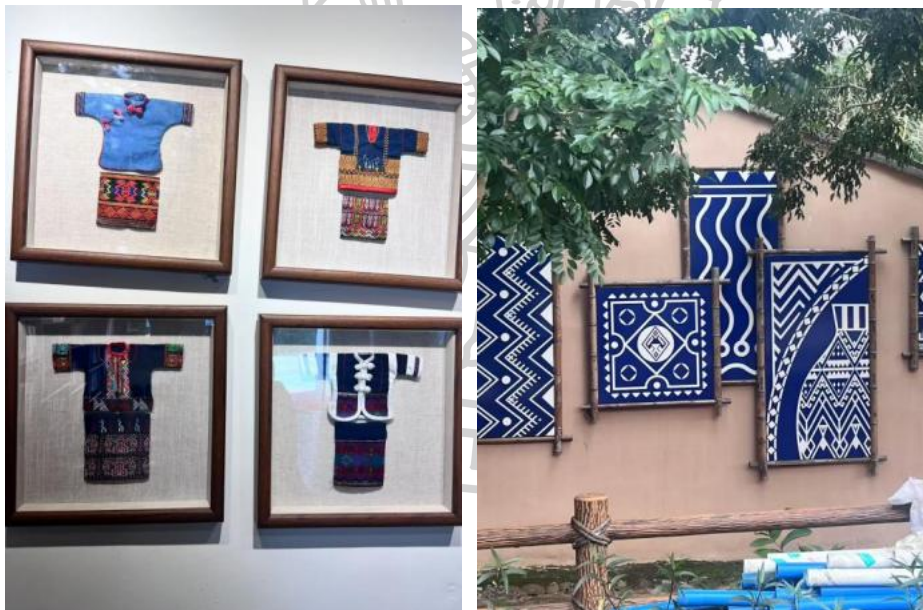
Fieldwork is carried out in major Li ethnic settlements in Hainan Province, including Baoting, Ledong, Wuzhishan, Dongfang, and Changjiang. The investigation covers:

1. Language use contexts and cultural differences across the five local dialects;
2. Folk traditional patterns (woven brocade, pottery, costume motifs) and their semiotic characteristics;
3. Presentation forms of intangible cultural heritage related to Li culture;
4. Local residents' perception and acceptance of Li cultural visual imagery.

Data collection methods include on-site photography, interview recordings, and field notes, serving as foundational materials for subsequent symbol extraction and visual reconstruction (Figure 14).

Figure 14

Fieldwork Notes



Note. Photographed by the author.

3.3 Phase Two: Expert Interviews and Questionnaire Design

3.3.1 Expert Interviews

To gain an in-depth understanding of the cultural connotations of the Li ethnic group and the contemporary expressive possibilities of its symbolic representations, semi-structured interviews were conducted with three experts, including one expert in

costume design, one expert in Li ethnic patterns, and one expert in visual communication design. The interviews focused on topics such as the linguistic and cultural characteristics of the five Li dialects, challenges in visually translating these dialects, the symbolic meanings of traditional patterns, and recommendations for redesigning and disseminating ethnic symbols. The interviews were audio-recorded, transcribed, and subjected to coding analysis to extract key research terms and critical elements for visual design.

3.3.2 Questionnaire Design and Distribution

A structured questionnaire was designed, comprising the following sections:

Awareness of and interest in Li culture;

Visual acceptance of traditional patterns;

Preferences regarding graphic design, color schemes, and character settings;

Usage habits of visual IP dissemination media (e.g., social media, brochures, tourism souvenirs).

The sample targeted local youth in Hainan Province (aged 18–40), design-related professionals and students, as well as tourism consumers. A total of 400 questionnaires were distributed and all 375 were validly returned. Stratified random sampling was employed to ensure sample diversity and representativeness.

3.4 Phase Three: Visual Design Development Based on Semiotics

3.4.1 Extraction of Semiotic Elements

Drawing on prior fieldwork and theoretical analysis, cultural symbols with potential for visual communication were extracted from daily language, representative objects, and typical patterns of the five Li dialects based on the triadic semiotic model (symbol, index, icon). A “symbol dictionary” was constructed accordingly.

3.4.2 Construction of the Visual System

The extracted symbolic elements were visually rendered into designs including but not limited to:

1. Character designs embodying Li visual elements;
2. Totemic logos, color systems, and costume patterns for the characters;
3. Application scenarios such as cultural walls, cultural and creative products, and apparel.

4. The design style integrates modern flat design, ethnic totemic geometric motifs, and soft color contrasts to enhance visual communication effectiveness and user recognition.

3.4.3 Iterative Design Refinement

After the initial design drafts were completed, two rounds of expert reviews were conducted. Design details and symbol congruence were adjusted based on expert feedback. Concurrently, small-sample pilot testing was carried out within the target user group to collect suggestions for further optimization.

3.5 Phase Four: User Testing and Effectiveness Evaluation

To verify the effectiveness of the design proposals in real-world dissemination contexts, two evaluation components were implemented:

3.5.1 Questionnaire Evaluation

The final design proposals were presented to target users via images and scenario simulations, and feedback questionnaires were collected. Evaluation dimensions included cultural recognizability, visual appeal, emotional resonance, and adaptability to application scenarios.

3.5.2 In-Depth Interviews

Twelve participants were selected from the user testers for supplementary in-depth interviews to explore their understanding, emotional connection, and suggestions regarding the ethnic elements in the design. The interview data were thematically categorized and content-analyzed to deepen the interpretative insights of the study.

3.6 Data Analysis

This study employs a combination of quantitative and qualitative data analysis strategies. Questionnaire data were statistically aggregated using the Wenjuanxing platform, while interview transcripts and textual content were processed using content analysis to extract themes. The symbolic semiotic theory was applied to interpret and evaluate visual design elements comprehensively, thereby elucidating the cultural value and communicative efficacy of the Li five-dialect IP visual imagery.

3.6.1 Basic Statistical Analysis of Questionnaire Data

Automated statistical analysis was conducted on the collected questionnaires via Wenjuanxing, focusing on:

Frequency and percentage analysis: Reporting response frequencies and proportions for each item to understand audience awareness and acceptance of Li cultural elements, e.g., how many respondents recognize Li dialect identifiers and perceive the graphic designs as culturally aesthetic;

Mean analysis (for scaled questions): For Likert-type or rating-scale items (e.g., 1–5 or from “strongly dislike” to “strongly like”), mean scores were provided to assess popularity of design elements such as color schemes, patterns, and character settings;

Cross-tabulation (basic): Using Wenjuanxing’s cross-analysis to compare variables such as “knowledge of Li culture” and “preference for visual design,” revealing the impact of background variables on design evaluation. These descriptive statistics provide an objective basis for assessing general acceptance and cultural cognition of the design proposals.

3.6.2 Content Analysis of Interview Data

Audio recordings from expert interviews and user follow-ups were transcribed and subjected to content analysis through the following steps:

Thematic coding: Open reading of transcripts to extract high-frequency terms and key viewpoints, generating preliminary codes;

Categorization and summarization: Grouping related codes into thematic categories such as “cultural understanding,” “visual acceptance,” and “design suggestions”;

Synthesis of viewpoints: Summarizing constructive feedback from multiple experts and users to inform design refinement.

3.7 Chapter Summary

This chapter systematically elaborates the overall methodological framework of the study, establishing a research pathway centered on mixed methods. Initially, the literature review collated domestic and international findings on Li culture, visual symbols, ethnic IP design, and semiotic applications, providing a solid theoretical and design foundation. Subsequently, fieldwork and data collection in major Li communities gathered dialect distribution, folk patterns, and contextual imagery to supply authentic cultural materials for design.

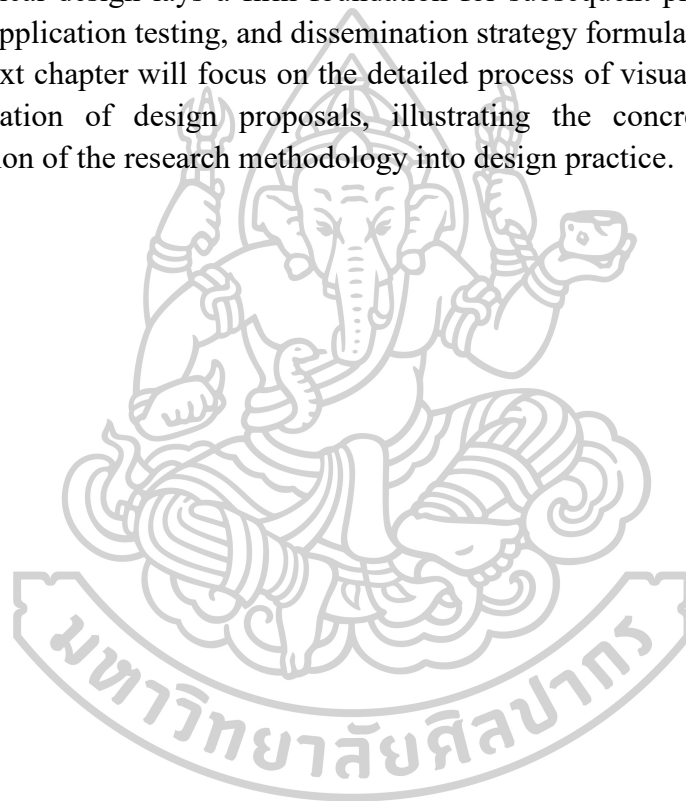
Data collection proceeded in a phased manner:

1. Phase One constructed the design corpus through onsite photography and cultural material gathering;
2. Phase Two integrated expert interviews and questionnaires to capture multidisciplinary perspectives from ethnology, design, and user groups;

3. Phase Three involved iterative expert evaluations to continuously optimize the visual design;
4. Phase Four obtained genuine audience feedback via online and offline user research on the visual imagery.

Data analysis combined descriptive statistics afforded by the Wenjuanxing platform with qualitative thematic content analysis of interview materials. This integrative approach ensured both objectivity and comprehensiveness, enabling an in-depth theoretical construction of the Li five-dialect IP visual design. The robust methodological design lays a firm foundation for subsequent presentation of design outcomes, application testing, and dissemination strategy formulation.

The next chapter will focus on the detailed process of visual identity design and the presentation of design proposals, illustrating the concrete application and transformation of the research methodology into design practice.



CHAPTER 4

RESEARCH RESULT

4.1 Questionnaire survey and expert opinion interview

4.1.1 Expert Interview Analysis (Phase One)

In the pre-design phase, the research team conducted the first round of expert interviews focusing on three core areas: the visual characteristics of Li traditional culture, the cultural meanings of ethnic patterns, and the possibilities for applying these motifs in modern design contexts.

Table 14 Experts Interview Result

Expert	Main themes of interview questions
Tian qian	<p>Visual System Evaluation: This study demonstrates a rigorously structured visual framework with coherent logical progression, where graphic translation adheres to semiotic principles to achieve high recognizability and disseminative potency.</p> <p>Recommendations: Formalize the graphic grammar system into a "Pattern Semantics Handbook" or "Visual Language Library" to standardize future IP extensions and cross-platform design applications. Implement active decoding mechanisms (e.g., AR interfaces, interactive animations) to transform audience engagement from passive viewing to participatory interpretation.</p>
Deng hong	<p>xi Design Methodology Assessment: This study transcends superficial pattern application, establishing a three-dimensional "motif-structure-semantics" framework that enables systematic innovation. The five apparel pieces effectively manifest cultural distinctions among the five Li linguistic subgroups, with targeted expressions in: Silhouette tailoring reflecting regional identities Chromatic zoning mapping cultural geography</p>

Textile selection preserving artisanal legacies

Recommendation:

Develop a design-to-market pathway to contextualize totemic heritage through wearable manifestations, thereby advancing traditional symbolism into contemporary sartorial practice.

Chen dan

Cultural Semiotics Evaluation:

The research demonstrates methodical classification and semantic distillation of Li ethnic patterns, particularly in its academically rigorous tripartite categorization of iconic, symbolic, and indexical signs. The designs authentically **preserve** the embedded cultural significances—including sacrificial rites, spiritual beliefs, and cosmological perspectives—within these motifs.

Recommendation:

Establish artisan-led co-creation frameworks to ensure culturally grounded hermeneutics, transforming design practice from extractive appropriation to ethically sound cultural empathy.

Note. Analyzed by the author.

4.1.1.1 Visual Expression Characteristics of Li Nationality's Traditional Culture

Most experts agreed that Li culture is highly visual, relying heavily on patterns, textiles, and costumes to convey historical narratives, beliefs, and social identity in the absence of a written script. These visual symbols serve as vital carriers of cultural memory.

4.1.1.2 The Cultural Semantics of National Patterns

Experts highlighted that Li ethnic patterns are rooted in nature worship, totemic belief, and daily life, often bearing gendered significance. For instance, the “Power God” totem emphasizes masculinity and protection, while the “Fish Tail” motif symbolizes fertility and female vitality.

4.1.1.3 Modern Design Tips for Pixel Conversion

Experts unanimously recommended avoiding direct duplication of traditional patterns. Instead, they advised abstract reinterpretation, form simplification, and optimized color schemes to modernize the visuals. Adding semantic layers—such as narrative

elements or character-driven designs—was suggested to enhance communicative power.

In summary, the first phase of expert interviews provided valuable theoretical grounding for understanding the cultural logic, motif extraction strategies, and symbolic design methods, guiding the subsequent stages of the design process.

4.1.2 Questionnaire Data Analysis (Phase One)

To gain a deeper understanding of public perceptions and acceptance of Li ethnic costumes and patterns, the research team designed and distributed a structured questionnaire, collecting a total of 498 valid responses. This phase of the survey focused on four main aspects: awareness of Li culture, visual acceptance of traditional patterns, preferences for various design styles, and habits of using visual IP media.

4.1.3 Demographic Data of Respondents

This section reports the demographic data of the 489 participants in this study. Gender and age are shown in Tables 1 and 2, respectively.

Table 15 Question 1 Gender

Gender	frequency	percentage
male	231	46.39
Female	249	50
Prefer not to disclose	18	3.61
All	498	100

Notes were collected, compiled, and analyzed by the researchers.

According to Table 16, the majority of the participants (231 people, 46%) were male; 249 people (50%) were female; and 18 people (4%) did not wish to disclose their gender information.

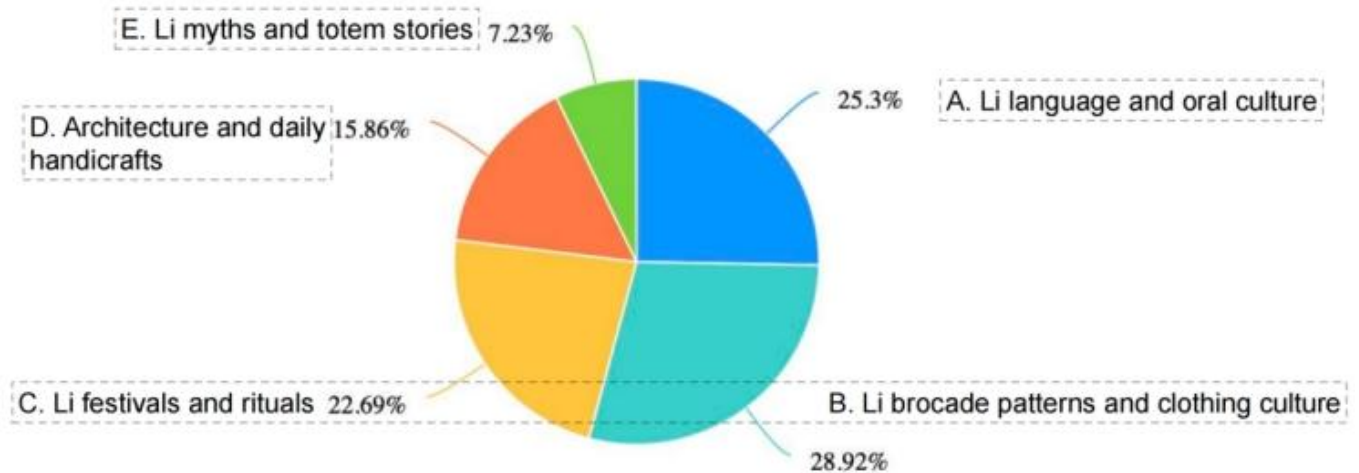
Table 16 Question 2 Age

Age	frequency	percentage
Under 18	43	8.63
18-25	233	46.79
26-35	94	18.88
36-45	84	16.87
46+	44	8.84
All	498	100

Table 2 shows that the majority of participants are aged 18-25 (47%). Those aged 26-35 account for 19%, and those aged 36-45 make up 17%. There are 44 people aged 46 and above, accounting for 9%. Among them, 8% are under 12 years old.

Figure 15

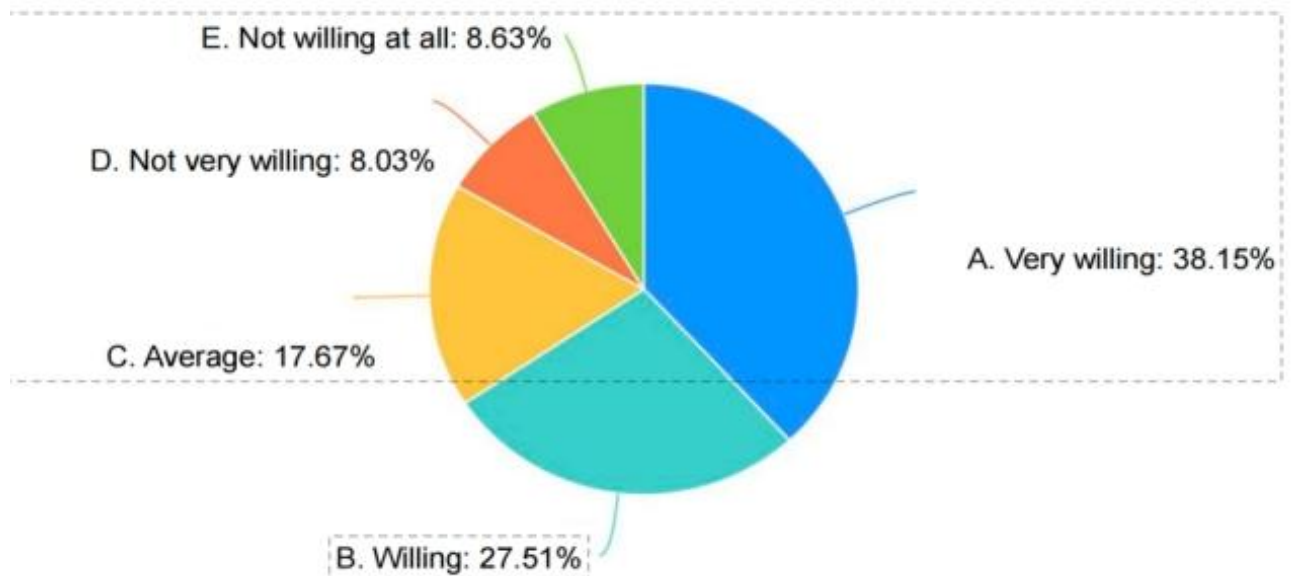
Interesting results of Li nationality cultural elements



Note. Analyzed by the author.

shows that most participants (29%) were interested in ethnic costumes and culture; 25% were interested in Chinese language and spoken culture; 23% were interested in ethnic festivals and rituals; 16% were interested in architecture and handicrafts; and 7% were interested in ethnic myths and totem stories. Table 3

Figure 16
Willing to learn about traditional Chinese culture

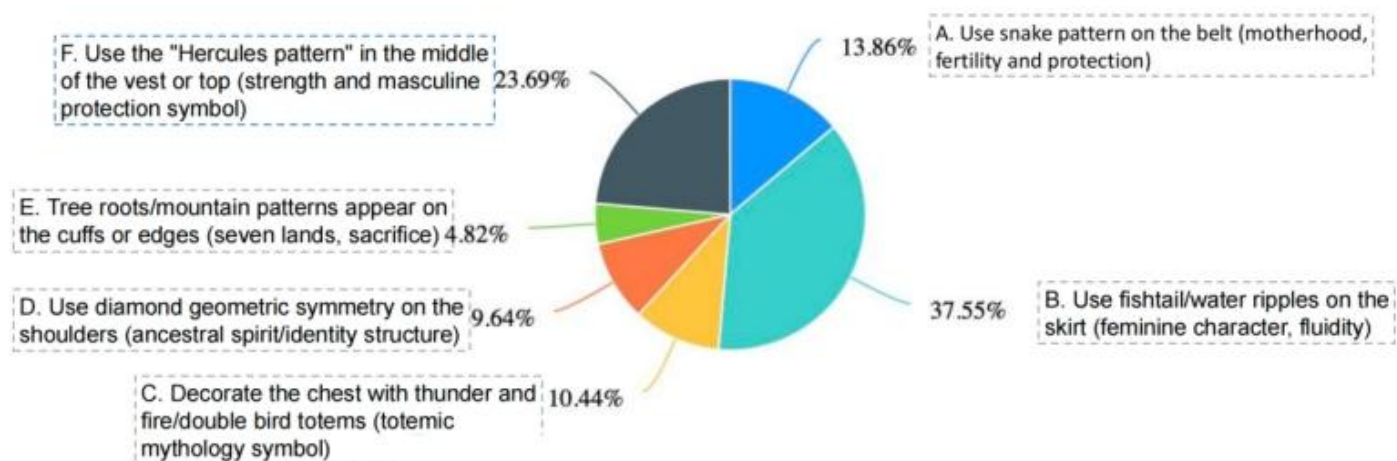


Note. Analyzed by the author.

The notes were collected, compiled and analyzed by the researcher.

Table 4 shows that most people (38%) are willing to learn about traditional Chinese culture; 26% are willing to learn, 18% are average; 8% are not very willing; and 8% are completely unwilling.

Figure 17
Ranking results of Li nationality clothing patterns



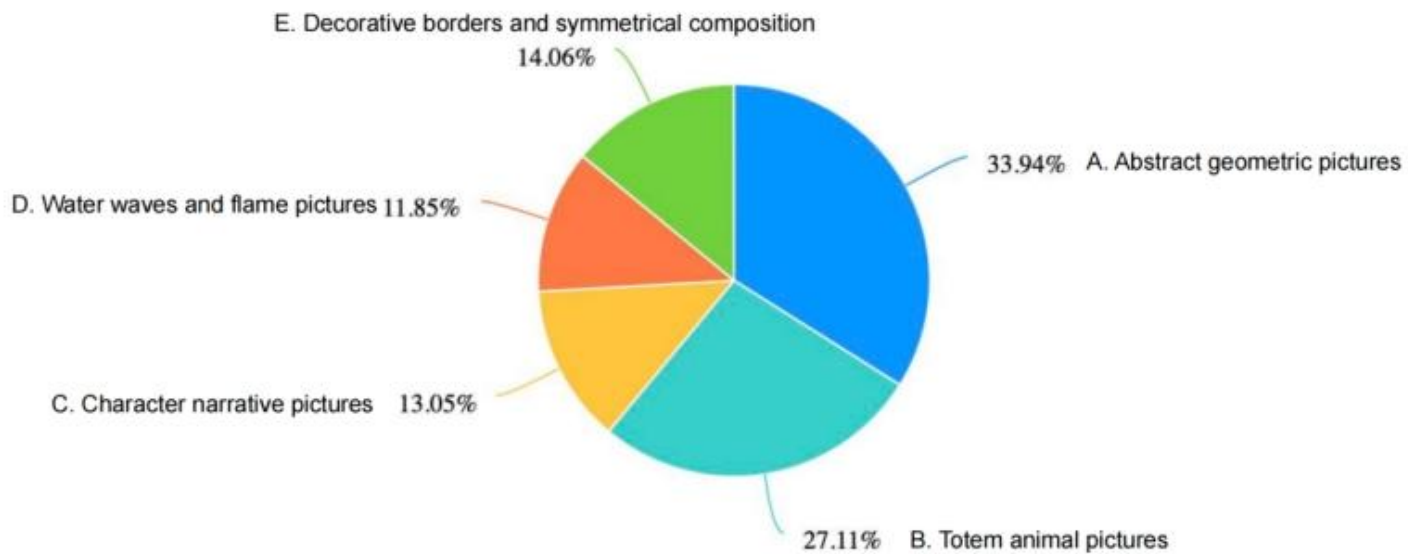
Note. Analyzed by the author.

Table 5 shows that 38% of people prefer to use fishtails and water ripples on skirts (feminine characteristics, fluidity); 24% choose to use the "Hercules pattern" in the

west or the middle of the top (symbol of strength and protection); 14% of people use snake patterns on belts (motherhood, fertility and protection); 10% choose to decorate the chest with thunder and double bird totems (totemic mythological symbols); 10% choose to use diamond geometric symmetrical patterns on the shoulders (ancestral spirit/identity structure)

Figure 18

Style attractiveness ranking results

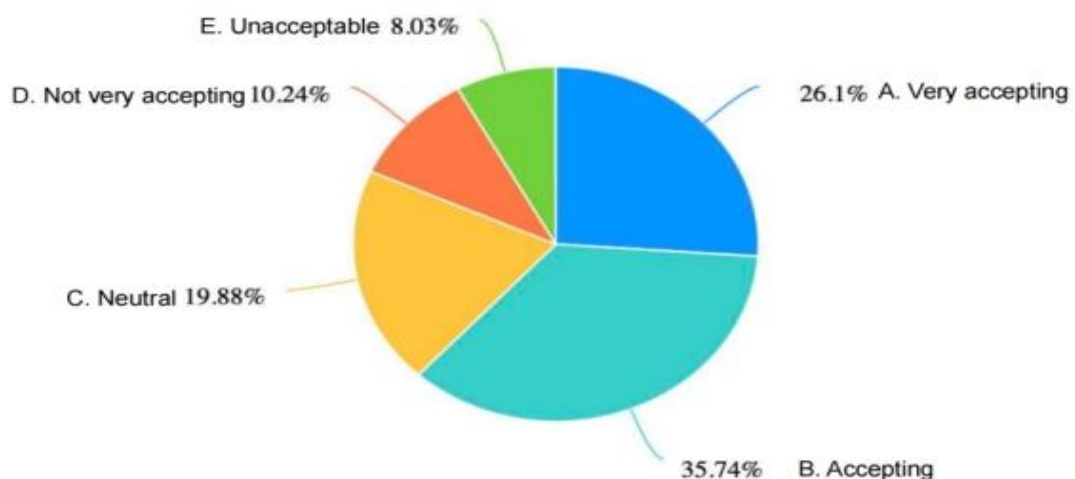


Note. Analyzed by the author.

Table 6 shows that most people (34%) chose abstract geometric pictures; 27% chose totemic animal pictures; 14% chose decorative borders and symmetrical compositions; 13% chose character narrative compositions; and 12% chose water waves and flames.

Figure 19

Accept the results of using Li brocade patterns in modern product design

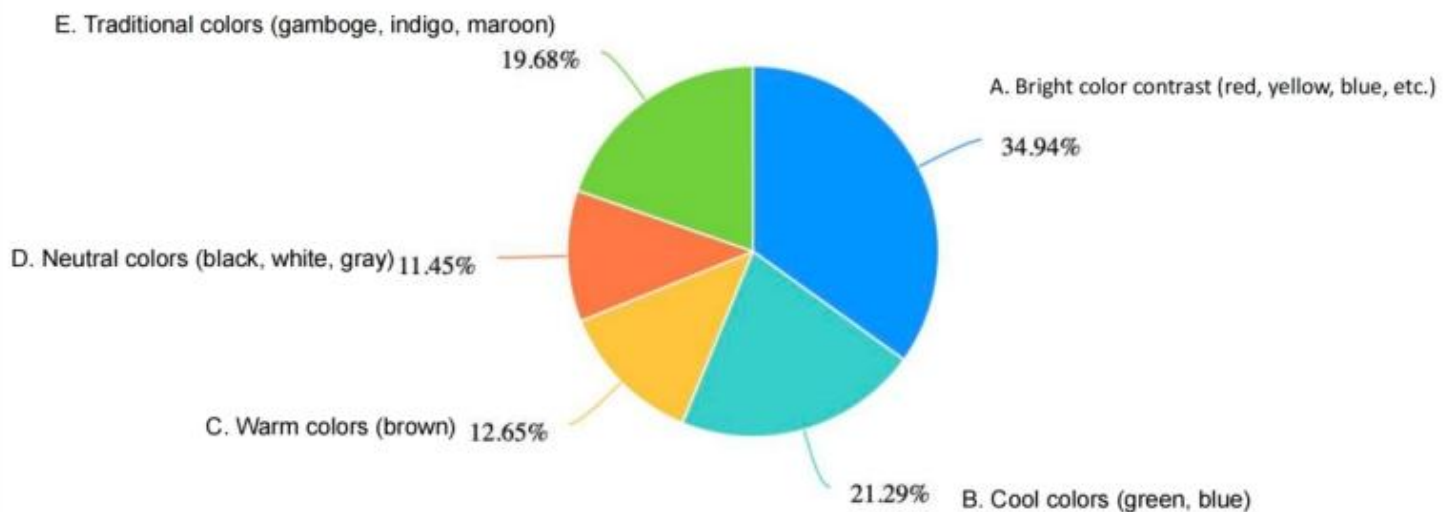


Note. Analyzed by the author..

Table 7 shows that most participants (36%) chose to accept the use of Li brocade patterns in modern product design; 26% chose to be very accepting; 20% chose to be neutral; 10% chose to be not very accepting; and 8% chose to be unacceptable.

Figure 20

Results on which color you prefer in accessories/clothing design

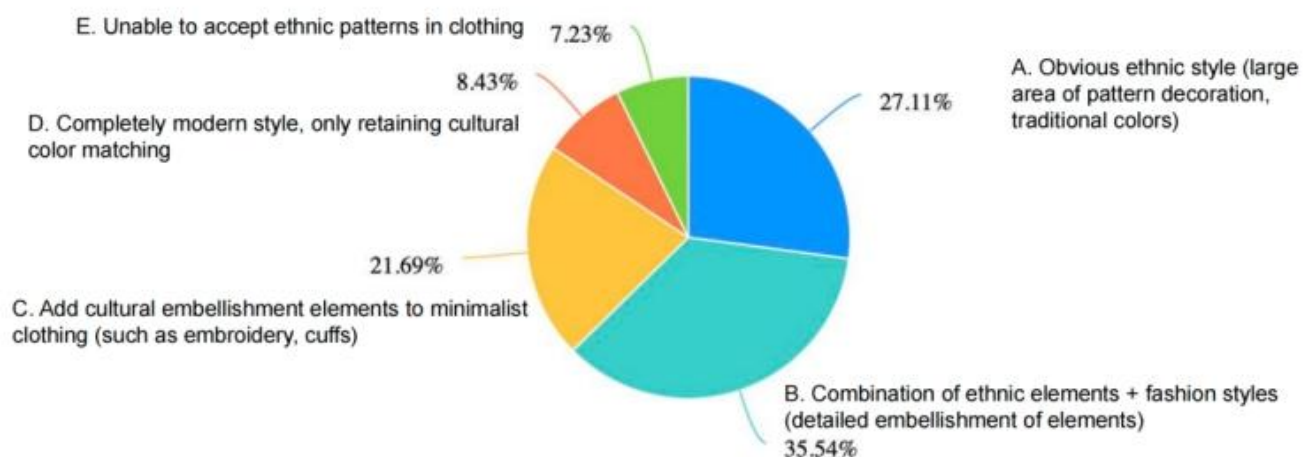


Note. Analyzed by the author.

Table 8 shows that most participants (35%) chose bright color contrast (red, yellow, blue, etc.); 21% chose cool colors (green, blue); 20% chose traditional colors (turmeric, indigo, maroon); 13% chose warm colors (brown); and 11 chose neutral colors (black, white, gray).

Figure 21

The clothing uses Li ethnic patterns as the core element. Which style do you prefer

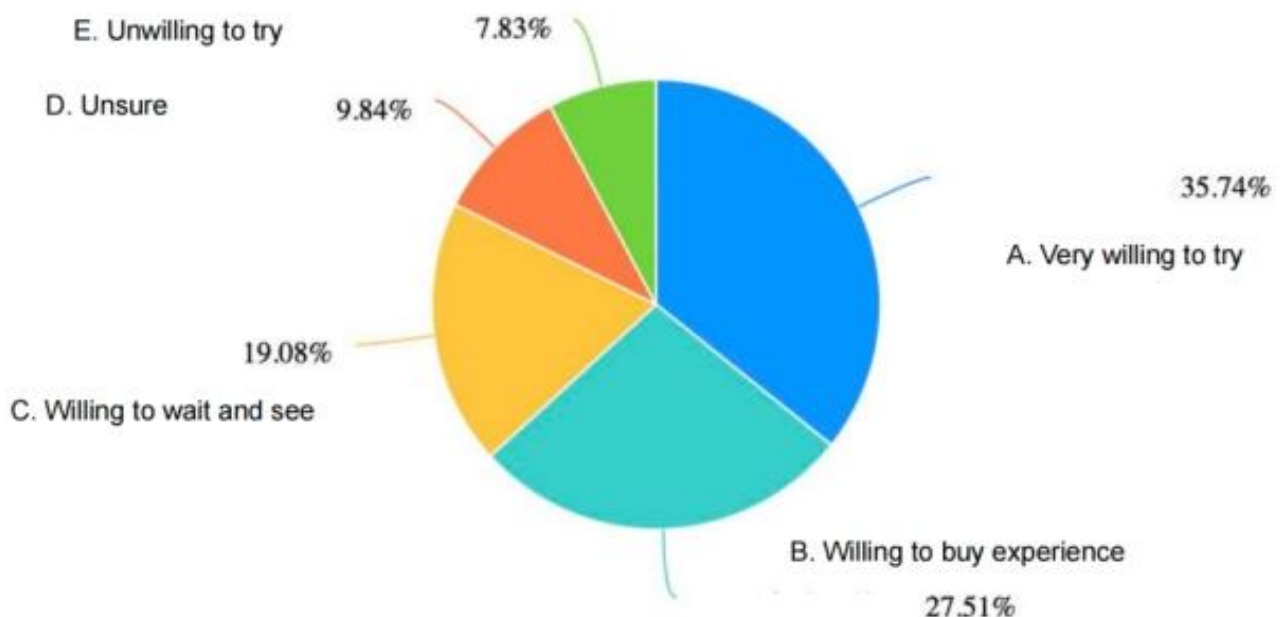


Note. Analyzed by the author.

Table 9 shows that most participants (36%) prefer a combination of ethnic elements and fashion style (detailed decoration of elements); 27% prefer obvious ethnic style (large area pattern decoration, traditional colors); 22% like to add cultural decorative elements (such as embroidery, cuffs) to minimalist clothing; 8% like a completely modern style, only retaining cultural color matching; 7% cannot accept ethnic patterns in clothing.

Figure 22

Are you willing to try the results of Li brocade's brocade pattern

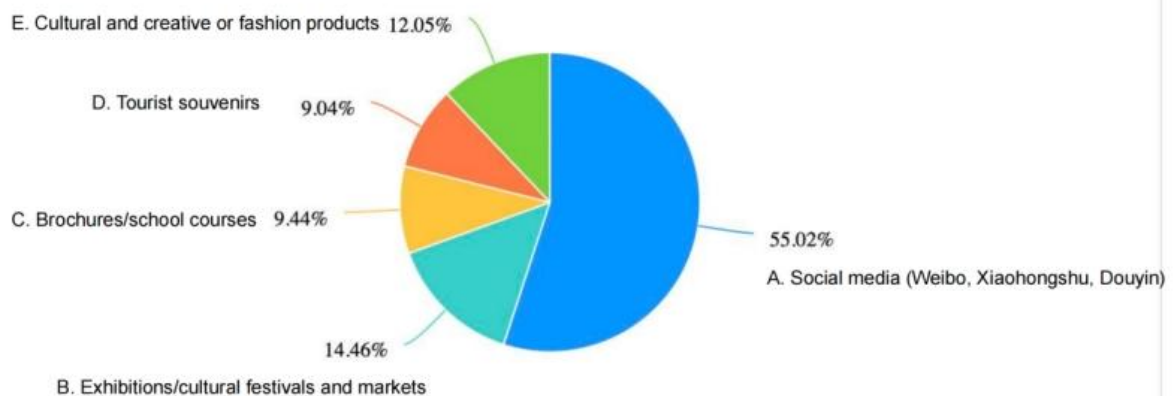


Note. Analyzed by the author.

Table 10 shows that most participants (36%) are willing to buy products containing brocade patterns of Li brocade; 28% are willing to buy experiences; 19% are willing to wait and see; 10% are unsure whether to try; and a few (8%) choose not to try.

Figure 23

Most frequently accessed media results

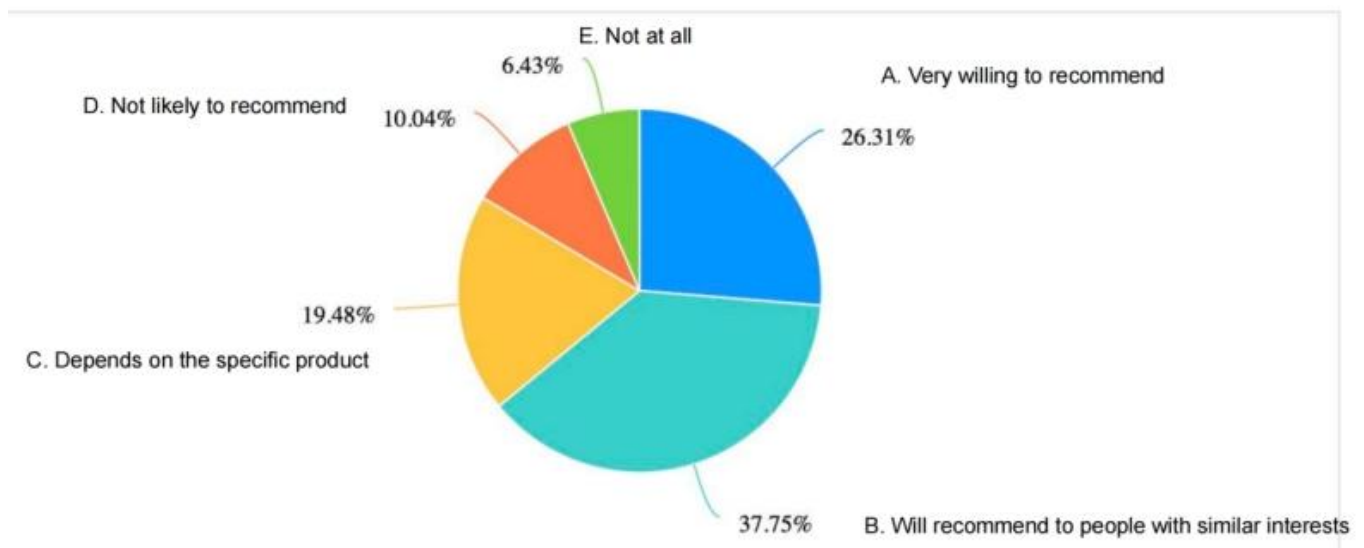


Note. Analyzed by the author.

Table 11, more than half of the participants (55%) were exposed to social media (Weibo, Xiaohongshu, Douyin); 14% were exposed to exhibitions, cultural festivals and markets; 12% were exposed to cultural creativity and fashion products; and 9% were exposed to brochures, school courses and tourist souvenirs.

Figure 24

Are you willing to actively recommend the results

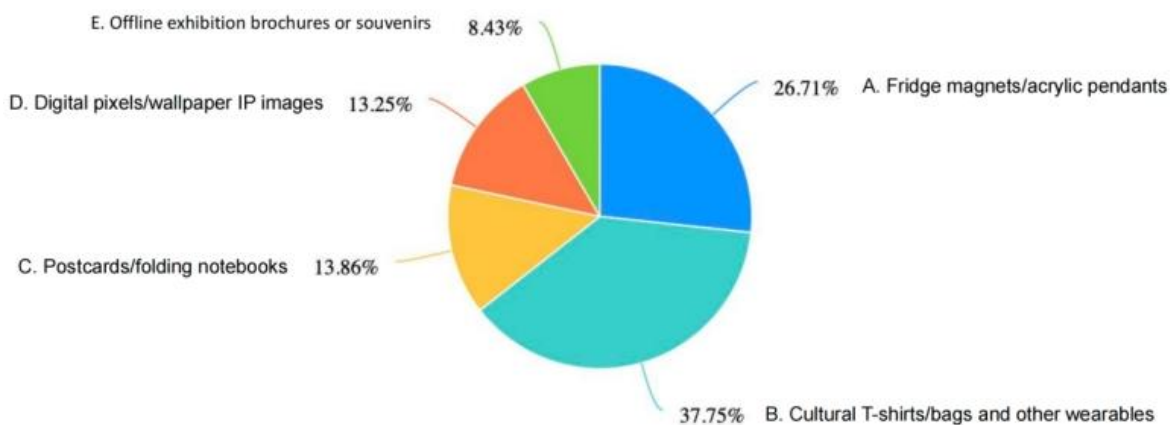


Note. Analyzed by the author.

Table 12 shows that if the product is beautifully designed, 38% of people would recommend it to people with similar interests; 26% would be very willing to recommend it; 19% would choose to depend on the specific product; 10% would be unlikely to recommend the product; and 6% would not recommend it at all.

Figure 25

Product ranking results

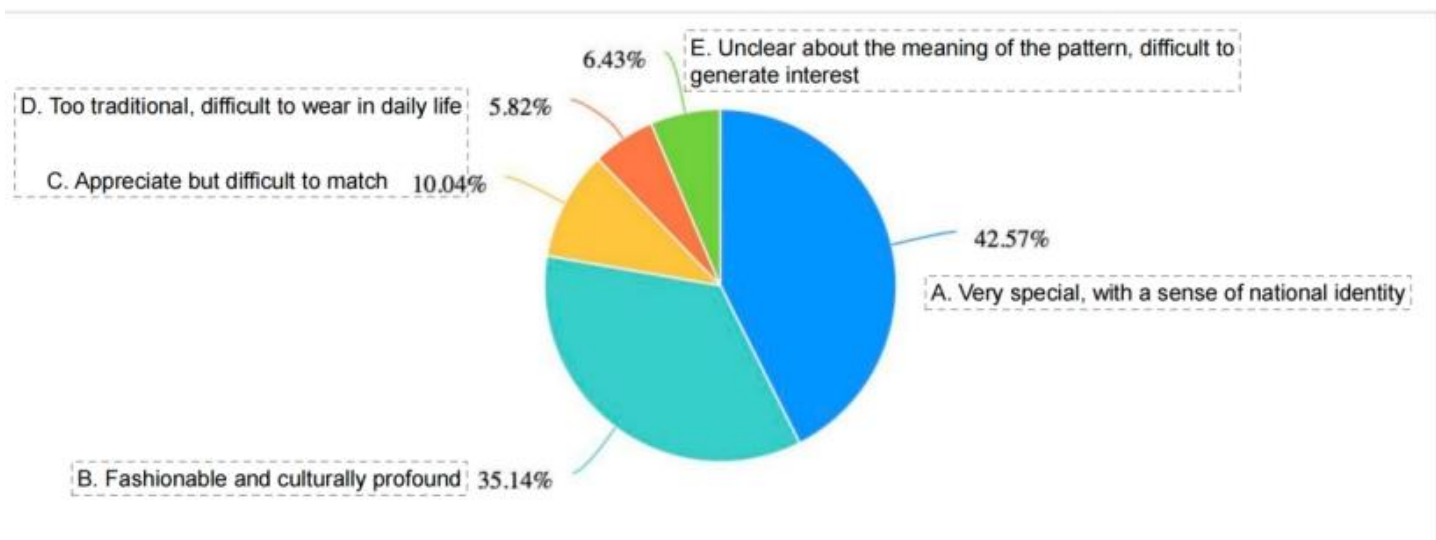


Note. Analyzed by the author.

Table 13 shows that most participants (38%) preferred cultural T-shirts/bags and other wearable items; 27% chose refrigerator magnets and acrylic pendants; 14% chose postcards/folding notebooks; 13% chose digital pixels/wallpaper IP images; a few (8%) chose offline exhibition brochures or souvenirs.

Figure 26

The intuitive feeling of wearing modern clothing with Li brocade patterns



Note. Analyzed by the author.

Table 14 shows that most participants (43%) felt that modern clothing with Li brocade patterns was very special and had a sense of national identity; 35% thought it was fashionable and culturally profound; 10% thought it was appreciative but difficult to match; 6% thought the pattern was unclear and difficult to arouse interest; and 6% thought it was too traditional and difficult to wear in daily life.

4.1.3.1 Questionnaire Summary

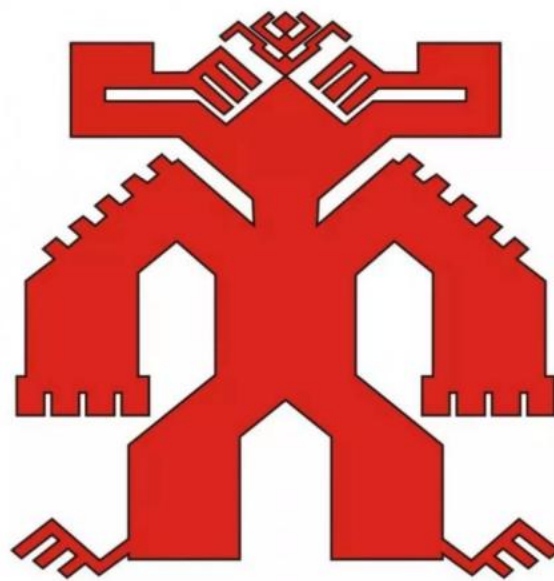
To better understand public perception, aesthetic preferences, and media receptivity toward Li culture, the research team collected 498 valid questionnaires. The results revealed a generally low level of cultural awareness—especially regarding dialects, motif meanings, and garment techniques. However, over 60% of respondents found traditional Li patterns visually acceptable, with the Fish Tail and Power God motifs being the most favored. In terms of design style, a significant portion preferred modern minimalist or cartoon-inspired interpretations, especially among younger audiences. Additionally, respondents showed a strong preference for light, practical media such as fridge magnets, keychains, acrylic charms, and social media avatars. These insights offer a solid user foundation for guiding future pattern extraction, style development, and product medium selection.

4.2 Design and Development

This chapter outlines the entire design development process—from the extraction of Li ethnic graphemes to their transformation into multi-media design outputs. It highlights how cultural essence is visualized and contemporized through a system of visual language. Centered on the “Hercules Pattern” and the “Fish-tail Pattern,” the study builds a complete chain of cultural communication through graphic abstraction, character development, and product application.

Figure 27

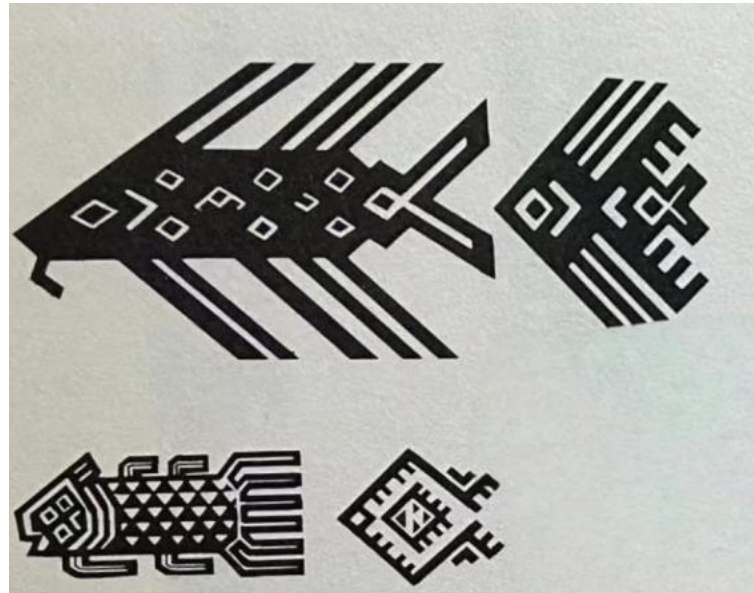
Hercules pattern



Note. Analyzed by the author.

The Hercules Pattern symbolizes protection and strength, representing a core symbol of Li male culture. Its symmetry and graphic recognizability make it suitable for standardized application in digital media and visual symbol systems.

Figure 28
Fishtail pattern



Note. Analyzed by the author.

The Fish-tail Pattern is a common traditional grapheme in female clothing, representing fertility, life, and the flow of nature. Its curved form offers good decorative and dynamic adaptability within clothing structures.

Based on constructing a Li visual language system and following the trinity thinking path of "Pattern Semantics - Clothing Structure - Cultural Expression," this study designed and produced a set of clothing pieces that integrate traditional Li patterns with modern silhouette language. This series comprises three sets. Design inspiration stemmed from traditional Li totemic symbols and regional color systems, supplemented by audience feedback from the questionnaire survey. The focus was on selecting two representative symbols, the "Hercules Pattern" and "Fish-tail Pattern," for transformation and reconstruction into clothing language.

User research results also validated this choice. The fish-tail pattern received a preference rate of 37.55%, making it the most popular grapheme; the Hercules pattern ranked second at 23.69%. This preference, across both acceptability and cultural association dimensions, supports their feasibility as core design graphemes.

4.2.1 Grapheme Extraction and IP Character Design Logic

Building upon the traditional visual symbol system, this study attempted to translate the cultural elements of the Li people's five dialect regions into digital IP characters with strong communication power and affinity. This section used modern illustration

language as the expressive medium, selecting "Li women" as the character archetype. It integrated elements like ethnic clothing, totemic patterns, color logic, accessory styles, and dialect differences. Through anthropomorphic expression and symbolic visual reconstruction, a series of concrete and vivid IP character images were created. The two characters showcased in this section draw inspiration from the patterns and clothing traditions of different Li regions, establishing a preliminary "character system prototype" based on cultural semantics and visual symbols.

4.2.2 Extraction and Reconstruction Process of Graphemes

After selecting the Hercules and Fish-tail patterns as core graphemes, the study proceeded with their digital extraction and visual reconstruction. The process integrates field research, photographic documentation, and graphic deconstruction, comprising four main steps:

1. **Field Image Collection:** Authentic images of Li brocade, garments, and artifacts were gathered through field photography to ensure cultural accuracy and motif representativeness.
2. **Graphic Analysis and Hand-drawn Restoration:** The motifs were deconstructed into basic units through sketching, analyzing symmetry, repetition, and spatial composition.
3. **Digital Simplification and Vectorization:** The sketches were digitally processed using software such as AI and Photoshop to simplify lines, preserve cultural essence, and enhance modern visual appeal.
4. **Modular Design Expansion:** The graphemes were developed into scalable graphic modules for use in IP character costumes, pattern derivatives, and cultural product graphics, enabling cross-media applications.

This method preserves traditional aesthetics while enabling modern reinterpretation for broader dissemination.

4.2.2.1 Design Logic of the "Runhuo" Image

Design Motivation (Based on the Hercules Pattern):

Figure 29

IP image line draft (sketch):



Note. Designed and drawn by researchers.

The motivation for the design of the “Runhuo” image (based on the Hercules pattern)

Figure 30

Hercules pattern of the Li nationality in Hainan



Note. Analyzed by the author.

Based on the Hercules pattern design, representing the spiritual imagery of male strength, protection, and will.

Structurally embodies symmetrical aesthetics and high-contrast color schemes, emphasizing solemnity and cultural ritualistic feeling.

Graphemes are concentrated on the chest and sleeves to reinforce totemic communication.

Target Audience: Mass communication, IP licensing, commemorative cultural and creative products.

Cultural Prototype: The Hercules pattern is widely distributed in Li totems and ornaments, symbolizing warrior spirit, tribal guardian deity, and masculine strength.

Modeling Language: The headdress is a graphically simplified version of the traditional feathered crown, using five red segments to create a solemn radiating visual effect, emphasizing the symbol of power.

Grapheme Application: The Hercules pattern is placed centrally on the chest and garment body, reinforcing the protective imagery through symmetrical geometric shapes.

Clothing Structure: Overall cape-like, integrating ritualistic clothing elements with modern pattern language, constructing a "traditional warrior" look.

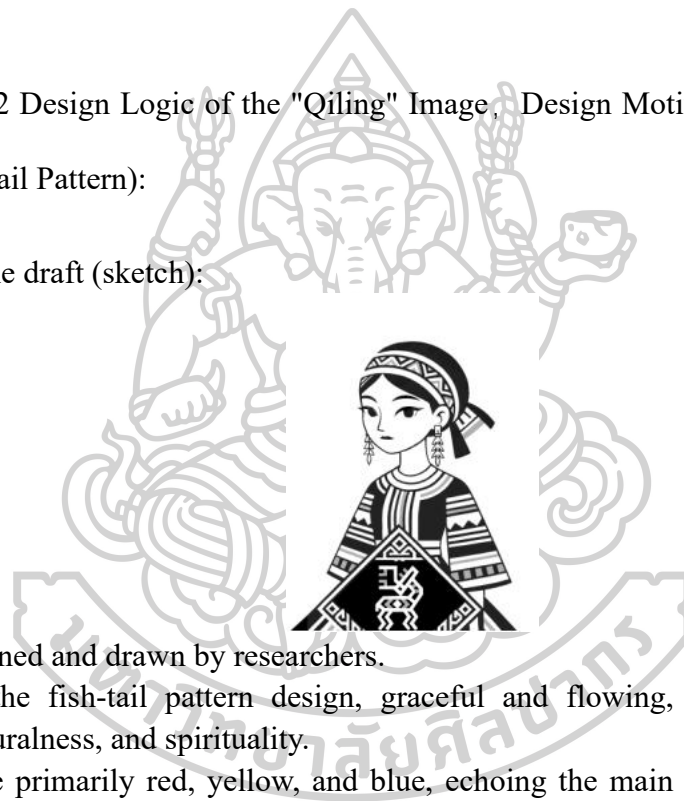
Character Positioning: Represents "Protection and Strength," suitable for neutral roles in cultural products, cultural tourism symbol communication, etc.

4.2.2.2 Design Logic of the "Qiling" Image Design Motivation (Based on the

Fish-tail Pattern):

Figure 31

IP image line draft (sketch):



Note. Designed and drawn by researchers.

Based on the fish-tail pattern design, graceful and flowing, symbolizing female vitality, naturalness, and spirituality.

Color usage primarily red, yellow, and blue, echoing the main tones of Li brocade, enhancing cultural belonging.

Details like hair accessories, earrings, and sleeves incorporate "water wave" and "woven band" line language, creating a highly affable image for communication.

Figure 32



Patterns

Note. Analyzed by the author.

Target Audience: Female users, cultural tourism promotion, educational illustrations for younger audiences.

Cultural Prototype: The fish-tail pattern is an important motif in traditional Li brocade symbolizing "water, flow, femininity," often appearing on hems, scarves, and woven bands, signifying fertility, nature, and soft power.

Modeling Language: The hair accessory adopts a simplified and integrated version of the semi-radiating traditional Li emblem "feathered headdress," highlighting divinity and ethnic identification.

Grapheme Application: The fish-tail pattern is used in details like the forehead headband and cuffs, with smooth and flowing lines adding agility to the character.

Clothing Structure: The tailoring draws from the traditional Li women's attire "front-opening long sleeves + multi-colored bands," with the visual focus concentrated on the upper body structure, highlighting a sense of identity.

Character Positioning: Represents "Wisdom and Spirituality," suitable for affable and cultural communication fields.

IP Characters:

Figure 33

IP image draft (finished picture):



Note. Designed and drawn by researchers.

Based on the graphic semantics of the Sai dialect region, emphasizing ritualistic expression and pattern order. The clothing structure adopts a more enclosed robe design, highlighting the visual presentation of sacredness and solemnity. Colors are mainly red and golden yellow, supplemented by a black base, creating strong contrast and graphic impact, forming a symbolic visual style. In terms of patterns, the character's collar, cuffs, and chest feature typical "zigzag edge," "meander pattern," and "zigzag pattern" styles, neatly arranged and densely patterned, exuding a strong sense of ritualistic heraldry.

The headdress continues the "radiating feathered crown" structure from the first character but, through modeling optimization and proportional adjustments, gives it a

more noble and solemn temperament. The headscarf structure is layered, with its wrapping method drawing inspiration from the multi-layered headscarves worn by Li women during sacrificial ceremonies or major festivals. The facial contour is sharper, with a steady gaze, expressing a cultural personality imbued with ethnic memory and protective spirit.

Its core totemic pattern is located centrally on the chest, featuring a typical "human figure + cross center" combination structure, representing ancestor worship and ethnic inheritance. This graphic design plays a crucial "identity marker" role in the character's visuals, expressing the core of ethnic culture.

Figure 34

IP image draft (finished picture):



Note. Designed and drawn by researchers.

Design inspiration comes from the traditional clothing and animal totems of the Meifu dialect region of the Li people, particularly representative patterns like "deer pattern," "butterfly pattern," and "double symmetrical geometric patterns." The overall image uses deep black as the base color, symbolizing the mystique and totemic beliefs in Li culture; high-frequency auxiliary colors of red, yellow, and blue emphasize reverence for nature and the color philosophy of five-color worship. For clothing patterns, the graphic worn on the character's chest originates from a typical deer pattern. After geometric simplification, it becomes more concise and modern while retaining the ancient sense of order through symmetry and straight-line arrangement, strengthening the spiritual power represented by the totem.

The character's hair accessory adopts the representative "fan-shaped feathered crown" symbol, with red lines radiating outwards, signifying the sacred and clan-marking ribbon structure in Li women's headdresses. Combined with totemic patterns from traditional woven bands, the headband features a spiral interwoven pattern in red, yellow, and black, rich in detail and rigorous in structure. The character's overall facial contour uses contemporary illustration language, simplified features without

losing expressiveness, enhancing acceptance and affinity among modern young audiences.

The earrings reference Li silver and shell ornament styles, using geometric drop patterns to restore the traditional "plate drop earring" form, simulating metallic texture visually while retaining the ethnic decorative structure. The entire character embodies a "soft yet strong, calm yet powerful" image of a cultural woman, showcasing the intrinsic spirit of Li culture while balancing aesthetic dissemination and commercial suitability.

4.2.2.3 Analysis of Design Value and Cultural Function of Both, Dynamic and static, strong and gentle, representing the philosophy of gender complementarity in Li culture;

Forms a systematic visual connection with clothing design, possessing both recognizability and potential for character extension;

As IP prototypes, they can be extended into various communication forms like social media emojis, tourism promotion images, and cultural product packaging characters.

4.2.3 Cultural Logic of Pattern Selection and User Feedback

In preliminary fieldwork and questionnaire interviews, researchers conducted a small-scale survey on "which images in Li patterns are most representative and visually appealing." Results showed that "Hercules" and "Fish-tail Pattern" were widely considered the most ethnically distinctive and mystically symbolic pattern types. "Hercules" often appears as a symmetrical human figure, symbolizing tribal protection, primitive vitality, and spiritual power in Li mythology. The "Fish-tail Pattern" frequently appears in women's clothing, dyeing, and brocade, representing female reproductive power and the Li ecological view of symbiosis with nature.

Building on the IP character system construction, this study further developed a set of derivative cultural and creative products centered on the Li Hercules totem, following the idea of "extending ethnic visual symbols into daily life." This set mainly includes three types: refrigerator magnets, keychains, and cartoon character clips. The graphic content originates from the two female character IP illustrations previously created, uniformly adopting the representative Li totem "Hercules Pattern" as the primary identification symbol. The aim is to integrate traditional culture into daily life, transforming ethnic totems from "museum language" into "living language."

Selection Logic of the Totem: Why "Hercules Pattern" is Core

Among the five Li dialect regions, the "Hercules" totem is one of the most widespread and unifying cultural symbols. It typically appears as a symmetrical human figure, incorporating elements like headdresses, broad shoulders, and an upright posture, representing primal reverence for natural forces and worship of sacred vitality.

Culturally, "Hercules" is both a guardian deity and a symbol of bravery, harvest, inheritance, and multiple other meanings.

Selecting the "Hercules Pattern" as the core totem for IP visual extension is based on the following considerations:

Strong Graphic Stability: Its pattern structure is mostly composed of geometric straight lines and symmetrical shapes, possessing high recognizability, suitable for efficient conversion across different sizes, materials, and techniques.

Strong Cultural Inclusiveness: Hercules appears not only in different Li dialect regions but also possesses cross-regional sharing, providing cultural support for building a unified IP image.

Strong Positive Connotation for Communication: Aligns with core contemporary design values like "strength," "protection," and "individual expression," facilitating emotional resonance with modern users.

Strong Visual Impact: As a chest emblem and central composition element in clothing design, the Hercules pattern has excellent compositional balance and graphic rhythm, easily extending decoratively.

Therefore, in this cultural product development, the Hercules pattern serves as the cultural identifier for the IP characters and is refined and reinforced in the product design, forming a graphic matrix with consistent visual language.

4.2.4 Cultural and Creative Product Design and Development

4.2.4.1 Keychain Design

Figure 35

Button buckle design



Note. Designed and drawn by researchers

Keychain design: a combination of character personality and cultural totem

Design: Based on character silhouettes, retaining details of headdresses and clothing patterns to reflect Li female identity, while placing the Hercules totem in the central chest area, forming a "character-culture" link. Overall proportions are compact, suitable for hanging on bags, key rings, stationery cases, and other everyday items.

At the communication level, the keychain format has strong "mobile display" characteristics, enabling silent dissemination of totemic culture through user usage. Young users today enjoy expressing their individuality and cultural stance through items like keychains and badges. Combining IP characters with Li totems gives the product dual value: cultural uniqueness and emotional identification.

4.2.4.2 Refrigerator Magnet Design

Fridge magnet design: dual role of decoration and function

Design: Refrigerator magnets use acrylic laser cutting technology. The main graphic features the character illustration image, with the background slightly reduced to retain the core pattern. Choosing rigid molded material ensures the pattern's integrity, especially the Hercules pattern on the character's chest, which presents a certain three-dimensional and metallic feel under light, endowing the traditional pattern with modern visual appeal.

Refrigerator magnets exist not only as decorations but also carry the symbolic meaning of a "family blessing object." Traditionally, Li totems were often placed in living spaces to ward off evil, protect family health, and ensure good fortune. Through modern design transformation, the refrigerator magnet becomes a small "life talisman" carrying this cultural belief.

Figure 36

Refrigerator magnet



Note. Designed and drawn by researchers

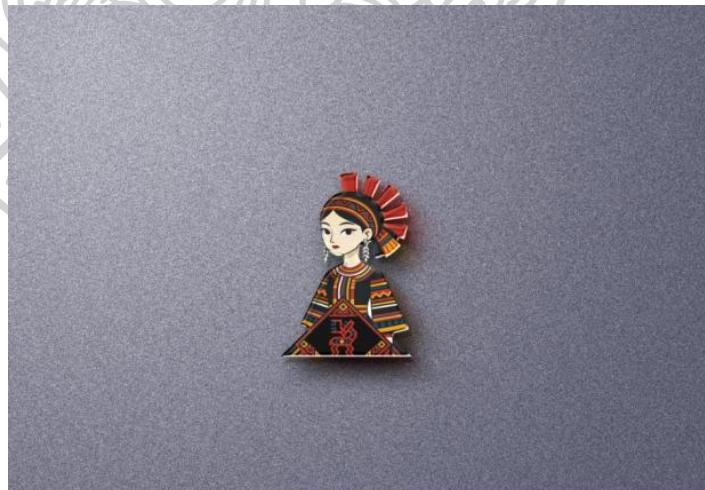
4.2.4.3 Character Clip Design: Graphic Simplification and Integration with Practical Media

Character clips use hard plastic magnetic or metal spring clip forms. Graphics undergo further flattening and abstraction to make visual expression better suit the clip's wide, flat structure. Character contours are simplified, retaining key identification points like the radiating headdress, earrings, and Hercules totem, ensuring strong recognizability even at reduced scales.

Functionally, clips can be used for organizing tickets, hanging ornaments, notebooks, business cards, and other everyday items, meeting users' multiple needs for "culture + practicality." With an approachable form and controllable pricing, it is one of the ethnic cultural derivatives highly suitable for mass dissemination.

Based on research results, the researchers used these two pattern types as the main totemic symbols for the three sets of clothing. Through reorganization and graphic reconstruction using modern design language, the traditional patterns gained stronger visual expression and media adaptability
(Image captions not translated as per request)

Figure 37
clip



Note. Designed and drawn by researchers

4.2.4.4 Design Summary and Reflection

The two characters follow a three-layer conversion mechanism in design strategy:

1. Cultural Symbol Collection Layer: Extract original totemic patterns, clothing silhouettes, color structures, and other cultural elements from Li dialect regions.

2. Graphic Language Reconstruction Layer: Achieve standardization and conversion into modern visual language through geometric simplification, flattening, and digitization.

3. Character Personality Construction Layer: Endow characters with unique personality positioning and narrative potential based on pattern meanings, clothing styles, and visual rhythm.

This IP character design is not only an attempt at the visual translation of Li culture but also provides a basic character template for future multi-platform content development (e.g., animation, digital interaction, AR applications, cultural products).

4.2.5 Media Translation of Symbolic Graphemes and Visual System Construction

In the overall design logic of this study, the transformation of traditional Li graphemes is not limited to flat expression or a single product form but is constructed as an extensible visual symbol system. Based on this, the project extended from "IP character design" in the visual expression phase to physical clothing production and cultural product development. This process reflects not only the broad application scope of ethnic grapheme visual language but also aligns with the core concept of "multi-media integrated communication" in the modern communication context.

Firstly, establishing digital IP characters explores the personification and semantic expression of Li graphemes. Through the concrete characters "Runhuo" and "Qiling," abstract patterns are endowed with personality and cultural emotion, enabling cultural symbols to "tell stories," thereby enhancing public cognition and acceptance. However, IP characters themselves lean more towards virtual communication and media symbols, requiring further grounding in real-world application scenarios to enhance cultural tangibility and everydayness.

Therefore, clothing design, as an important medium connecting virtual images and real life, became a crucial part of the visual symbol system. By importing visual language from character graphemes—including color, composition, pattern structure—into clothing design, the study completed the visual migration from 2D image to 3D wearable. This not only satisfies the aesthetic construction of functional clothing but also reflects the transformation of graphemes from cultural decoration to bodily semantics, bringing cultural communication into concrete usage scenarios.

Furthermore, the development of cultural products further expands the application space of graphemes in daily life scenarios. Small cultural items like refrigerator magnets, keychains, and acrylic pendants are not only portable and easy to circulate but also easier to marketize. They act as "cultural touchpoints," transforming abstract ethnic patterns from mere traditional symbols into modern life items with practicality and affinity. This strategy has practical significance for the "activation" of intangible cultural heritage.

In summary, from IP characters to clothing design and then to cultural product extensions, this study constructs a complete closed loop of visual communication. Although the three differ in media expression and functional positioning, they all take traditional Li patterns as the visual root and symbolic translation as the logical axis, ultimately serving the core goal of "contemporary expression of ethnic visual language." Through such system construction, it not only strengthens the continuity of the design language but also enhances the communication power and influence of ethnic culture in contemporary society.

4.3 Clothing Design

Design Process: Mood Board - Color Board - Silhouette Board - Sketch - Technical Drawing - Fabric Board

Figure 38

Inspiration Edition



Note. Designed and drawn by researchers

4.3.1.1 Mood Board

Inspiration Sources: By deeply excavating the visual treasures of Li brocade such as color, patterns, and texture; important Li spiritual totems like the Hercules pattern and fish pattern; unique architectural forms; and vivid ethnic figures and costumes. Using the freedom of collage art, these elements were refined, recombined, and modernized. Highlighted through the Li people's iconic intense color combinations in a simplified manner, they were finally woven into a composition full of rich ethnic flavor and modern artistic sense within a seemingly scattered yet coherent layout, showcasing the vitality of Li culture and its innovative potential in the modern context. Combining Hainan Li traditional patterns with modern popular styles and fabrics. Using the Hercules and fish patterns as main motifs. Blue and green as primary tones, yellow and red as accents. The Hercules pattern was innovatively combined and used on collars and necklines. The fish pattern was expanded to create fish-patterned fabric, paired with modern popular denim. Contemporary popular elements like ruffles and puffed sleeves were used in the design to fully integrate Hainan Li elements with modern trends for innovation.

4.3.1.2 Color Board

Color Explanation: Red in Li brocade is often dyed with plant dyes like red grass, sappanwood, or mineral cinnabar, symbolizing vitality, celebration, and sacredness. The red sailboat becomes a visual focal point, echoing the roof color of Li boat-shaped houses; red shoes metaphorize the ethnic vitality walking on the earth. Black is the base color of Li clothing, dyed repeatedly with natural indigo, representing land, ancestors, and solemnity. Dark clothing sets a steady tone, creating tension with red; black totemic lines outline the skeleton of Li patterns, like abstract variations of the Hercules pattern. Green originates from Hainan's tropical rainforest vines and betel nut leaves; green in Li brocade symbolizes prosperity and nature's bounty. Green blocks scattered like island vegetation balance the intensity of red and black, metaphorizing the symbiotic relationship between the Li people and the forest. Blue comes from repeatedly dyed plant indigo, requiring over 20 dyeing sessions. Blue is the cornerstone base color of Li brocade, upon which bright patterns are woven, symbolizing "light born from depth." In Li primal beliefs, the indigo dye vat was seen as a medium for communicating with spirits; the fabric dyeing process contained ancestral blessings;

4.3.1.3 Silhouette Board

Silhouette Explanation: Silhouettes are inspired by runway shows, establishing a new order through contradictory contrasts among three core silhouettes: cropped high-waisted, deconstructed H-line, and expanded boxy. The background digital art is actually a mirrored projection of multi-dimensional silhouette experiments—traditional body wrapping is broken, replaced by dynamic spatial occupation and dialectical dialogue of materials. The rattan belt both accentuates the waistline and serves as a contemporary translation of Li waist-loom weaving culture. Cropped top + wide-leg pants: extreme contrast of tight top and loose bottom, connected by a belt in the same color scheme; Hollowed skirt + outer overdress: layering inner and outer volumes, the overdress uses sheer material for weight reduction; Denim jacket + tulle skirt: physical confrontation of hard and soft materials, achieving formal fusion through deconstructed stitching.

Figure 39
Silhouette version



Note. Designed and drawn by researchers

4.3.1.4 Technical Drawings and Sketches

Set 1: Short Jacket + Inner Dress

Jacket length above the waistline, straight cut creating a rectangular volume. Dropped shoulders + flared cuffs form a modern variant of the lantern sleeve. Along the placket, armhole, and hem, 0.8cm wide silk ribbon is embedded using Chinese piping technique. Dark base slip dress with U-neckline + high-waist seam, enhancing bust wrap. Asymmetric hem, short front/long back, 30° bias seam at side. Detachable streamers add playfulness.

Set 2: Lantern Sleeve Top + High-Waist Straight Skirt

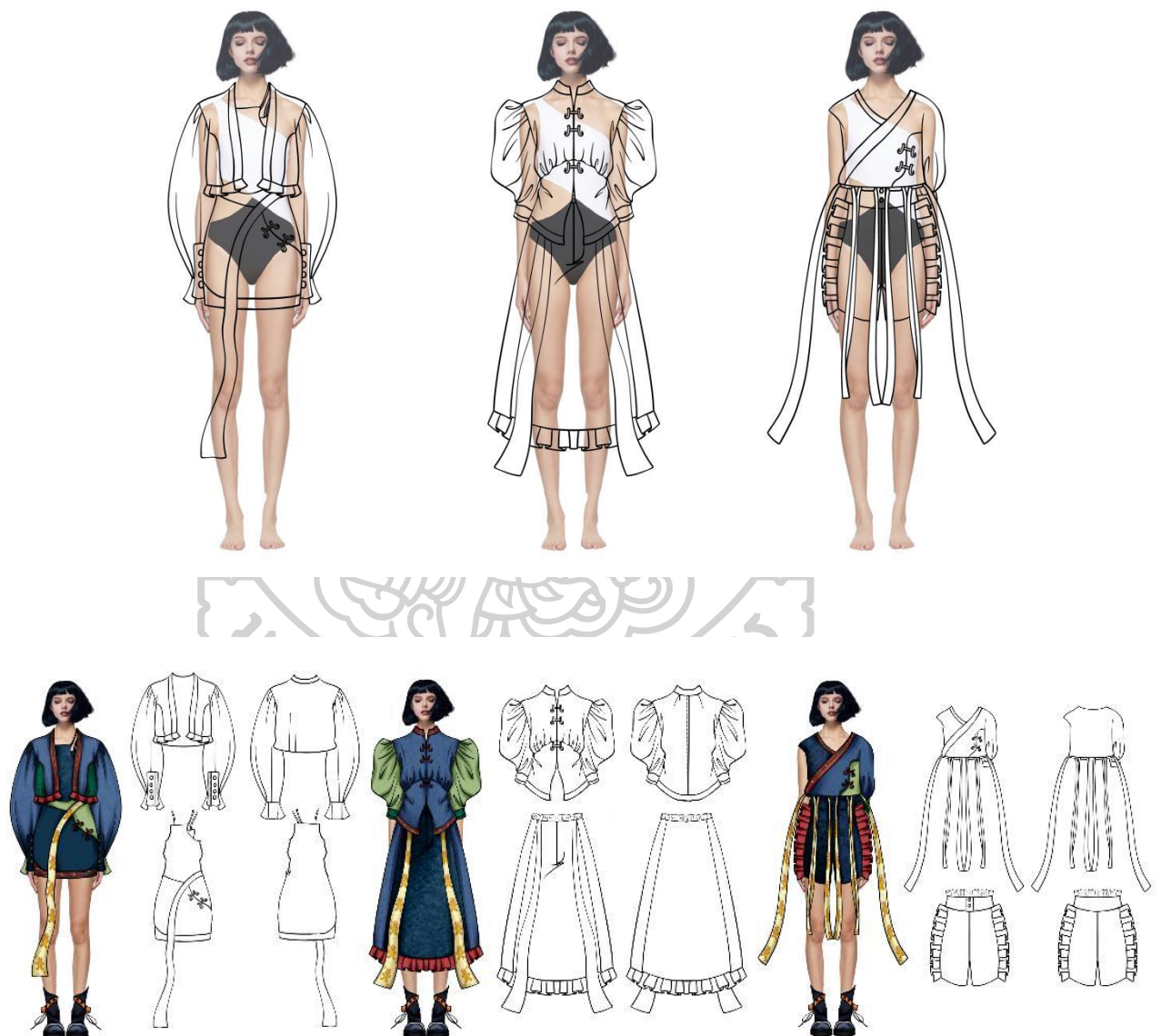
Fuses Chinese stand collar tailoring with Li weaving patterns, achieving modern workwear transformation by deconstructing traditional symbols. Black and white line art emphasizes technical rationality; colored garments showcase cultural tension. Green acetate satin + Dupont paper lining heat-pressed for shape, maintaining puffiness without sagging. Cuffs gathered, elastic ribbing embedded with drawstring for adjustable lantern/bell sleeve shapes. Inspired by Li sacrificial belt "binding belt," redesigned as unfixed streamers. Pattern uses abstracted "Hercules," laser engraved and filled. Colors use plant-dyed turmeric palette and eco-recycled polyester digital print.

Set 3: Deconstructed Asymmetric Wrap Top + Shorts

Asymmetric silhouette: High right shoulder / left wrap, right shoulder upright panel connects to left waist diagonal opening, breaking traditional symmetry. Blue-green color clash: royal blue velvet + turquoise jacquard silk, seam hidden under wrap.

Main body uses satin to enhance color contrast. Three sets on each side, spaced 12cm radially, mimicking the drape of Li waist-loom warp threads. Vertical 3D pleated shorts, symmetrically distributed on both sides of the visual core, six equidistant pleats per side, pleat lines extending from waistband to hem, creating a vertical "light tunnel" effect.

Figure 40
Style drawings and line drawings



Note. Designed and drawn by researchers

4.3.1.5 Fabric Board

Fabric Explanation: Primarily washed denim, silk double-faced jacquard, hand-dyed indigo cotton/linen jacquard.

Washed Denim: Poetic recreation of ocean erosion. Texture uses stone-washing for frosty white patterns, whiskering simulates weathered rocks, reflecting years of wave erosion on Sanya reefs. Color: indigo base + bleached areas, mirroring the shades of blue in Danzhou sea under sunlight. Eco-process: plant indigo paste cold dyeing, echoing the sustainable wisdom of Li ancient tie-dyeing.

Silk Double-Faced Jacquard: Dialogue between machine and tradition weaving. Double-faced different patterns: front "frogman pattern," back "banyan tree pattern," expressing dual metaphors of Li ancestor worship + ethnic reproduction. 8-shaft satin base weave + 15% float length, simulating silk-like shimmer through sparse coconut groves. Thin mulberry silk lightweight for tropical heat/humidity.

Hand-dyed Indigo Cotton/Linen Jacquard: Tie-dye cracking forms shibori resist white "tortoiseshell cracks," mapping Hainan's red soil arid geology. Jacquard uses diamond grid pattern, a millennial symbiosis symbol of rainforest rare birds and Li brocade. Color: 20-layer dip-dyeing, preserving random oxidation marks from sea wind during dyeing.

Figure 41
Fabric version



Note. Designed and drawn by researchers

4.3.2 Detailed Production Process

Figure 42
Standing



Note. Designed and drawn by researchers

Draping

Direct fabric shaping on a mannequin to determine the overall structure and visual zoning of the garment. This step emphasizes fit with the body structure and reserves accurate positions for subsequent grapheme placement, such as the Hercules pattern on the chest.

Figure 43
plate making



Note. Designed and drawn by researchers

Pattern Making

Based on the draped structure, perform 2D unfolding and draw paper pattern templates, clarifying proportions and shapes of each part. This step is the key technical foundation for garment making and also the basis for subsequent pattern matching and symmetrical layout.

Figure 44
paper pattern



Note. Designed and drawn by researchers

Paper Patterns

Print the finalized pattern templates as paper patterns. Secure them to fabric using pins and weights to ensure cutting precision. In this study, different colored fabrics represent different parts (e.g., sleeve, shoulder, neckline) corresponding to specific grapheme application areas.

Figure 45 Cutting, Sewing



Note. Designed and drawn by researchers

Manually cut the fabric according to the paper pattern outlines, including main fabric, complementary fabric, lining, etc. Precision must be strictly controlled to ensure pattern positioning and seam line consistency, guaranteeing the coherence of overall garment aesthetics.

Structural assembly of all cut pieces using a combination of hand sewing and industrial machine sewing.

Special attention is paid during this stage to the accuracy of pattern alignment and the integrity of the garment structure, while also completing detail treatments like piping, topstitching, and decorative band attachment.

4.3.2.1 Cropped Jacket + Dress Ensemble

Pattern Drafting:

Jacket:

Draft front/back panels with square neckline, puff sleeves, and cropped silhouette

Mark contrast panel insertion points

Skirt:

Draft straight-cut mini skirt block

Plan jacquard insets and red piping zones

Mark streamer attachment notches

General: Apply 1-1.5cm seam allowance to all components

Cutting Operations:

Jacket:

Denim: Cut front/back/sleeves

Green satin: Cut cuff bands

Red braid: Cut trim strips

Interfacing: Cut neckline/cuff stabilizers

Skirt:

Denim: Cut main body

Jacquard: Cut inset panels

Red braid: Cut hem/waist trims

Printed cotton: Cut streamers

Assembly Sequence:

A. Jacket Construction

Stabilization:

Fuse interfacing to wrong side of neckline/cuffs

Press with low-heat iron to set shape

Sub-assembly:

Stitch sleeve underarms with right sides together

Ease stitch sleeve caps → Attach to armholes with gathering technique

Join satin cuffs to sleeves → Flip and topstitch

Trim Application:

Baste red braid along neckline/hem edges

Edgestitch through all layers
 Attach side contrast panels with flat-fell seam
 Final Assembly:
 Join shoulder/side seams RS together
 Press open seams
 B. Skirt Construction
 Decorative Elements:
 Stitch jacquard insets to denim RS together
 Apply red braid with piping foot along hem/waist
 Closure System:
 Install concealed zipper at side seam
 Attach streamers at pre-marked points
 Press seam allowances toward lining
 C. Final Quality Control:
 Conduct full ensemble fitting
 Verify:
 » Trim alignment
 » Proportion balance
 » Ease of movement
 Adjust hem/waist tensions as needed

Figure 46
 Short coat + inner dress



Note. Designed and drawn by researchers

4.3.2.2 Lantern sleeve top + high waist skirt

Standing: fix white fabric - mark key lines - shape wave pleats - position the edging - verify the armhole movement.

Red edge positioning: lay the red edging 2cm below the hip line to avoid wave distortion. Use a bead needle to mark the turning point, waist side, and skirt slit.

Pattern making and paper pattern making: use kraft paper, curve ruler, and erasable pen.

For the top part: draw the outline of the front and back pieces, including the design of the stand-up collar, the shape of the puff sleeves to determine the curvature of the sleeve cap, the size of the cuffs, and the waist cutting to mark the waist dart position.

For the skirt part: draw the front and back pieces of the skirt, consider the splicing design to plan the proportion and position of different fabrics, and reserve the installation position of the skirt hem and ribbon.

When making the paper pattern, reserve 1-1.5 cm seam allowance for each part. Cutting:

1. Top:

Denim: Cut out the front and back pieces, and make sure the waist and dart marks on the front piece are clear; cut out the stand-up collar fabric including the seam allowance; cut out the puff sleeve pieces with satin silk, one on each side, and mark the sleeve cap alignment points.

Interlining: Cut out the interlining corresponding to the front, back, neckline, and cuffs of the top for later shaping.

2. Skirt:

Cut out the front and back pieces of the skirt from denim; cut out the middle splicing part from jacquard fabric; cut out the skirt hem strips from red satin ribbon/ribbon; cut out the streamers from patterned cotton fabric.

Top production:

Shaping treatment: Bond the collar and cuff lining to the reverse side of the corresponding fabric, iron with an iron at low temperature, and fix with the help of adhesive lining to enhance the stiffness of the parts.

Component splicing: Puff sleeve sewing: Face the satin silk sleeve pieces to each other, sew the sleeve bottom seam, then face the sleeve cap to the front of the sleeve cage, align the alignment points, sew and fix, and pleat appropriately to adjust the sleeve cap curvature to create a bubble effect.

Waist treatment: At the waist position of the front and back pieces of the top, dart according to the paper pattern mark, sew the darts and iron them flat to make the waist naturally narrow.

Stand-up collar installation: Face the collar surface to the front of the collar lining, sew the collar around, trim the seam and fold it into a straight stand-up collar, then sew it to the front of the top collar, and finally iron to shape it.

Overall stitching: Place the front and back pieces of the top facing each other, sew the side seams and shoulder seams, complete the main body of the top, and iron the seams.

Skirt production:

Fabric splicing: Splice the denim/cotton and linen pieces of the skirt with the jacquard fabric, facing each other, sew the splicing seams, iron the seams, and do the pressing of the visible lines to enhance the retro feel and firmness.

Trim and ribbon: Skirt trim: Place the red ribbon/ribbon along the edge of the skirt, sew the front faces together, fold and iron to form a delicate trim.

Ribbon installation: Fix one end of the patterned cotton ribbon at the preset position of the skirt, such as the side seam or the back waist, and sew it firmly with a sewing machine or hand stitching to ensure that it is not easy to fall off when pulled.

Closing the skirt: Install the invisible zipper: Cut the opening according to the length of the zipper at the side seam or back seam of the skirt, sew the invisible zipper and the front of the seam opposite to each other, complete the closure of the skirt, and iron it to finish.

Overall combination:

Place the sewn top and the front of the skirt opposite to each other, align the waistline, sew the connecting seam, and iron it flat. Check whether the sew of each part is firm, and iron the details such as the neckline, cuffs, and skirt again to shape them.

Figure 47

Lantern sleeve top + high waist skirt



Note. Designed and drawn by researchers

4.3.2.3 Deconstructionist slant collar top + shorts

Standing: fix the grey fabric - shape the wave pleats - set the edge position - adjust the sleeve expansion - verify the dynamics

Pattern making, cutting:

Front piece: on the blue main fabric, according to the design and mannequin size, use chalk to draw the asymmetrical front piece outline, consider the unique cutting on one side of the single sleeve, and cut after leaving the seam allowance.

Back piece: Draw the shape of the back piece, and also reserve seam allowance for cutting, paying attention to the connection and adaptation with the shoulders and side seams of the front piece.

Single sleeve: Cut the blue fabric according to the designed sleeve length and width, considering the cuff shape. If there is a closure or decoration, plan in advance and reserve seam allowance.

Decorative parts: Cut the red decorative fabric, make the decorative strip shape similar to the side and neckline in the picture, and the red block decoration of the bottom, and reserve seam allowance.

Bottoms: Cut blue fabric as the base of the bottoms, determine the length and width, combine the ribbon layout, reserve the seam allowance for connecting with the top, and the location for installing red decorations on the side.

Ribbons: Cut the patterned ribbon fabric according to the designed length and width. You can cut a few more for backup. The edges can be locked (to prevent unthreading, use a sewing machine to lock the edges or sew the edges by hand).

Sewing:
 Assembly of top: Splice the front and back pieces: Face the front and back pieces of the top to each other, align the shoulders and side seams, sew along the seams with a sewing machine or hand sewing, and iron them flat after sewing to make the joints smoother.

Installation of single sleeves: Face the cut sleeves to the sleeve cage of the body, align and sew, pay attention to the fit of the sleeve cap, iron after sewing, and shape them.

Sewing decorative strips: Sew the red decorative strips along the neckline, sides and other design positions, face to face with the body, and make appropriate pleats and splicing effects to add a sense of layering. Iron them after sewing to fix them.

Bottoms: Sew the two sides of the bottom fabric to form a tube, reserve the part connected to the top at the top, sew the red decorative block on the side according to the position, and iron it to tidy up.

Ribbon installation: Fix one end of the ribbon to the edge of the bottom, evenly distribute it, sew it firmly with a sewing machine or hand sewing, ensure that it is not easy to fall off when pulled, and tidy up the shape of the ribbon after sewing.

Overall integration: Connect the prepared top and bottom, face each other, align and sew, lock the seams to prevent unthreading, and then iron the whole to make the clothing more stiff, check whether the sewing of each part is firm and whether the shape is in line with the design.

Figure 48

Deconstructionist slant collar top + shorts



Note. Designed and drawn by researchers

4.3.3 Display of finished apparel designs

Figure 49

Dressed photos



Note. Photographed by the author.

The clothing adopts a pairing of a fitted top and a high-waist skirt. The overall silhouette leans towards modern Western wearability, but the detailed design is entirely derived from Li visual logic. The top features puffed sleeves at the shoulders,

corresponding to the "wide sleeve" form of Li festive clothing, emphasizing ritualistic feeling and female power. Symmetrical slits are used on the front placket and hem, symbolizing the Li concept of the "channel between humans and gods."

Figure 50

Dressed photos



Note. Photographed by the author.

For the pattern, the "Hercules Pattern" appears in a banded form on the skirt hem and waistband streamers, presented using a combination of embroidered bands and printed weaving, enhancing the pattern's three-dimensionality and cultural penetration. Color-wise, blue is the dominant tone, representing Li worship of nature (especially water bodies), paired with green puffed sleeves symbolizing ecological growth and female natural power, creating an overall harmonious and symbolic effect.

The second clothing design boldly attempts an asymmetric cut structure, using a single-sleeve cape and diagonal wrap design, paired with a "half-skirt + streamers" structure. This breaks the traditional linear layout of Li brocade clothing, presenting a more modern and dynamic clothing language.

In pattern treatment, the "Fish-tail Pattern" appears multiple times in continuous totemic bands, distributed on the front skirt panel, side hem, and back connecting band. This pattern serves not only a decorative purpose but also becomes a medium for "graphically guiding body movement" in dynamic clothing design. Especially when the model walks or turns, the streamers and patterns form trajectories of movement, giving the traditional pattern a "living" dynamic visual effect.

Additionally, this set incorporates red folded plate decorations at the side hem, inspired by the "red feathered crown" in Li headdresses, symbolizing reverence for totemic power and further emphasizing the modern visual transformation of traditional culture.

Figure 51

Dressed photos



Note. Photographed by the author.

4.4 Small Exhibition and Its Significance

In the current context of cultural globalization and design diversification, the contemporary expression of traditional culture has increasingly become a focus in the art and design fields. This small exhibition, centered on "Clothing Design and Cultural Product Display," focused on the inheritance and innovation of ethnic culture. It aimed to explore pathways connecting tradition and modernity through creative design and visual presentation. By integrating ethnic cultural symbols, regional aesthetic characteristics, and contemporary design thinking, the exhibition demonstrated to the public how design can become an important medium bridging the past and future, tradition and modernity.

Purpose:

Against the backdrop of rapid modern societal development and accelerated pace of life, many precious ethnic cultures are gradually marginalized or misunderstood. We held this exhibition precisely hoping to leverage the power of design to allow the audience to "see" and "understand" those valuable elements existing in our cultural

roots anew. Through visual translation and productized expression, it not only enhances the public's affinity for local culture but also inspires younger generations' sense of identity and enthusiasm for participation in ethnic culture. It transforms traditional culture from static museum exhibits into an organic part of contemporary life.

Significance:

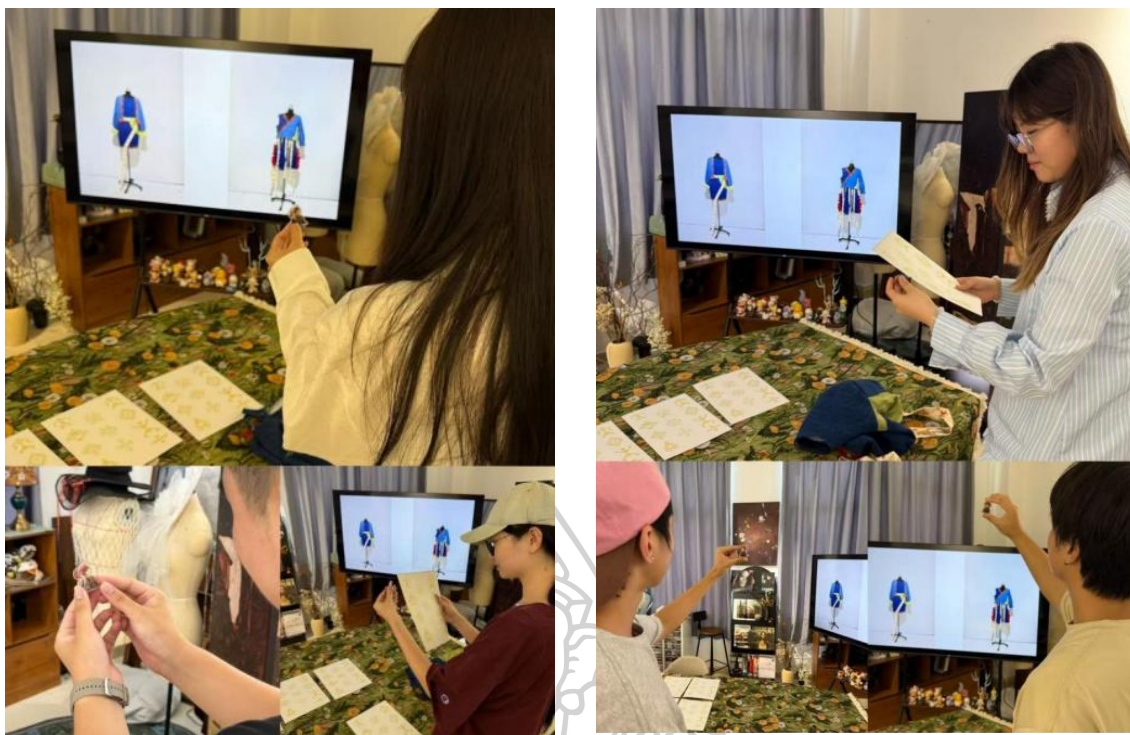
Showcasing Achievements: Design as a Medium for Cultural Communication

The exhibited works spanned multiple dimensions including clothing, accessories, and cultural products. The creative team deeply researched classic patterns, clothing constructions, material languages, and other elements within ethnic culture, combining them with modern design language to attempt building a cultural expression method with a sense of contemporaneity. Each piece not only carries the designer's aesthetic thinking but also reflects deep exploration of ethnic identity, cultural identification, and social values.

Figure 52

Exhibition photos





Note. Photographed by the author.

4.4.1 Exhibition effect survey and audience feedback analysis

Figure 53
Questionnaire analysis

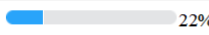
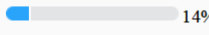

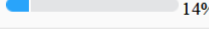
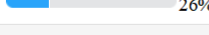
1. Questionnaire survey results: (Completeness of the overall conception and expression of this set of clothing design)

Options	Subtotal	Proportion
1point	7	14%
2point	10	20%
3point	7	14%
4point	12	24%
5point	14	28%

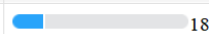
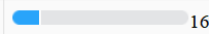

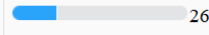

2. Questionnaire survey results: (Visual presentation and cultural connotation of Li ethnic pattern in this design)

Options	Subtotal	Proportion
1point	9	18%
2point	10	20%
3point	7	14%
4point	14	28%
5point	10	20%
Number of valid responses to this question	50	

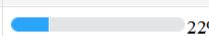
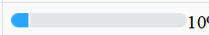

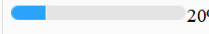

3. Questionnaire survey results: (Whether the style of the visual IP image is consistent with the cultural connotation of the Li ethnic group)

Options	Subtotal	Proportion
1point	11	 22%
2point	7	 14%
3point	12	 24%
4point	7	 14%
5point	13	 26%
Number of valid responses to this question	50	

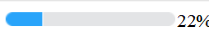
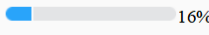
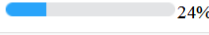
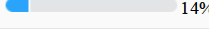
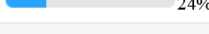
4. Questionnaire survey results: (Design completion of fabrics, structure and craftsmanship details)

Options	Subtotal	Proportion
1point	9	 18%
2point	8	 16%
3point	8	 16%
4point	13	 26%
5point	12	 24%
Number of valid responses to this question	50	

5. Questionnaire survey results: (Overall visual effect)

Options	Subtotal	Proportion
1point	11	 22%
2point	5	 10%
3point	7	 14%
4point	10	 20%
5point	17	 34%
Number of valid responses to this question	50	

6. Questionnaire survey results: (Spreading Li culture)

Options	Subtotal	Proportion
1point	11	 22%
2point	8	 16%
3point	12	 24%
4point	7	 14%
5point	12	 24%
Number of valid responses to this question	50	

Note. Analyzed by the author.

In order to verify the expression effect of the visual system of the five dialects of the Li nationality in the clothing carrier, this study organized a small exhibition for target users after the design was completed. The exhibition content mainly includes four sets

of modern clothing designed with traditional Li patterns, supplemented by sketches of element application, IP image setting pictures and cultural illustrations, aiming to test the expressiveness of the design in multiple dimensions such as visual presentation, cultural communication, and craft details.

The exhibition invited 50 young people aged 18-35 with design background or ethnic cultural interests to complete the questionnaire and provide feedback, forming the evaluation results of the following dimensions:

1. In terms of the completeness of the design concept, 52% of the respondents gave a score of 4 points or above, indicating that the overall concept of the clothing has been well recognized in terms of presentation and communication;
2. In terms of the effectiveness of the cultural connotation of the Li ethnic group's pictures, 48% of the scores were in the range of 4-5 points, indicating that most users can perceive and understand the ethnic cultural symbols contained in the clothing;
3. In the evaluation of the fit between the visual IP image and the connotation of the Li ethnic group culture, 26% of the users gave 5 points, and another 24% gave 3 points, indicating that there is still room for further improvement of cultural accuracy in visual character design;
4. In terms of the professionalism of fabrics, structure and craftsmanship details, 50% of the users gave a score of 4 points or above, reflecting a certain professional recognition of the design in terms of production technology;
5. The overall visual unity and detail expression achieved the highest satisfaction, with 54% of the participants giving 4-5 points;
6. In terms of the role of promoting the dissemination of Li culture, although 24% of users believe that there is a significant dissemination effect, there is still a considerable proportion (22%) of low-scoring evaluations, indicating that there is still room for improvement in the cultural communication ability of the design.

Through this exhibition and user questionnaires, researchers have preliminarily verified the adaptability and dissemination ability of pixel design in clothing media, and also found that users have more diverse expectations for cultural expression. The exhibition feedback provides an important basis for subsequent design optimization, especially in terms of the cultural depth of visual IP, the expressiveness of clothing language, and dissemination strategies. It provides a clear adjustment direction.

Table 17

Note. Analyzed by the author.

Problem	Rating distribution	Average
1. How high is the completeness of this clothing design set in terms of its overall conception and execution?	1=4% 2=10% 3=14% 4=24% 5=48%	4.02
2. Is the visual presentation of Li ethnic patterns in this design effective in conveying their cultural significance?	1=8% 2=10% 3=14% 4=4% 5=64%	4.06
3. Does the style of the visual IP character demonstrate deep alignment with the cultural essence of the Li ethnicity?	1=2% 2=14% 3=14% 4=14% 5=56%	4.08
4. Do the fabric choices, structural design, and craftsmanship details reflect a high level of professional execution?	1=8% 2=6% 3=16% 4=6% 5=64%	4.12
5. Does the overall visual effect achieve both coherence and sophisticated detailing?	1=2% 2=10% 3=14% 4=20% 5=54%	4.14
6. Does this design significantly contribute to celebrating and sharing Li ethnic culture?	1=2% 2=16% 3=4% 4=14% 5=64%	4.22

Based on the rating data in the chart, all six evaluation dimensions for this clothing design received high ratings, with average scores exceeding 4 points. This indicates the design performed excellently overall and was recognized by most evaluators. Analyzing the rating indicators allows the following detailed summary across aspects like design conception, cultural communication, visual expression, craft completion, overall unity, and cultural dissemination value:

1. Overall Conception and Expression Completion (Avg. 4.02): This indicator mainly examines the completion of the clothing design in terms of overall ideas, thematic

concepts, and visual expression. Nearly half (48%) gave the highest score (5), indicating high standards. However, some lower scores suggest room for improvement in completeness or thematic presentation, possibly slight deficiencies in logical coherence or narrative clarity.

2. Visual Expression and Cultural Conveyance of Ethnic Patterns (Avg. 4.06): 64% gave 5 points, indicating successful translation of ethnic elements, preserving cultural authenticity while making them visually appealing through modern design. Lower scores from a few suggest potential obstacles in cultural interpretation or slight ambiguity in expression.

3. Visual IP Character and Ethnic Cultural Fit (Avg. 4.08): Over half (56%) rated the fusion of IP characters and culture as very high, showing design originality and deep connection to cultural attributes. This suggests the IP characters are not only recognizable but also culturally deep, enhancing audience understanding and appreciation.

4. Professional Completion of Fabric, Structure, and Craft Details (Avg. 4.12): This score was among the highest. 64% gave 5 points, reflecting high professionalism in fabric choice, structural design, and craft details. Design balances aesthetics with practicality and wearability. Few low scores indicate satisfactory overall craft completion.

5. Overall Visual Unity and Detail Expression (Avg. 4.14): Evaluators generally found good unity, coordinated style/composition, proper detail handling, and reasonable integration of color/material/pattern, showing high visual quality from macro to micro.

6. Effectiveness in Promoting and Disseminating Ethnic Culture (Avg. 4.22): Highest score of all, showing significant impact in cultural dissemination and value guidance. 64% gave full marks, recognizing the successful presentation of ethnic culture through modern design, enhancing cultural identity and possessing social communication/educational value. This indicates the design addresses aesthetics/form and shoulders cultural communication responsibility.

4.5 Expert Interview Feedback and Design Optimization Suggestions

Expert Interview Background

To verify the design's feasibility and artistry, interviews were conducted with three experts in Li culture and visual design, specializing in Li culture research, fashion design, and digital media design. Interview content focused on the cultural communicability of design graphemes, market potential of clothing/cultural products, and affinity of digital IP characters.

Table 18

Note. Analyzed by the author.

Expert	Evaluation and Suggestions
Tian qian	<p>Digital IP Character Design Evaluation:</p> <p>The digital IP characters are exquisitely designed, with visual communication highly consistent with the preferences of the youth demographic. The pattern and color combinations create memorable visual impressions.</p> <p>Representative characters "Qiling" and "Runhuo" possess distinct personalities that effectively capture the attention of the target audience.</p> <p>Recommendations:</p> <p>Enhance interactivity in digital IP dissemination through features such as AR interactive experiences or social media stickers/packs to boost user engagement and approachability.</p> <p>Refine character postures and expressions with greater detail variation to ensure adaptability across diverse communication scenarios.</p>
Deng xihong	<p>Apparel Design Evaluation:</p> <p>The garment silhouettes successfully balance contemporary aesthetics with elements of Li ethnic traditional attire, achieving cultural authenticity without compromising modern appeal.</p> <p>The layered application of colors and pattern arrangement creates striking visual depth,</p>



delivering powerful stylistic impact.

Recommendations:

Enhance textural dimensionality in select designs through elevated embroidery techniques or traditional craftsmanship to amplify tactile richness and visual hierarchy.

Refine fabric selection for improved functionality and wearability, prioritizing materials suited for contemporary daily wear contexts.



Chen dan

Cultural Integration Assessment:
The designs masterfully articulate the cultural significance of Li ethnic patterns, particularly the "Fu Dog Guardian motif" and "Piscine motif", through visually communicative symbols that ensure cross-cultural legibility. The apparel successfully fuses traditional heritage with contemporary tailoring, generating visceral impact while reinforcing cultural resonance.



Recommendations:

Implement contextual storytelling during product promotion, utilizing QR-accessible cultural narratives on merchandise to deepen consumer understanding of symbolic meanings.

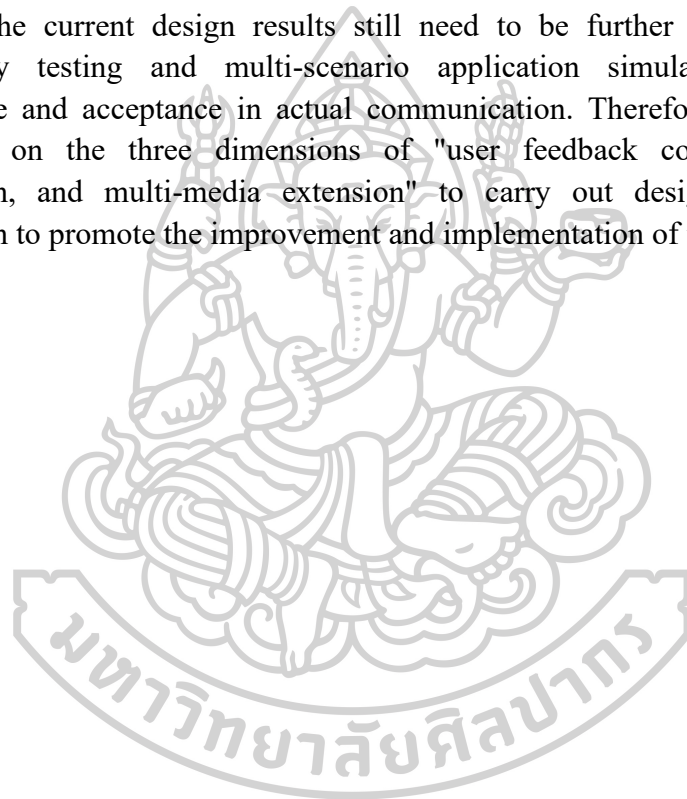
Develop modular digital content (e.g., micro-documentaries) explaining motif origins for enhanced cultural engagement.

4.6 Summary

This chapter preliminarily constructs an IP image system with cultural recognition and modern communication power through in-depth exploration of the five dialects of the Li nationality and extraction of visual semantics. In terms of graphic element extraction, character setting, color system construction, and media adaptation, the design work is based on national culture, combined with the aesthetic needs of the target audience, and achieves an effective integration of tradition and contemporary.

In addition, based on the feedback from questionnaire surveys and expert interviews, the design team preliminarily verified the cultural logic and communication potential of the core visual elements and established the direction for subsequent deepening.

However, the current design results still need to be further tested through user participatory testing and multi-scenario application simulation to test their performance and acceptance in actual communication. Therefore, the next chapter will focus on the three dimensions of "user feedback collection, systematic optimization, and multi-media extension" to carry out design verification and optimization to promote the improvement and implementation of the IP image system.



CHAPTER 5

RESEARCH CONCLUSIONS

5.1 Conclusions

This study focused on representative traditional patterns from the five dialect groups of the Hainan Li ethnic group, applying a semiotic perspective to conduct systematic analysis and design practice. The research aimed to explore effective pathways for reconstructing ethnic cultural visual language within a contemporary design system. Through a comprehensive process—including cultural extraction, —symbolic reconstruction — design development — expert validation, and — application demonstration—it verified both the feasibility and scalability of semiotic-based visual design in the context of cultural communication.

5.1.1 Step One: Establishing Contemporary Expression Paths for Ethnic Cultural Symbols

By deconstructing and reorganizing the pattern system within the non-literate Li culture, this study distilled typical patterns like the fish-tail pattern and Hercules pattern into core visual symbols possessing semantic, visual, and communicative functions. These symbols are no longer merely decorative graphics but are systematically transformed into visual languages with cultural semantics, structural logic, and communication direction. This offers standardized and media-adapted pathways for the contemporary expression of Li graphemes.

5.1.2 Step Two: Realizing Multi-dimensional Transformation and Implementation through Visual Design

Using cultural graphemes as the core language, the study achieved integrated design solutions across three domains:

- (a) Clothing design, where graphemes were merged with structural semantics.
- (b) Cultural products, where the symbolic extensibility of patterns was demonstrated.
- (c) Digital IP characters, where anthropomorphism enabled cultural personification.

These outcomes not only reflect aesthetic and market potential but also serve as functional tools for cultural transmission, illustrating the flexibility of symbolic design across visual media.

5.2 Discussion

This study unfolded the visual transformation practice of "contemporary expression of Li traditional patterns" within a semiotic context. It accumulated valuable experience in method selection, media integration, and cultural translation, while also revealing the challenges and tensions traditional ethnic symbol systems encounter in the modern context.

5.2.1 Phase 1: Transformation from decorative elements to communication language

In the process of design transformation, the traditional Li ethnic group elements are transformed from "static decorative elements" to "symbolic language with communication function". This transformation requires the graphics to have: cultural symbolism, user recognizability and media scalability.

This study achieved the semantic dimension upgrade of non-linguistic ethnic cultural elements through methods such as color simplification, graphic logic reconstruction and application scenario segmentation (F. Wang, 2023).

5.2.2 Phase 2: Building a full-link design system integrating multiple media

This study is not limited to a single medium, but takes the image element as the visual source point to construct a cross-platform communication matrix, including:

Physical clothing: strengthening cultural structure and ritual sense;

Cultural and creative products: emphasizing affinity and practicality;

Digital IP characters: realizing character personification and interactive communication.

This chain-like construction method has formed a visual system with both communication integrity and cultural representativeness, providing a replicable path for ethnic images to enter the mainstream design context (Karlson, 2015).

5.2.3 Phase 3: Verification through user participation and dissemination feedback mechanism

User surveys and expert interviews jointly constructed the "double verification mechanism" of this study:

498 questionnaires provided user aesthetic preferences and content feedback;

Expert opinions promoted the cultural accuracy and communication adaptability of the design.

This mechanism takes "cultural content as the core and user feedback as the support" to strengthen the real adaptability and communication effectiveness of the design results.

5.3 Study limitations

Although this study has achieved certain results in theoretical exploration and design practice, it is still subject to the limitations of the research cycle, resource conditions and media tools, and there are still four limitations that cannot be ignored:

5.3.1 Limitation 1: Limited geographical and sample coverage

This study was originally planned to cover the five dialect groups of the Li nationality, but due to time and traffic constraints, the field research was only concentrated in

some settlements, which may have affected the comprehensive understanding of regional cultural differences.

At the same time, although 498 questionnaires were collected, there were still deviations in the structural distribution of gender, age, education, etc., and the broad representativeness of the sample still needs to be improved (Chattaraman & Lennon, 2008).

5.3.2 Limitation 2: The depth and scientificity of pixel extraction need to be strengthened

This study mainly relies on visual intuition and cultural text data to organize and transform the traditional pixels of the Li nationality. However, due to the lack of a systematic pattern document database and standard graphic data, the historical origin and structural logic of some pixels are still unclear.

In addition, the semantic interpretation of some symbols is somewhat subjective, and further academic verification from disciplines such as ethnology and folklore is needed (Deng, 2020).

5.3.3 Limitation 3: Limited media conversion technology

Although this study attempts to extend the image element to multiple media such as clothing, cultural creation and digital IP, due to the lack of digital technology support such as augmented reality (AR) and virtual character modeling, the current communication form is still mostly in the static presentation stage.

In the future, it can be expanded to the direction of metaverse scenes, digital interactive media and AI-generated content (Si, Chen, & Jin, 2016).

5.3.4 Limitation 4: Insufficient testing of physical production and communication effects

Currently, only preliminary sample production has been completed for clothing and cultural and creative products, and they have not yet been tested for long-term use or market launch. Therefore, there is a lack of effective verification of user feedback,

commercial conversion data, and public acceptance, which also limits the in-depth evaluation of their "market adaptability of cultural products" (C. Chen, 2013).

5.4 Recommendations

In order to further improve the sustainability of design effects and cultural communication, based on the research findings, the following four suggestions are put forward for reference by subsequent practitioners and researchers:

5.4.1 Suggestion 1: Strengthen the systematic organization and digital construction of ethnic patterns

It is recommended that local governments, universities and intangible cultural heritage protection institutions collaborate to establish a systematic digital archive of traditional Li patterns, and classify and semantically annotate the pixels scattered in physical objects, oral descriptions and images.

This will provide high-quality basic data support for graphic redesign, cultural and creative development, AI-assisted design, etc.

5.4.2 Suggestion 2: Build a multi-party collaborative design and development platform

Encourage the integration of university creative resources with local cultural tourism industries and handicraft cooperatives to build a virtuous chain of

"cultural content + creative design + industrial incubation".

At the same time, encourage young designers to conduct in-depth field research on ethnic culture and stimulate new design momentum "based on local culture".

5.4.3 Suggestion 3: Expand digital communication methods and enrich interactive media channels

It is recommended to embed the IP image of the Li ethnic group into new media platforms, such as short videos, social expressions, interactive games, etc., to increase user participation and cultural visibility.

Through dynamic, anthropomorphic and interesting design strategies, the cultural communication transformation from "being watched" to "being interacted" can be achieved.

5.4.4 Suggestion 4: Pay attention to the simultaneous development of cultural interpretation and educational guidance

The success of design depends not only on the attractiveness of form, but also on the user's understanding of its cultural connotation.

It is recommended to equip the cultural product promotion and exhibition communication with interpretation systems, such as QR code links, explanation manuals, micro-documentaries, etc., so that users can "see the beauty" and "understand its meaning" at the same time (Galeeva, Yao, Emanova, & Rauzeev, 2019).

5.5 Future research directions

This study has carried out contemporary expression and dissemination practices based on the traditional graphics of the Hainan Li nationality, but there is still a broad research space in terms of deepening the graphics system, multi-media expansion, and cross-cultural communication mechanisms. It is recommended to conduct in-depth exploration in the following four directions:

5.5.1 Direction 1: Deepen the detailed study of the differences in the five dialects

The five major dialect groups of the Li nationality have significant differences in aesthetic habits and pattern composition. Future research can delve into the dialect element system, explore its symbolic semantics and graphic logic, and build a graphic system with greater cultural depth and ethnic recognition.

5.5.2 Direction 2: Promote AI-assisted pixel generation and visual language database construction

AI image generation technologies such as Stable Diffusion and Midjourney can be used to achieve scalable generation and variant design of Li ethnic pixels.

At the same time, it is recommended to build a standardized graphic language database containing traditional semantics, graphic logic and generation rules to improve the efficiency and creative freedom of pixel conversion (Bansal et al., 2024).

5.5.3 Direction 3: Strengthen the interactive communication research under the fusion of digital and spatial media

In the future, ethnic visual elements can be expanded to digital space forms such as virtual try-on, AR guided tours, and 3D immersive installations, realizing the transition from two-dimensional display to immersive experience, and broadening the boundaries of contemporary expression of ethnic culture.

5.5.4 Direction 4: Establish a cross-cultural visual comparison and communication effect evaluation mechanism

In the context of cultural globalization, how ethnic elements are recognized, accepted and misinterpreted by different cultural groups is an issue worthy of attention.

It is recommended to c(Bock, 2009; Broenen, 2001; Cao, 2025b; Chattaraman & Lennon, 2008; Chen, 2010a; Heang & Chuong, 2025; Krampen, 1987; Langlois, 2013; Moriarty, 2004; Morris, 1938; Nagel, 1994; Ohm, 2012; Shaumyan, 1987; Shinar et al., 2003; Yu, 2025) conduct a comparative study on the acceptance of Chinese and foreign users, establish an "international aesthetic coordination mechanism" for ethnic visual expression, and enhance its adaptability and influence in global communication.

REFERENCES

- Alqudah, H., & Khasawneh, M. A. S. (2024). Cross-cultural semantic analysis in online language learning platforms: Insights from user-generated content. *Migration Letters*, 21(S3), 27-41.
- Bansal, G., Nawal, A., Chamola, V., & Herencsar, N. (2024). Revolutionizing visuals: the role of generative AI in modern image generation. *ACM Transactions on Multimedia Computing, Communications and Applications*, 20(11), 1-22.
- Bateman, J. A. (2018). Peircean semiotics and multimodality: Towards a new synthesis. *Multimodal communication*, 7(1), 20170021.
- Bock, A. (2009). *The crossover of new media immersion and site-specificity: Contemporary art and spatial experience* [Concordia University].
- Broenen, M. (2001). *Endless weaving: Encountering the feminine in abstract art-making*. Pacifica Graduate Institute.
- Cao, C. (2025a). Research on the construction of "golden course" for clothing design based on the clothing cultural resources of the Li nationality in Hainan. *Education Information Forum*(01), 43-45. https://kns.cnki.net/kcms2/article/abstract?v=fSCzX0TVvUhN7X4ZAemopWm nZX8v5kMGr-v0hyJI6CU_IhUGo7yeHhMtEi9lZV9YqBolIu0Fy_Kj5TBfwOz5_IpesPkb28lnALylw3DDIAxzDHQMxU0OxaTO5Jkjm5kKphfUqKlx6KgGr8J2_Nki5z3Zk1iXg4xBJnJB0fldVeROXB274IPL3xepftEYQbub&uniplatform=NZKPT&language=CHS
- Cao, C. (2025b). Research on the construction of "golden course" for clothing design based on the clothing cultural resources of the Li nationality in Hainan. . *Education Information Forum*(01), 43-45. Retrieved(01), 43-45. https://kns.cnki.net/kcms2/article/abstract?v=VUvWpoE9A3KSVTg7kplK8S15c q2QazkZ5NDv7nRrTyuZ3EWjQ69DwB4LVnhDR1v72FpKWkqN3awCwDnfy 6whKNvej4rX0JI1KZ9iKXkR3AZPamKcigdi73C_VbMsmf3APK5JomSZaUe4 20PaCILMqD9IdKhGWCykmbaA6qOrCUSVmw6ATlv4oUQM5dd7-zmn&uniplatform=NZKPT&language=CHS
- Cao, C. (2025c). Research on the construction of "golden course" for clothing design based on the clothing cultural resources of the Li nationality in Hainan. *Education Information Forum*(01), 43-45. https://kns.cnki.net/kcms2/article/abstract?v=ewTrO3D4JaP9-yZCaDTDnPzf7m zIO6vqny2lCzNkJho3-Ltbxk9tLZVZhUOQWESlRW7U_Srx4AZHjMbUPm9_hGMbvzxQV0Njqkgf3Z6tHFhKruGAMf768-Jmpr7F5L1NvpfOh4K_n-wPL_Q NJyrmnb23q0XszLCmHeY6091G_aXcXL8k0YtojsAufGVILAqf&uniplatform

=NZKPT&language=CHS

- Cao, X., Kong, K., & Huang, Q. (2025). Reconciling quality and equity: policy innovations in Guangxi's preschool education reforms in the post-2010 era. *Social Transformations in Chinese Societies*.
- Chang, Y.-H., Wu, M.-H., Lin, K.-F., & Tan, K.-H. (2025). Effects of 12-week free sprint training and speed, agility, and quickness training (SAQT) on reaction time and lower limb muscle activation during crouch start. *European Journal of Applied Physiology*, 1-9.
- Chattaraman, V., & Lennon, S. J. (2008). Ethnic identity, consumption of cultural apparel, and self - perceptions of ethnic consumers. *Journal of Fashion Marketing and Management: An International Journal*, 12(4), 518-531.
- Chen, A. (2016). An Analysis of the Narrative Mode of Folklore Images from the Perspective of Semiotic Narrative Studies. *Journal of Northern University for Nationalities: Philosophy and Social Sciences*(5), 127-130.
- Chen, B., Deng, L., Liu, Y., Deng, X., & Yuan, X. (2025). The Effect of Integrative Neuromuscular Training on Enhancing Athletic Performance: A Systematic Review and Meta-Analysis. *Life*, 15(8), 1183.
- Chen, L. (2010a). On the Modeling Beauty of the Traditional Brocade Patterns of the Li Nationality. *Journal of Qiongzhou University*, 17(06), 11-14. Retrieved 17(06), 11-14.
https://kns.cnki.net/kcms2/article/abstract?v=VUvWpoE9A3Lfk40FRLAjukP6fDz8ZXPOTRxd2DipehQVZmklzrj3zmTgdOBBYE_IhoFFrmDM88XZoGDHTvn0qK2PG1DsD28MJjSNUcQkQ2s7dDqnYWR7MJsfgb347SVaAgzYqBWFpsKoTVvHb0GAymS9LNqkp9_LaUryw3nt5aiYbj2o1NLUFw==&uniplatform=NZKPT&language=CHS
- Chen, L. (2010b). On the Modeling Beauty of the Traditional Brocade Patterns of the Li Nationality. *Journal of Qiongzhou University*, 17(06), 11-14.
https://kns.cnki.net/kcms2/article/abstract?v=LzEBRIJt2Q3u6rSUIq1IMouLCQinKxEan-oZnC49OL5tMCLLay3zNIX9MqLkGZMi6RfGelum6rZHnX9elXrnGNlgL96-xJPZti13UrEofhiA42ekseRAbzrgOfLwACB5IA2nac-4-An9wuzjJDI1Rxn0yQBq2bNNXTAKif8_t3lHgmXKPABA7-IBKvVevfPf&uniplatform=NZKPT&language=CHS
- Chen, Y., & Xu, X. (2024). Creative expression and practical research on Li brocade patterns in product decoration. *Shandong Textile Technology*, 65(04), 20-23. Retrieved 65(04), 20-23.
https://kns.cnki.net/kcms2/article/abstract?v=VUvWpoE9A3LbLdbbEPFWC94KoMpZSyyIW5lF1_qLnSooGAUPXOW27sb54D_SHXotIguDXcFdl20C_AA9

[Vpr17BH_hWwQ8RuzJ5LHk3aNXXNOfbysSDsGagiBGniP26nH2cnzygA05Yd66ScnmO4DRriSO46J5_9LUAW6licATBUJSS6RDVLPf7ZQFV_WevxV7&uniplatform=NZKPT&language=CHS](https://kns.cnki.net/kcms2/article/abstract?v=fSCzX0TVvUg3UqVa8xgXwkKw7P07xBJ6B5ijpiL1pNIGZ--ywuDY2GAqqKmMwHfsrrVpnixkmOCYz2p12ZMMoOee39Cr2G0wvC85Y0UHPj5vTYgNbdU3M47rHLGGc5sfDu1SKpdYqdlMUv1a2DA3pFtQCPdgF1Y-D2emCyPflTWzKqeXDIkYIQMqYvdgSDnYLGJ7Ib8Zb-4=&uniplatform=NZKPT&language=CHS)

- Chen, Y., & Xu, X. (2024). Creative expression and practical research on Li brocade patterns in product decoration. *Shandong Textile Technology*, 65(04), 20-23. <https://kns.cnki.net/kcms2/article/abstract?v=fSCzX0TVvUg3UqVa8xgXwkKw7P07xBJ6B5ijpiL1pNIGZ--ywuDY2GAqqKmMwHfsrrVpnixkmOCYz2p12ZMMoOee39Cr2G0wvC85Y0UHPj5vTYgNbdU3M47rHLGGc5sfDu1SKpdYqdlMUv1a2DA3pFtQCPdgF1Y-D2emCyPflTWzKqeXDIkYIQMqYvdgSDnYLGJ7Ib8Zb-4=&uniplatform=NZKPT&language=CHS>
- Deng, X. (2020). Innovative expression of the cultural connotation of Li brocade patterns in fashion design. *Chemical Fiber and Textile Technology*.
- Dong, X. (2020). Application of Li Nationality Traditional Costumes in Modern Design. *Drama house*(22), 161-162. https://kns.cnki.net/kcms2/article/abstract?v=fSCzX0TVvUhRc3oFOg226931pOAMtgovofgnkaT-alik7cXXe5ZzeSm4ETXQT1aXb0uHpZUSleBd2GTVNTukh4pr2uXl4XC886xu2rf13OhnA9j0Y_x-p7dsVZ0sD6JaYAAO0B4MXICEHdSdORQ3Tmp1WppaN_CO4nYPwE185ztwnk5a7Ljb8wFHIKAtM603mlr9RgIWDj4=&uniplatform=NZKPT&language=CHS
- Dong, X., & Wang, L. (2020). Application of Li Nationality Traditional Costumes in Modern Design. *Drama house*(22), (22), 161-162. https://kns.cnki.net/kcms2/article/abstract?v=VUvWpoE9A3K1Zp9_WRtTEcdHhJzuyceki8NtwseDycO7uFPbWCuYMwz4n4_XyCyQhhwQrTQH9xmI2TXQXDg1wGbS84oF54kQSYDi5F5Yq-H2thYYZpMPC0IJwu6yYN_ksmdJkA3BgV0YBRA6u7JT92XfdtutGEf9-gmXgSrBcKjG9azflBgtTA3w0dtFCpS9&uniplatform=NZKPT&language=CHS
- Eco, U. (1979). *A theory of semiotics* (Vol. 217). Indiana University Press.
- Fan, J., Sun, K., Liu, X., Zhu, T., & Li, Y. (2025). Effects of sprint interval training compared to high intensity interval training on repeated sprint capacity and sport-specific performance in college-aged male tennis players. *Plos one*, 20(9), e0332705.
- Galeeva, Z. N., Yao, M. K., Emanova, J. G., & Rauzeev, I. Z. (2019). Specificity of National Vision in Costume. *Revista Turismo Estudos e Práticas-RTEP/GEPLAT/UERN*(1), 1-7.
- Goharipour, H. (2020). *Urban cinesemiotics: A theory-based critical interpretation of Chicago in the cinema of the 1980s and 2010s*. Kansas State University.
- Guan, Z., Buppawong, P., & Wisaraporn, W. (2025). Designing a SAQ Physical Fitness Program for Football Athletes of Guangzhou Sport University. *International*

Journal of Sociologies and Anthropologies Science Reviews, 5(3), 13-28.

- Han, D. (2020). Research on Digital Dissemination Platform for Culture and Arts of the Inhabited Ethnic Groups in Heilongjiang Basin. *Heilongjiang Ethnic Series*(02), 124-128+133. <https://doi.org/10.16415/j.cnki.23-1021/c.2020.02.020>
- He, M. (2021). Transmission and Reception Interaction: The Postmodern Transformation of the Transmission and Reception Mechanism of National Brands under the Intercultural Communication Context of “Belt and Road”. *Chinese market*(16), 110-112. <https://doi.org/10.13939/j.cnki.zgsc.2021.16.110>
- Heang, R., & Chuong, K. (2025). Digital Media and Its Impact on Intercultural Communication of Cambodia with China and Japan. *Open Access Library Journal*, 12(4), 1-16.
- Jiao, Y. (2020). Analysis on the application of Li ethnic group brocade product patterns in environmental art design. *Brand research*.
- Karlson, A. (2015). The Creation of Ethnicity: National Costume as Reconstruction or Construct? *Tradicija ir dabartis*(9), 134-144.
- Kong, X., Liao, Q., & Yang, C. (2024). Comprehensive analysis of li ethnic clothing based on five major dialects and its application in modern fashion design. *Fibres & Textiles in Eastern Europe*, 32(2).
- Krampen, M. (1987). Ferdinand de Saussure and the Development of Semiology. In *Classics of semiotics* (pp. 59-88). Springer.
- Langlois, G. (2013). Participatory culture and the new governance of communication: The paradox of participatory media. *Television & New Media*, 14(2), 91-105.
- Li, X., & Rao, Y. (2021). Research on the regeneration and application of Hainan Li brocade pattern design—Taking animal patterns as an example. *Design*, 34(11), 70-72.
- Li, Y., & Xiao, Y. (2021). Research on IP character product design based on the Pumi ethnic group. *Industrial Engineering Design*.
- Li, Z. (2024a). A Metaphorical Study on the Symbols of Human Figure Patterns in Li Brocade. *New Legend*(24), 32-34. https://kns.cnki.net/kcms2/article/abstract?v=fSCzX0TVvUjhpYVvrah-oFc8wkQh2RV9n8_QNcksgHQt6iQ84KJ8Ji9Vq8NPEBlrbtNKQySw7nsVLASxSgqYRwGzGTfZm3bdyHV9rEzMsS4Sg7lHjb89PumtzkV2GjVdISaGS-k_jW-BEML9hzo3h-B4uqRFRI838CpiFm5fi8F2rUFDPvnrsNRF5JZ0zFvYEFS05bR24=&u niplatform=NZKPT&language=CHS
- Li, Z. (2024b). A Metaphorical Study on the Symbols of Human Figure Patterns in Li Brocade. *New Legend*(24), 32-34. <https://kns.cnki.net/kcms2/article/abstract?v=VUvWpoE9A3JSdmOXSlIxKjHy>

[Bj2v2soG9RhvWCnukXGFjyj_hGfO89ARdGysLEY-Ej5V8SLflWM5kugHf7teWGYjoPOcRfMevZZr7HgUF2sIPsb7nI02PkK2HqNWcfsp9i0loS9OAAKaEvauCa2N6Z4HAYrSVk0KJWa4MzW8tWzTfHuEprGz_IPobgvLBPY2&uniplatform=NZKPT&language=CHS](https://doi.org/10.20143/j.1671-1602.2020.15.046)

- Liu, B. (2020). Redesign of Li nationality clothing patterns and their extended application in modern design. *Western Leather*, 42(15), 71-72. <https://doi.org/10.20143/j.1671-1602.2020.15.046>
- Liu, D. (2024). A Study on the Traditional Color Aesthetics of Hainan Li Brocade--Taking Mei Fu Dialect as an Example. *South China Sea Journal*, 10(06), 115-123. https://kns.cnki.net/kcms2/article/abstract?v=VUvWpoE9A3JfF9wCH1q7n_uFv_cqUQqPwMScpWgYUTCfuyqCrIB_NzPzr8TSbMBy6YWuJndgO3m8lr8_Dzxt5LsTB_qJd3OCXWO0X3LxyLEO2CAEAuBU3bTpRxN_FGfSLprj_XePC47EgXpmnvZ2UV3q9w4OVpXyJ-tgQo-uuP6iYeYvhDdQddhalFS86Q_&uniplatform=NZKPT&language=CHS
- Liu, X., Shao, Y., Saha, S., Zhao, Z., & Karmakar, D. (2025). Maximizing sprint performance among adolescent sprinters: a controlled evaluation of functional, traditional, and combined training approaches. *Frontiers in Public Health*, 13, 1596381.
- Moriarty, S. (2004). Visual semiotics theory. In *Handbook of visual communication* (pp. 249-264). Routledge.
- Morris, C. W. (1938). Foundations of the Theory of Signs. In *International encyclopedia of unified science* (pp. 1-59). Chicago University Press.
- Nagel, J. (1994). Constructing ethnicity: Creating and recreating ethnic identity and culture. *Social problems*, 41(1), 152-176.
- Ohm, J. (2012). *Multimedia communication technology: Representation, transmission and identification of multimedia signals*. Springer Science & Business Media.
- Pei, J. (2015). Study on the Patterns and Colors of Li Brocade. *Technology Vision*(21), 158-158.
- Pradittakarn, W., Nongkhai, M. P. N., Sulaiman, R. S. T., Anan, T. R., & Kumar, R. (2025). The effect of speed, agility, and quickness training on backstroke performance in 12-15-year-old students. *Journal of Physical Education and Sport*, 25(2), 382-391.
- Qi, Q., & Ma, X. (2005). Anthropological interpretation of the frog pattern on Li brocade. *National Art*(1), 67-81.
- Shaumyan, S. (1987). A semiotic theory of language.
- Shinar, D., Dewar, R. E., Summala, H., & Zakowska, L. (2003). Traffic sign symbol

- comprehension: a cross-cultural study. *Ergonomics*, 46(15), 1549-1565.
- Si, X., Liu, Y., Feng, X., & Feng, S. (2025). Experimental study on the impact of Speed-Agility-Quickness Training method on the agility performance of collegiate sanda specialty students. *PeerJ*, 13, e19406.
- Si, Y. (2017a). *A comparative study on the similarities and differences between the dialects of the Hainan Li nationality in terms of clothing* [Master, https://kns.cnki.net/kcms2/article/abstract?v=LzEBRIJt2Q0EmcEYG2qujsgfDCF0ZS-gm4CJ3fxChopuCLAJwDxMFIY0q83ChDTWFRcf3DX0QE7pNx0ikuGcqRTRsMILAAjqvDpQzRLtM2ARAU5WSpIEEH9DpPHuGD1LrlayFXq2LDXq9qsoidIG2oorYfESlqETTzM_IKzORkWmusXWrebg2fiflQwuiZiFylneEQvO0eA=&uniplatform=NZKPT&language=CHS].
- Si, Y. (2017b). *A comparative study on the similarities and differences between the dialects of the Hainan Li nationality in terms of clothing*. [硕士, Qidao University]. https://kns.cnki.net/kcms2/article/abstract?v=ewTrO3D4JaO9g-3jU6aZXZ23OexUKZPBUVlJclKHDP0ligL7_Jd_Yt3H9zuANWP-QLzp2i8MY-rv2kdOs7bDytXQrg95zDMSEhYebM68e-76j7ppUXZsSpdv_0LjRN64fJa1UV9sVkMnW3AWEruy3Zw2UfjSO0dpOCGOjL1ZdI2vRipJwcQZqrwdWbDSwQOv&uniplatform=NZKPT&language=CHS
- Sin-Wai, C. (2016). *The Routledge encyclopedia of the Chinese language*. London–New York.
- Su, S., Dan, X., Long, B., An, W., & Zhu, Y. (2023). Study on the brocade craftsmanship and patterns of the Li nationality in the Qi dialect area of Hainan. *Journal of Silk*, 60(9).
- Sun, J., & Ab Aziz, A. (2023). Exploring the redesign value of Chinese traditional Auspicious patterns in the context of modern design. *EDUCATUM Journal of Social Sciences*, 9(1), 12-26.
- Sun, M., Soh, K. G., Ma, S., Wang, X., Zhang, J., & Yaacob, A. B. (2025). Effects of speed, agility, and quickness (SAQ) training on soccer player performance—a systematic review and meta-analysis. *Plos one*, 20(2), e0316846.
- Tan, C., Zhou, M., & Wang, R. (2024). Liyun Wuxing—Li ethnic group pattern silk scarf design. *Hunan packaging*, 39(06), 231. https://kns.cnki.net/kcms2/article/abstract?v=fSCzX0TVvUhrChDjHz47T-OqpxcjhX7IMbFNyZLiaMwe0gyqNnkh4_A5fXYGvWmnBKcaDSTNL1XS-D-bgU_SbZYki1M5uIDzyehPIQuFIzjT4TACwkr_xXHdUWW9jQAYS2lsQlk2_WY8z_zNuVmt0QQvHdUDMvA56818wC0ATCJbXrkkGDD7i9Wzf2hxme2oKL7zzStYHkU8=&uniplatform=NZKPT&language=CHS

- Tan, C., Zhou, M., & Wang, R. (2024). Liyun Wuxing——Li ethnic group pattern silk scarf design. *Hunan packaging*, 39(06), 231. https://kns.cnki.net/kcms2/article/abstract?v=VUvWpoE9A3KB_6fjxbk2ck54p_mhCvNXGR8anrC_UToGTg2PguDHC2adcPzOPdgp-tgut1cTbSNloi-mTn_2nA6QIn4G6fof2hCjwIUtwoV2zldRKbZG6R5Bf3yRvVFuB6VQLSDCX8E3-1AZFMNuCpqsF53wZBr2qhzaOEQIN2y0jgbqH3M5PEUVT-RfW8IIw&uniplatform=NZKPT&language=CHS
- Twenge, J. M., Martin, G. N., & Spitzberg, B. H. (2019). Trends in US Adolescents' media use, 1976–2016: The rise of digital media, the decline of TV, and the (near) demise of print. *Psychology of popular media culture*, 8(4), 329.
- Wang, F. (2023). Study on the Aesthetic Transformation Design of Traditional Cultural Elements in Visual Language. *Journal of Humanities, Arts and Social Science*, 7(11).
- Wang, S. (2022). The production of the visual images of Tibet: a semiotic and contextual study.
- Wei, Y. (2024). Innovative application of Li ethnic group clothing patterns in modern clothing design. *Dyeing and finishing technology*, 46(04), 98-100. https://kns.cnki.net/kcms2/article/abstract?v=VUvWpoE9A3Kt4ZMRKtlOsARzf_qSAMtqsQIq66IROW6ZfMqE1Y6b1aJCcoOTbKPCaq8c6VU8koS8MnqGpCaPuSkLQWY-J8vRyFH8g1YYGQv_E3kgqKkZWrYh3sNM9sPiQ_9wCjtq0JPd4GLfbH8ru0uUDpyRxo2rs_U0CjKXPUJGZpk199LtyszWxwH5tZyng&uniplatform=NZKPT&language=CHS
- Wu, C. (2018a). A Study on the Cultural Connotation of Li Nationality's Clothing. *Tomorrow's Fashion*(13), 328. https://kns.cnki.net/kcms2/article/abstract?v=fSCzX0TVvUjSqdr-BiljHT3fXHVYCPSKLF8mkQQItxfecCTUbDIRObpUQnop9piAmxkESDUdFTpKK6_JsgxRfBNAD2W_LqJE8gMkT6ZaCaLzS1FJfoWB2iyg8UhULJG3plwYRR5iApKBQbiq57dpqxJTz0pTflb2LSk_YiWG2dtPWrrWdkJ731gGTBE02zDB9zztDS4jsY=&uniplatform=NZKPT&language=CHS
- Wu, C. (2018b). A Study on the Cultural Connotation of Li Nationality's Clothing. *Tomorrow's Fashion*(13), 328. https://kns.cnki.net/kcms2/article/abstract?v=VUvWpoE9A3IabcH2uInASmxQIVwtv0zZaB28FfXFf3Z6v1Ozu5alUS9ThRjM9yfe4RbSun1vVT-ATkSfQBGC TCMCvRH3-zFOcWbIyINJ8wGhf_CIUmw0BefnhQwwM3e7gO1kM6lAuntSZ_ziai0zy0-UvteEOGaxVJBKvuuLiydWgZkjfXkEW0XtmSc42yMj&uniplatform=NZKPT&language=CHS
- Wu, C. (2019a). The application of traditional Li women's clothing elements in modern clothing design. *Heilongjiang Textile*(03), 17-19.

https://kns.cnki.net/kcms2/article/abstract?v=fSCzX0TVvUij1HrzkCuSQA7IPVpnzak8kFpXYf52VoU8uD0WsbyybcvuTFDdvr_SbNG3xW7ps_CR81D-n-Uvacq8Qlx0NbPhAYKN91sK_uT-PoxyupIGQgZNeQxu1tCpo8Vtn0zlS8sZHvuD5gphwTNLIJHpf_4e7zdp7av2IwfS11RJ9JR5ApYeeXYHFIXrudIMCyzc3PM=&uniplatform=NZKPT&language=CHS

- Wu, C. (2019b). The application of traditional Li women's clothing elements in modern clothing design. *Heilongjiang Textile*(03), 17-19. https://kns.cnki.net/kcms2/article/abstract?v=VUvWpoE9A3LVasusOOH27AY4NMPrxivH-YjTt_GA9GCwlbh1KVom54J3kQfviPoFnfXa9hnlRMbzkcMDQA IUOdxTSFQWaAXUpN4QRWrNr7FO0JWterdIsif43R9VB_1tn2REHc7GGeAsIXBBOJLK5Q9iH3o_m1GxhsaDe0CrI5K4kF8e-p7eJpeVxQ3Wzl60&uniplatform=NZKPT&language=CHS
- Wu, S. (2012). *Modern application of traditional Li brocade patterns* [Donghua University].
- Wu, Z., & Areerungruang, S. (2025). A SEMIOTIC STUDY OF TRADITIONAL PATTERNS IN THE FIVE DIALECTS OF THE LI ETHNIC GROUP—CULTURAL SYMBOLISM AND MODERN COMMUNICATION. *วารสาร ส่งเสริม และ พัฒนา วิชาการ สมัยใหม่*, 3(3), 692-714.
- Xia, M., & Wang, Y. (2013). Inheritance and protection of Qi dialect women's clothing of the Li nationality. *Shandong Textile Economy*(1), 61-66.
- Xin, L., Zhou, X., & Kong, X. (2024). A Brief Analysis of the Similarities and Differences between the Li Nationality's Clothing Dialects and Their Modern Aesthetics. *Western Leather*, 46(06), 98-102. <https://doi.org/10.20143/j.1671-1602.2024.06.098>
- Xu, X., & Hu, R. (2024). Research on the Industrialization Development of Oriental Li Nationality Clothing Culture Based on Symbolic Interactionism. *Beauty and Times (Part 1)*(06), 30-34. <https://doi.org/10.16129/j.cnki.mysds.2024.06.007>
- Yakin, H. S. M., & Totu, A. (2014). The semiotic perspectives of Peirce and Saussure: A brief comparative study. *Procedia-Social and Behavioral Sciences*, 155, 4-8.
- Yu, B. (2025). Exploration of Brand Design Elements to Promote Consumer Engagement: Structure, Semantics, and Content. *Academic Journal of Humanities & Social Sciences*, 8(2), 43-49.
- Zhang, H., Sun, H., Xie, S., & Zhang, G. (2024a). Research on the information visualization design of Hainan Li brocade pattern based on visual thinking. *Footwear Craftsmanship and Design*, 4(12), 36-38. https://kns.cnki.net/kcms2/article/abstract?v=fSCzX0TVvUhhW7VNYHhuUFXXIC5s8nimXCkkoXL_f7kIDCO37gPC82CGSJxVv3YmDC0PLmBN4v5w211q

[6Z6DPKNI20jebH1At8EkCWqeP4tIReBo387CptZALS11EDsLEfFvQ050PvYh3rapEBNidW4jSv1HOIq33QLc660O3JhGTDb-XV5F-9gBy6X6Qv5sea00Dylj4rI=&uniplatform=NZKPT&language=CHS](https://kns.cnki.net/kcms2/article/abstract?v=VUvWpoE9A3LT7n_f9Y1_M4gE_hfj_eXSEjOMapur5YxU7lfyG5TIDdswiCffLarExeiJrGqWaZe3gxRmSHLrP5HnPtYKeB1obhYwBbhX8rmsaYOXpLMrXNKCWpQ6hk81UEQ33et9OszNLF8TsmSG7EGl-wHTyQUvWKyMP9l_aMGVywK-K_Kdps6-Xxj0X1F&uniplatform=NZKPT&language=CHS)

- Zhang, H., Sun, H., Xie, S., & Zhang, G. (2024b). Research on the information visualization design of Hainan Li brocade pattern based on visual thinking. . *Footwear Craftsmanship and Design*, 4(12), 36-38. https://kns.cnki.net/kcms2/article/abstract?v=VUvWpoE9A3LT7n_f9Y1_M4gE_hfj_eXSEjOMapur5YxU7lfyG5TIDdswiCffLarExeiJrGqWaZe3gxRmSHLrP5HnPtYKeB1obhYwBbhX8rmsaYOXpLMrXNKCWpQ6hk81UEQ33et9OszNLF8TsmSG7EGl-wHTyQUvWKyMP9l_aMGVywK-K_Kdps6-Xxj0X1F&uniplatform=NZKPT&language=CHS
- Zhang, L. (2004). An Analysis of the Differences between Saussure and Peirce's Semiotic Views. *Journal of Changchun Normal University*, 4.
- Zhang, X. (2021). The application of ethnic cultural symbols in modern visual communication design. *Scientific and Social Research*, 3(1), 11-13.
- Zhang, Y., & Zhang, S. (2014). How and why Saussure is misread in China: A historical study. *Language & History*, 57(2), 149-167.
- Zhou, J. (2007). Pattern Art in Li Brocade. *Journal of Zhejiang Textile and Fashion Vocational Technical College*, 6(3), 32-34.
- Zhou, X., & Zou, L. (2024). Research on the clothing patterns of the Li nationality in the Ha-dialect area of Hainan and its innovative design application. *Comparative Study on Cultural Innovation*, 8(03), 104-108. https://kns.cnki.net/kcms2/article/abstract?v=VUvWpoE9A3KKdyR5JwkkGSysPE-fsAumkV5wgsyuc3ONin9aCAS40IeJSL9mO5wS8G-bofVLojJjCmjyynwyqGV8N6rwLCmqjN_2Kn4WUtK0q8uQDM0sDDTBLgxHA2yN3iO-vEWs5cmn0golvCUezim9umQGVzYQVoZL2sXaK7_XoZ7OxzpOOv2kh4TzDqH1&uniplatform=NZKPT&language=CHS
- Zhu, H., Yao, H., & Kang, y. (2021). Study on totem patterns based on semiotics theory: Taking the frog pattern of the Li nationality as an example. *Art Technology*, 34(4), 153-154.
- Zhu, L. (2024). The Application of Hainan Lijin Patterns in Costume Design under the Background of Digitization. *Western Leather*, 46(14), 91-93. <https://doi.org/10.20143/j.1671-1602.2024.14.091>



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<https://so12.tci-thaijo.org/index.php/MADPIADP/article/view/2835>

