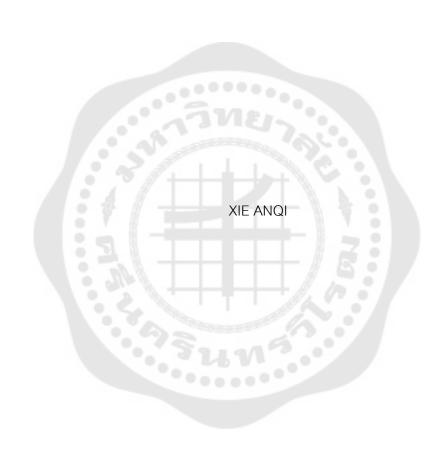


THE INTERCONNECTION OF CULTURE AND ART IN THE PACKAGING DESIGN OF PU'ER TEA: A STUDY OF ETHNIC MINORITIES IN XISHUANGBANNA



Graduate School Srinakharinwirot University 2024

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ศิลปศาสตรคุษฎีบัณฑิต สาขาวิชาศิลปวัฒนธรรมวิจัย
คณะศิลปกรรมศาสตร์ มหาวิทยาลัยศรีนครินทรวิโรฒ
ปีการศึกษา 2567
ลิขสิทธิ์ของมหาวิทยาลัยศรีนครินทรวิโรฒ

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An Dissertation Submitted in Partial Fulfillment of the Requirements

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Faculty of Fine Arts, Srinakharinwirot University

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THE DISSERTATION TITLED

THE INTERCONNECTION OF CULTURE AND ART IN THE PACKAGING DESIGN OF PU'ER TEA: A STUDY OF ETHNIC MINORITIES IN XISHUANGBANNA

BY

XIE ANQI

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	chai Ekpanyaskul, MD.) duate School
ORAL DEFENS	SE COMMITTEE
Major-advisor	Chair
(Asst. Prof. Dr.Ina Puyuthanon)	(Prof. Dr.Pisit Charoenwong)

Title THE INTERCONNECTION OF CULTURE AND ART IN THE

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Author XIE ANQI

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Thesis Advisor Assistant Professor Dr. Ina Puyuthanon

Pu'er tea encapsulates Chinese tea culture and the ethnic traditions of Xishuangbanna. This research aims to: (1) analyze the intricate relationship between Chinese tea culture and packaging design, and (2) develop a Pu'er tea packaging design strategy that integrates Xishuangbanna's ethnic characteristics with Chinese tea culture. To achieve these objectives, the study employs a mixed methods approach, combining qualitative data from interviews with 10 stakeholders to explore cultural representation in packaging and quantitative surveys analyzing 313 samples. The results produced a 'Cultural Symbols Hierarchical Transformation Model' and proposed a strategy of 'regional cultural symbols + tea ceremony spirit', advocating for an ethnic symbols database to bridge intangible cultural heritage preservation and commercial design. The study not only provides guidance for Pu'er tea packaging design but also offers a reference for innovating heritage-based derivatives and promoting traditional culture internationally, with potential applications to other tea varieties.

Keyword: Pu'er tea, Packaging design, Ethnicity, Culture and art, Xishuangbanna

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At this point in my writing, it means that I am coming to the end of my doctoral studies. This year, I am 35 years old, the third year of my doctoral studies, and the eleventh year of my art and design studies. Looking back on this challenging and rewarding journey, I have a lot of feelings in my heart, and I can only offer my most sincere thanks to all the people who have accompanied me, supported me, and helped me get to where I am today.

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XIE ANQI

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CHAPTER 1

INTRODUCTION

1.1 Background

The origin and evolution of tea encompass a vibrant and multifaceted historical trajectory, rooted from China, extending over 4,700 years (Zhang, 2017). Based on the findings of historians and archaeologists, tea was firstly discovered during the reign of Emperor Shennong, a legendary figure in Chinese mythology, encountered the tea plant while experimenting with various herbs. Following this encounter, he began to investigate and utilize the leaves of tea plants for their potential medical properties (Zhang, 2015).

The history of Chinese tea is extensive, transforming from a beverage reserved for the aristocracy in the Qin and Han dynasties to becoming widely consumed by the general population. The Tang and Song dynasties witnessed a flourishing of tea culture which laid the ground work for the intricate social practice and rituals surrounding the tea consumption. Furthermore, both the Ming and Qing dynasties marked a period of prosperous tea trades. Initially, green tea emerged as the earliest type of tea in Chinese history, characterized by its simple processing methods. It demonstrated the inherent excellence of the tea leaves. By the time of the Tang and Song dynasties, however, tea had been selected as one of the annual tributes to the imperial court and nobility which led to the considerable advancements in tea processing techniques. Consequently, the cultural aspects of tea ceremonies and the use of tea equipment became more incorporated into daily life. Additionally, the growing popularity of tea art performances played a role in further promoting tea culture. In the Ming and Qing dynasties, the prosperity of the tea trade elevated tea houses and tea pavilions to prominent venues for social gatherings and leisure. The art of brewing and tasting tea was further refined and became widely appreciated. Furthermore, a variety of tea grew during this period, including white tea, black tea, yellow tea, dark tea, and oolong tea, each characterized by distinct manufacturing techniques and flavors, creating a vibrant historical narrative of Chinese tea. The classification system of Chinese tea demonstrates the profound

historical roots of tea culture and highlights the distinctive production methods and cultural importance of different tea varieties. Among the six main types of tea, Pu'er stands out within the dark tea category. Pu'er tea is highly regarded not just for its diverse range of flavours and distinctive taste, but also for the transformations it experiences over time and the cultural value it accumulates as it matures, making it a meaningful object of both scholarly exploration and cultural appreciation within the field of tea culture.

Pu'er tea is derived from the Yunnan Province in southwest China; its history can be traced back to the Eastern Han Dynasty, roughly 1,700 years ago. During the early Yuan Dynasty, it was referred to as "Pu tea," while during the Ming Dynasty, under the rule of Wanli, its name was officially changed to "Pu'er tea.". Pu'er tea became an important tribute to the imperial courtyard and the royal family, and so it came to be titled the "King of Tribute Tea." This was not only a manifestation of power and status but also a reflection of the unprecedented position taken up by tea culture in society. According to "History of Ming," in the Ming Dynasty, every year, large quantities of Pu'er tea were sent to the capital for the emperor and nobility. This not only increased Pu'er tea's reputation but also promoted the spread of Pu'er tea throughout the nation. During the transition from the late Ming to the early Qing Dynasty, the act of consuming Pu'er tea gained popularity among the upper class and educated individuals (Yao, 2008). The distinctive fermentation process and extended ageing potential of Pu'er tea have rendered it a topic of extensive investigation and admiration among tea connoisseurs around. Pu'er tea serves as more than just a drink; it acts as a vessel for China's extensive historical and rich cultural heritage. The culture of Pu'er tea encompasses a diverse range of artistic expressions, including tea art, poetry, calligraphy, and painting, which serve as a platform for presenting the aesthetic ideals and artistic endeavours of the Chinese nation. Pu'er tea, which hails from Yunnan, China, is not only a valuable part of Chinese tea culture but also a remarkable treasure in the global tea community (Yang & Mo, 2016).

Xishuangbanna, located in the southern part of Yunnan Province, is blessed with a subtropical and tropical monsoon climate. It boasts a rich historical and cultural heritage, along with stunning natural landscapes, making it one of the key cradles of human civilization. As a vital part of China, its tea culture also enjoys a long history, enriched with unique regional characteristics. Notably, Xishuangbanna's Pu'er tea stands out for blending the diverse tea traditions of various ethnic groups and reflecting the region's unique geographical, historical, and cultural identity. The local ethnic minorities, renowned for their generational terraced tea farming, have cultivated tea for centuries. The art of Pu'er tea production, encompassing stages such as picking, fixation, rolling, drying, and fermentation, showcases their reverence for tea and the distinctive tea-making techniques that are vital elements of their cultural heritage.

Xishuangbanna, the premier production area for Pu'er tea in Yunnan Province, has a rich history of tea cultivation. The region's climate and soil conditions are exceptionally well-suited for tea tree growth, resulting in top-quality Pu'er tea that is cherished by enthusiasts. Particularly in the western region of the Xishuangbanna Dai Autonomous Prefecture, with its abundant tea tree resources and ideal climate, the area has rightfully earned the reputation as the "Hometown of Pu'er Tea." The county's environment, known for its temperate winters and moderate summers, offers optimal circumstances for the cultivation of tea trees. Menghai County possesses an extensive range of tea tree resources in China, encompassing many types such as Dali tea and Pu'er tea. The tea plantation area is 68,780 hectares and produces 35,300 metric tonnes of tea annually, which provides a strong basis for the production and study of Pu'er tea. The climatic conditions in Menghai County play a crucial role in facilitating the growth of tea trees. The tea tree thrives in this region because of its high annual average rainfall of around 1,300 mm, which, combined with abundant sunlight, offers an optimal development habitat. The spring and autumn seasons offer diffuse light that creates an ideal ecological environment for tea trees that thrive in shade. This light is essential for improving the quality of tea. Menghai County has a variety of tea tree resources, including contemporary tea gardens, natural populations of wild tea trees, and ancient tea gardens. A significant number of these ancient tea trees offers important resources for investigating the historical background and traditional methods of producing Pu'er tea.

By studying Pu'er tea, a deep understanding of the artistic expressions of tea culture can be achieved, enriching and enhancing knowledge and comprehension of Chinese tea culture. Among China's 31 provinces (including autonomous regions and municipalities), 22 are involved in large-scale tea production. Notably, Yunnan and Fujian provinces contribute over 30% of the national total tea output, highlighting the regional characteristics and economic significance of China's tea industry (Lu, 2013). Xishuangbanna, located in Yunnan, is one of China's foremost agricultural hubs, renowned for its prominent role in tea production. In 2019, the production of Pu'er tea amounted to approximately 155,000 tons, marking a 10.7% year-on-year increase, with an agricultural output value of about 7.83 billion yuan, accounting for 3.26% of the national tea agricultural total value. The domestic sales revenue reached 11.53 billion yuan, representing 11.2% of the total domestic sales volume of all tea categories. Between January and October 2020, the export volume of Pu'er tea was 65.7 tons, with an import value of 574,000 US dollars. Pu'er tea's prominence in the international market, demonstrating its economic strength, is deeply rooted in the rich and diverse ethnic cultures of Xishuangbanna. The packaging design, which artfully combines traditional and modern elements, serves as a pivotal force in driving local economic growth and preserving the global legacy of tea culture.

Tea, once solely valued for its medicinal properties, gradually wove itself into daily life, becoming an enduring symbol of Chinese culture (Fu, Yao et al., 2018). With commercial development, tea packaging has emerged, not only to protect the tea but also to serve as a crucial medium for transmitting traditional Chinese culture. Packaging design goes beyond just appearance decoration; it conveys product information, value, and cultural connotations, all of which are intertwined with the profound heritage of tea culture. These designs reflect changes in social productivity and aesthetic concepts. Carefully designed tea packaging not only protects and enhances tea quality, but also

aligns with market demands and consumer aesthetic preferences. Thus, it plays multiple roles in driving economic development, preserving culture, and fulfilling social responsibility.

The evolution of product packaging design and manufacturing technique from 2000 to 2020 has been greatly influenced by globalisation and technical progress. Due to the rapidly expanding market and the diversifying demands of consumers, modern packaging design has become more commercialised, resulting in a period of transformation that has been especially noticeable in the Chinese tea market. Culturally and aesthetically, tea packaging faces many obstacles. In terms of promoting Chinese cultures, contemporary tea packaging has generally been unsuccessful in properly communicating the fundamental principles of "Dao operates naturally," "unity of heaven and humanity," "freshness and purity," and "tranquilly and peace" that are inherent in traditional tea culture. This issue undermines the significance of tea as a cultural transmission medium, hindering consumers' understanding and appreciation of the profound nature of tea culture. From an aesthetic perspective, many packaging designs simply replicate visuals and traditional Chinese patterns, without effectively portraying the inherent traits and aesthetic requirements of tea culture. This phenomenon not only diminishes the artistic value of tea packaging, but also starkly contrasts the quality of the tea itself. This phenomenon not only diminishes the artistic value of tea packaging, but also creates a stark contrast between the packaging and the quality of the tea itself.

In conclusion, based on an understanding of the status quo of Chinese tea packaging from 2000 to 2020 and the existing problems, this study aims to explore how to better integrate traditional Chinese cultural elements with modern design concepts. An in-depth examination of the intersection and conflict between traditional and contemporary tea packaging design will be conducted. This study seeks to address the shortcomings of modern tea packaging in cultural transmission and aesthetic representation and to propose practical design strategies to strengthen the function of tea as a cultural carrier. The goal is to enhance consumers' perception and appreciation of tea culture, thereby promoting the global dissemination and recognition of Chinese

tea culture. It is anticipated that this study will introduce novel innovations and perspectives to the field of tea packaging design, potentially contributing to the cultural and artistic enrichment of the tea industry's sustainable development.

1.2 Research Objectives

- 1. To analyze the intricate relationship between Chinese tea culture and packaging design.
- 2. To develop a packaging design strategy for Pu'er tea that incorporates the ethnic characteristics of Xishuangbanna and the Chinese tea culture.

1.3 Research Questions

- 1. In what ways can a profound connection be forged between Chinese tea culture and Pu'er tea packaging design?
- 2. What specific elements of Xishuangbanna's ethnic minority tea culture exert an influence on Pu'er tea packaging design?

1.4 Significance of the Research

- 1. This research aims to enhance the role of tea packaging design as an effective tool for transmitting and promoting Chinese tea culture, ensuring that it accurately reflects the profound connotations of tea culture and deepens people's understanding and appreciation of tea culture.
- 2. This research aims to develop packaging design strategies that embody ethnic characteristics by exploring the harmonious integration of Xishuangbanna's ethnic minority culture and Chinese tea culture, with the objectives of enhancing the cultural value of Pu'er tea and promoting the wider dissemination of tea culture.

1.5 Scope of the Research

1.5.1 Content Scope

This research delves into the impact of both Chinese tea culture and the distinctive tea traditions of Xishuangbanna on the packaging design of Pu'er tea, with a particular focus on the design of Pu'er tea cakes and the cultural and aesthetic values they encapsulate. It examines the traditional elements of tea culture embedded in Pu'er tea packaging, including symbols, typography, color schemes, and craftsmanship intrinsic to Chinese tea culture. Moreover, the study explores how the unique tea culture and regional characteristics of Xishuangbanna, Yunnan, can be seamlessly woven into Pu'er tea packaging design, effectively conveying the rich cultural heritage and enhancing the market value of Pu'er tea through thoughtful and culturally resonant packaging.

1.5.2 Geographical Scope

This study is focused on the Xishuangbanna tea region in Yunnan Province, China, specifically including its capital, Jinghong City, and the key Pu'er tea-producing area of Menghai County. It aims to analyze the distinctive Pu'er tea culture unique to Xishuangbanna and its influence on packaging design, with the goal of leveraging packaging design to promote Pu'er tea in both domestic and international markets, thereby enhancing its cultural appeal and market presence.

1.5.3 Population Scope

This study targets tea enthusiasts aged 35 and above, a demographic that holds a key position in tea consumption and cultural dissemination due to their mature life experiences, stable economic background, and deep cultural appreciation. In addition, interviews will be conducted with 10 key figures connected to Pu'er tea and ethnic culture. These include two tea farmers from Nannuo Tea Mountain and Laobanzhang Village in Menghai County, a teahouse owner from Menghai County, a cultural scholar from Yunnan Province, the director of Fangyuan Factory at Menghai Tea Factory, a guide at the Hani Museum, a museum cultural expert, a Dai papermaking artisan, and two designers—one from Yunnan and one from Beijing.

1.6 Definition of Terms

1.6.1 Xishuangbanna

Located in the southwest of China, Xishuangbanna spans both subtropical and tropical zones and boasts a varied landscape that includes the Hengduan Mountains, high plateaus, basins, and a network of rivers, all contributing to its complex climate types and rich ecosystems. This region creates a colorful mosaic of diverse cultures and longstanding traditions.

1.6.2 Ethnicity

Ethnicity refers to a historically rooted social construct, defined by shared traits such as language, territorial affiliation, economic practices, and cultural elements. This research focuses on Xishuangbanna, a region noted for its intricate ethnic mosaic, where groups such as the Dai, Hani, Lahu, and Bulang have significantly influenced the cultivation, production, and cultural transmission of Pu'er tea, extending to its distinctive packaging aesthetics.

1.6.3 Pu'er Tea

Pu'er Tea, originating from China's Yunnan Province, is a type of tea processed through post-fermentation using Yunnan's large-leafed sun-blossomed green gross tea as the raw material. It is renowned for its distinctive deep aroma, mellow taste, and brownish-red appearance and color.

1.6.4 Packaging Design

Packaging design is the integration of fine arts and natural science applied to the protection and aesthetic enhancement of product packaging. It encompasses the multifaceted integration of elements including science, art, materials, economics, psychology, and market considerations. It is typically categorized as graphic design, though it is also sometimes classified under industrial design.

1.6.5 Chinese Tea Culture

Chinese tea culture represents a profound and enduring tradition deeply embedded in the nation's historical and contemporary framework. This tradition spans diverse practices, from cultivation and preparation to consumption, intersecting with domains such as art, philosophy, science, and medicine. In this dissertation, 'Chinese

tea culture' specifically refers to the cultivation and production techniques of pu' er in Xishuangbanna.

1.6.6 Aesthetic Value

Aesthetic value refers to the value form of satisfaction and pleasure that humans obtain through perception, experience and understanding in nature, art and life. It reflects the aesthetic relationship between people and things, and includes the comprehensive experience of vision, hearing, smell, taste and emotion.

1.7 Paper Framework

This framework demonstrates the complex interactions between tea culture, packaging design and cultural ecology, environment and social structure. By analysing the link between tea culture and Pu'er tea packaging design, it is possible to see more clearly how different cultural elements influence the design process and further disseminate and enhance tea culture through product packaging. The author has reviewed a large amount of literature related to tea culture and packaging design. However, to deeply analyse the national cultural characteristics of Pu'er tea packaging design, the theory of cultural ecology provides a unique perspective that enables us to understand the interactions between culture, environment and social structure, especially in the cultural heritage and innovation of Pu'er tea. The packaging design of Pu'er tea not only reflects the cultural characteristics of local ethnic minorities, but also enhances the added value and market competitiveness of the product by incorporating modern design language.

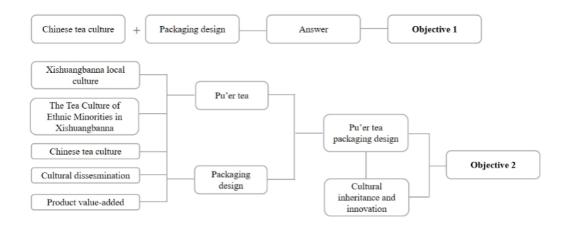


Figure 1 Paper Framework

Source: Drawn by Anqi Xie



CHAPTER 2 LITERATURE REVIEW

The thematic focus of this study is The Interconnection of Culture and Art in the Packaging Design of Pu'er Tea: A Study of Ethnic Minorities in Xishuangbanna. This chapter conducts a comprehensive review of relevant theories and literature to explore the intricate relationship between Xishuangbanna's ethnic minorities and the cultural significance of Pu'er tea. By employing the theoretical framework of cultural ecology, the chapter elucidates the evolutionary processes of tea culture in specific environmental and cultural contexts. The historical and cultural landscapes of these regions illustrate the distinctive dynamics of multicultural integration and their symbiotic relationship with tea production. These insights form the basis for analyzing the unique tea customs among ethnic minorities, synthesizing their historical and cultural attributes, and reinforcing the importance of Pu'er tea as a cultural icon. Through the lens of packaging design, this chapter further investigates the confluence of traditional tea culture and contemporary design, highlighting how this integration enhances the cultural appeal of Pu'er tea.

- 2.1 Multifaceted Aspects of Chinese Tea Culture
- 2.2 Theoretical Foundation of Cultural Ecology
- 2.3 Local Culture of Xishuangbanna
- 2.4 The Tea Culture of Ethnic Minorities in Xishuangbanna
- 2.5 The History and Characteristics of Pu'er
- 2.6 Pu'er Tea Packaging Design
- 2.7 Enhancing Value and Culture through Packaging

2.1 Multifaceted Aspects of Chinese Tea Culture

2.1.1 The Traditional Tea Culture

Tea culture, deeply rooted in a rich historical and cultural heritage, "Tea is a product of labor and a type of beverage. Tea culture uses tea as a medium to disseminate various cultures. It is an organic fusion of tea and culture, encompassing and reflecting the material and spiritual civilizations of a certain period. The connotation of tea culture is an integral part of excellent traditional Chinese culture. Its content is very rich, involving science and technology, education, cultural arts, medicine, etc (Xu, 1999). " China, the acknowledged birthplace of tea, has cultivated a sophisticated tea culture alongside advancements in the tea industry. Central to this tradition is the concept of "Teaism" (Shen, 2007). Despite its widespread usage in contemporary discourse, the term "tea culture" is often narrowly interpreted as referring solely to tea art or ceremonial practices. In reality, its scope is far broader. Scholarly explorations have defined tea culture as encompassing cognitive, creative, and applicative dimensions informed by tea science and related fields (Yan, 2001). The Buddhist Hall Tea Culture, or "Zen Tea", exemplifies the synthesis of tea and spiritual practice in Chinese tradition. Its origins date back to the introduction of Buddhism during the Eastern Han Dynasty, with early references to monastic tea consumption appearing in the Northern and Southern Dynasties.

Monastic communities embraced tea as a staple in their rituals, integrating it into spiritual practices. Over time, tea became a ceremonial offering in temples, evolving into the phenomenon recognized today as Buddhist Hall Tea Culture (Li, 2009). This cultural tradition underscores tea's role in Buddhist rituals, ceremonies, and daily practices, emphasizing health, focus, and spiritual mindfulness. Perspectives on tea culture vary: narrower interpretations emphasize its spiritual aspects, while broader perspectives encompass material elements such as scientific advancements, production techniques, and regional consumption patterns (Yang & Li, 2008). Liu Huan frames tea culture as a multidimensional concept, encapsulating both material and spiritual accomplishments derived from humanity's interaction with tea across history (Liu, 2015).

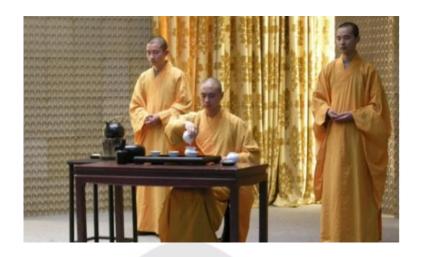


Figure 2 Zen Tea Performance by Master Mingxing

Source: Six Degrees of Tea" by Master Minghai, (2022, Jan, 28). Xiangrun Yun

Retrieved from https://zhuanlan.zhihu.com/p/462626822

In summary, tea culture manifests as a dynamic interplay of material innovation and spiritual heritage. It bridges historical traditions with contemporary practices, enriching cultural transmission while offering unique cultural experiences and spiritual nourishment. This phenomenon is pivotal to understanding and promoting Chinese culture, warranting deeper academic exploration.

2.1.2 Traditional Tea Ceremony

Chinese tea culture epitomizes a rich tradition, encompassing the cultivation, production, and appreciation of tea, while reflecting a distinct philosophy of life and social ethos. Among its key components, the tea ceremony highlights the aesthetic and ritualistic dimensions of tea drinking, embodying profound cultural values and a refined humanistic spirit.

Emerging during the Tang Dynasty and reaching its zenith in the Song Dynasty, the tea ceremony evolved into a sophisticated framework of rituals and artistic expressions. Its primary focus lies in elevating the aesthetic experience of tea, fostering spiritual cultivation, and exploring the intricate relationship between tea and humanity.

Over the centuries, this practice has not only shaped Chinese tea consumption habits but has also profoundly influenced the nation's cultural ethos and social customs.

The meticulous preparation and ritualistic elements of the tea ceremony encapsulate the philosophy of simplicity, naturalness, and harmony—principles central to broader Chinese cultural ideals. Through its enduring legacy, the tea ceremony continues to reflect the essence. of Chinese tradition while inspiring contemporary interpretations and applications.



Figure 3 Tang Dynasty Tea Ceremony

Source: Tang Dynasty Tea Ceremony (2022, Jan 07). Liuying

Retrieved from https://www.gugong.net/wenhua/31238.html



Figure 4 Song Dynasty Tea Fight Picture

Source: Tea Competition under the Willow Tree (2021). Zhang Xiao

Retrieved from https://www.zcool.com.cn/work/ZNDc2NzIxODA=.html

The exploration of the spiritual dimension inherent in the Chinese tea ceremony prompts me to reflect upon Zhuang Wanfang's (Zhuang, 1993) assertion that its essential ethos is rooted in the principles of "harmony, tranquility, joy, and truth." Zhuang compellingly posits that the tea ceremony functions as a ritualized vehicle for transmitting etiquette and nurturing moral cultivation through the very act of tea consumption. Expanding upon this foundation, Chen Xiangbai (Chen, 1994) in his seminal work, The Philosophy and Core of the Chinese Tea Ceremony, broadens the notion of the tea ceremony to include dimensions of tea artistry, morality, decorum, foundational principles, expressed sentiments, and guiding doctrines. Chen's perspective indicates that the Chinese tea ceremony serves as a framework for personal character development and the pursuit of harmony, thereby extending Zhuang's insights to encompass an emphasis on aesthetic appreciation and individual self-refinement, which I find particularly enlightening.

Further enriching this discourse is Wang Ling, a distinguished scholar of tea culture at the Beijing Academy of Social Sciences, whose publication, Chinese Tea Culture, offers critical insights into the relationship between tea artistry and the tea ceremony. Wang adeptly elucidates the intrinsic connection between these two elements, stating: "Tea art and the spirit of the tea ceremony are fundamentally the essence of Chinese tea culture. 'Art' pertains to the techniques of tea production, preparation, and tasting, while 'ceremony' encapsulates the spiritual essence that permeates these practices (Wang, 2009). In the absence of spirit, theoretical knowledge is rendered void; devoid of art, practice lacks dynamism. Tea artistry, with its tangible forms and methodologies, serves as the external manifestation of tea culture, whilst the tea ceremony embodies its spirit, principles, regulations, origin, and intrinsic essence —often intangible, yet profoundly felt through personal reflection and experiential engagement." This statement underscores a pivotal point: the amalgamation of art and ceremony represents a synergy where art articulates the spirit, and the spirit enlivens the art, achieving a profound unity of material and spiritual dimensions.

This synthesis of philosophy, ethics, and moral considerations within tea practices establishes a pathway for individuals to pursue self-cultivation, emotional refinement, a deeper appreciation for life, and meditative contemplation on the Dao. This process serves as a means of fostering spiritual growth and promoting the development of individual character.



Figure 5 Modern Tea Art Performance

Source: Photography by Anqi Xie, Xishuangbanna, Yunnan

Therefore, the tea ceremony, in my estimation, epitomizes the zenith of Chinese tea culture. Lu Yu, universally recognized as the progenitor of Chinese tea culture, integrated the Confucian precepts of "moderation and harmony" into his seminal work, The Classic of Tea. This text encapsulates a refined interpretation of the Confucian Doctrine of the Mean, advocating for the cultivation of harmony through the values of "frugality and virtue" intrinsic to tea culture. Lu Yu's contributions furnish a framework for comprehending both aesthetic refinement and philosophical reasoning. As the initiator of the Chinese tea ceremony, his work exemplifies the profound integration of Confucian values, accentuating the harmony attained through simplicity and ethical practice. I believe the enduring legacy of his work resides in its transference of both aesthetic sensibility and a reasoned philosophical perspective.

Contemporary scholarship, particularly that of Chen Xiangbai, underscores the quintessential importance of "harmony" within Chinese tea culture, broadening its interpretation beyond mere equilibrium to convey the organic unity of heaven, earth, and

humanity. This holistic synthesis, wherein heaven and humanity attain a state of unity, embodies the aesthetic ideal of harmony. The spirit of the tea ceremony may be elucidated through four principal tenets: "harmony, tranquility, enjoyment, and truth". These tenets, I contend, constitute the core of tea ceremony culture, significantly shaping individual comprehension and fostering harmonious social relationships.



Figure 6 Calligraphy of "Harmony, Tranquility, Enjoyment, and Truth"

Source: Cultural Arts- Traditional Culture-Calligraphy (2012, Mar 20)

Retrieved from https://www.aihanfu.com/wen/5597/

"Harmony" as I comprehend it, signifies not only interpersonal accord but also a profound connection between humanity and the natural world. Every aspect of the tea practice, from the brewing process to the selection of utensils and the artistry of presentation, embodies this pursuit of aesthetic equilibrium. Sharing tea evolves into a means of transcending quotidian concerns, cultivating inner tranquility, and fostering mutual understanding through authentic communication.

"Tranquility" stands as an indispensable element in the practice of tea, signifying not only the quietness of the external environment but also inner serenity and peace. In the serene setting of tea tasting, one can deeply appreciate the aroma, flavor, and natural beauty of tea. This inner calmness and tranquility provide individuals with a

sanctuary amidst the busyness and stress of life, allowing for a cleansing of the mind and soul.

"Enjoyment" expresses the pleasure and joy that the practice of tea brings to people. During the process of tea appreciation, it is not just about savoring the delicious tea but also about the spiritual fulfillment gained through interactions with family and friends. Each step in the practice of tea is a celebration of life's beauty, enabling individuals to discover happiness in everyday life and face life's challenges with a positive and optimistic outlook.

"Truth" embodies the pursuit of sincerity and authenticity in the practice of tea. At the tea table, there is no need for grandiose words or pretense; all interactions are based on sincerity and genuine connection. Tea makers and drinkers alike approach each other with open hearts, sharing life's joys and sorrows. This pure authenticity not only enriches the humanistic essence of the tea practice but also makes it a cultural tradition closely aligned with real-life experiences, imbued with warmth and sincerity.

The tea ceremony serves as a means of self-cultivation and character development, embodying profound cultural connotations and philosophical insights. In his 2005 academic work "Tea Description and Evaluation", Mr. Wu Juenong once again defines the tea ceremony as a pathway to spiritual enjoyment, artistry, and self-cultivation. He emphasizes tea's role as a precious and noble beverage, highlighting its spiritual and artistic dimensions. This perspective underscores the personal experience and spirituality inherent in the tea ceremony. In her book "Chinese Tea Culture", Professor Wang Ling (2009) offers a profound discussion on the relationship between tea art and the tea ceremony. She posits that the integration of tea art and the tea ceremony represents a highly unified synthesis of material and spiritual elements. Professor Wang's viewpoint consolidates and integrates previous perspectives, arguing that skill without morality is empty, and morality without skill lacks essence. She contends that the artistic (tea art) and spiritual (tea ceremony) dimensions are inherently interconnected.

These scholars' viewpoints are not isolated but interconnected and mutually reinforcing. Wu Juenong's perspective laid the groundwork for understanding the spiritual and artistic aspects of the tea ceremony, while Zhuang Wanfang expanded it to encompass social education and moral cultivation. Chen Xiangbai further enriched the discourse by emphasizing character development. Professor Wang Ling integrated these elements into a more comprehensive and systematic theory of the tea ceremony. Together, these discussions offer a comprehensive perspective on the profound cultural meanings and practical impacts of the tea ceremony.

The profound influence of the tea ceremony extends beyond mere skillful performance of tea art; it encompasses the transmission of philosophical perspectives and life attitudes. This represents the unique contribution of Chinese tea culture to global cultural heritage. The Chinese tea ceremony is not merely a demonstration of tea artistry; it is a profound cultural practice that integrates artistry, education, and spirituality. Through its core values of "harmony, tranquility, serenity, and truth", the tea ceremony has elevated individuals' spiritual realms and society's moral standards, fostering harmony among individuals, nature, and society.

2.1.3 Culture Heritage and Innovation in Modern Contexts

On the Inheritance and Innovation of Tea Culture, Xu Mingsheng emphasized the social responsibility involved in the inheritance and innovation of tea culture (Xu, 2007). He highlighted the importance of preserving a scientific spirit, enriching cultural connotations, and adhering to service-oriented principles. At the 10th International Tea Culture Symposium, held that same year at the birthplace of the Classic of Tea, Xu reiterated these points, underscoring the practical significance of tea culture inheritance and innovation. This work laid the groundwork for subsequent research by identifying the necessity and direction of efforts in tea culture inheritance and innovation. In 2011, Zhou Bei further emphasized the importance of promoting the inheritance and innovation of tea culture in the new century, echoing Xu's research and advocating for the dissemination and development of tea culture in modern society.

Tan Haonan in his work The Inheritance of Tea Culture and Traditional Arts and Crafts, argued for the combined study and development of tea culture and traditional arts and crafts through cultural integration and collaborative innovation (Tan, 2017). He identified three main artistic characteristics of traditional Chinese arts and crafts: an emphasis on metaphysical rather than physical form, extensive application of traditional cultural elements, and a clear practical purpose. These features distinguish traditional Chinese arts and crafts from foreign and contemporary arts and crafts, as well as from other traditional cultural arts. The integration of tea culture with traditional arts and crafts aims to enhance the soft power of Chinese culture in an era of cross-cultural communication and to promote collaborative innovation between these cultural domains. Building on the foundations laid by Xu Mingsheng and Zhou Bei, Tan's perspective expands the path of tea culture inheritance and innovation by emphasizing its intersection with other cultural fields. In her 2018 study, Li Xiaofang proposed the integration of traditional tea culture into industrial design. This perspective complements Tan Haonan's research, as both emphasize the importance of incorporating elements of tea culture into modern design. However, Li Xiaofang's focus is more specifically on the industrial design field.

Sun Yuxuan (2021) published an academic paper titled The Inheritance and Innovation of Traditional Chinese Tea Culture Space. In this paper, the author further discusses the inheritance and innovation of traditional Chinese tea culture space (Sun, 2021). Building upon previous research, the paper specifically focuses on the application of tea culture in spatial design, providing new ideas for the modern dissemination of tea culture. In their research in the same year, He Huanzhu and others emphasize the role of tea culture in moral education, especially the inheritance and innovation of the intangible cultural heritage of Anxi Tieguanyin female tea masters in tea culture moral education. This viewpoint combines the inheritance and innovation of tea culture with moral education, providing a new perspective on the social value of tea culture. Subsequently, Wang Junqing and others also proposed to pay attention to the exploration and protection of traditional tea culture, to create intangible cultural heritage

tea tourism products and services, and to enhance the inheritance and innovation of tea culture intangible cultural heritage (Wang et al., 2022). This viewpoint is complementary to Sun Yuxuan's research, both focusing on the protection and innovation of intangible cultural heritage of tea culture, but Wang Junqing and others are more focused on the development of tourism products and services.

Liao Fangzheng and others conducted a special study on Wuzhou Liubao tea (Liao & Li, 2023). In the academic achievement Research on the Historical and Cultural Inheritance and Innovative Development of Wuzhou Liubao Tea, they explore the historical and cultural inheritance and innovative development of Wuzhou Liubao tea. This perspective, based on prior research, explicitly emphasises safeguarding and advancing the local tea culture, offering fresh concepts for the preservation and evolution of tea traditions in the region. In the same year, Guang Yingjing compiles a comprehensive account of the practical knowledge gained from the preservation, transmission, and advancement of Yunnan's ethnic tea culture. Guang Yingjiong's research complements the work of Liao Fangzheng and other scholars who also study the preservation and advancement of tea culture. However, Guang Yingjiong's research specifically highlights the practical knowledge gained from the Yunnan region. During the same time frame, Hu Wen examines the preservation and advancement of the unique tea culture in Hezhou City, taking into account the influence of Dongrong. This perspective aligns with the findings of Liao Fangzheng and other researchers, highlighting the significance of preserving and advancing the unique tea culture of a specific region in modern society. Chen Hua proposed the inheritance and innovation of tea culture in rural revitalization and puts forward a series of specific measures and strategies (Chen, 2023). Building on previous research, this perspective focuses more specifically on the application of tea culture in rural revitalization strategies, providing new ideas for the social practice of tea culture.

In conclusion, from Xu Mingsheng's research in 2007 to Chen Hua's research in 2023, it is evident that the study of the inheritance and innovation of tea culture continues to deepen and expand into new areas. Researchers have proposed

various methods and strategies for inheritance and innovation from diverse perspectives. Xu Mingsheng's research laid the foundation for subsequent explorations. Zhou Bei, Tan Haonan, and others have further expanded the path of tea culture inheritance and innovation. Li Xiaofang, Sun Yuxuan, and their colleagues have specifically focused on the application of tea culture in design. He Huanzhu and others have combined tea culture's inheritance and innovation with moral education. Wang Junqing, Liao Fangzheng, and others have concentrated on the protection and innovation of the intangible cultural heritage of tea culture. Guang Yingjiong and Hu Wen have focused on the protection and innovation of the local characteristic tea culture. Chen Hua has combined the tea culture's inheritance and innovation with rural revitalization strategies. The correlation between these studies suggests that tea culture inheritance and innovation require multifaceted efforts, including cultural integration, educational promotion, design innovation, and social services, to ensure the sustainable development and dissemination of tea culture in modern society.

Therefore, the inheritance and innovation of tea culture are complex and multidimensional processes. They require a deep understanding and respect for traditional culture, as well as innovative thinking and methods to adapt to the needs of modern society. By combining tradition and modernity, culture and technology, local characteristics, and globalization, tea culture can be better protected and inherited while promoting the development of the tea industry. Additionally, the focus should be on cultivating a new generation of inheritors who, through education and practice, can become disseminators and innovators of tea culture. Such efforts will ensure that tea culture is inherited and developed not only in China but also globally.

2.2 Theoretical Foundation of Cultural Ecology

Before delving into the ethnic imprints and innovations in Pu'er tea packaging, this study first introduces the theory of cultural ecology, which provides a multidimensional framework for analyzing and understanding Pu'er tea culture and its packaging design. Julian H. Steward introduced the concept of cultural ecology in 1955, detailing its theoretical framework and research methodology in his book *Theory of*

Culture Change: The Methodology of Multilinear Evolution. This theory has since influenced various fields such as anthropology, archaeology, and social sciences, providing a fresh perspective on cultural studies. Steward emphasized that culture evolves as an adaptive process to the environment, with environmental adjustments shaping social structures and cultural characteristics (Steward, 1995).

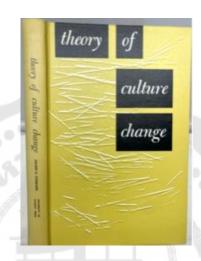


Figure 7 Book on Ecology

Source: Theory of Culture Change: The Methodology of Multilinear Evolution, (1995). Julian H. Steward

Retrieved from https://archive.org/details/theoryofculturec0000juli

Netting expanded on cultural ecology by exploring how cultures adapt to environmental changes through specific technologies and forms of social organization (Netting, 1965). He introduced the idea of cultural adaptation, highlighting the close relationship between cultural change and environmental dynamics. Cronk further analyzed the interaction between cultural adaptation and the environment, pointing out that culture not only adapts to the environment but also shapes it (Cronk, 1995). For instance, certain cultural practices, such as the manipulation of kinship terminology, have been shown to influence the social structure and reproductive success of certain groups.

Deng Xianrui introduced a holistic systems perspective, suggesting that cultural ecology should treat humans, society, and nature as a self-organizing complex system (Deng, 2003). Studying the coupling between different cultural groups and their ecological environments can reveal the structure and function of cultural ecosystems, promoting sustainable regional development. Yi proposed the concepts of ecological culture and cultural ecology, noting that the two are interlinked. Ecological culture uses ecological methods to study culture, while cultural ecology focuses on cultural expressions within ecological relationships (Yi, 2003). The combination of these perspectives broadens the research scope of cultural ecology and forms the foundation for a comprehensive cultural ecology theory.

Chen Mingkun extended the application of cultural ecology to cross-cultural studies, analyzing significant historical events such as the collapse of the Soviet Union and Eastern European revolutions (Chen, 2012). His research emphasized the role of cross-cultural communication in ecological and ethnic systems, offering insights into how culture influences natural ecosystems. Edward contributed to the study of cultural ecology by introducing the concepts of "high-context culture" and "low-context culture," examining how different communication modes impact the understanding and dissemination of culture (Hall, 1976). Cultural communication not only preserves cultural continuity within societies but also fosters cultural innovation and development through cross-cultural adaptation.

By adopting the theoretical framework of cultural ecology, we can better understand the interplay between culture and environment. This perspective offers essential guidance for analyzing the strategies behind Pu'er tea packaging design. In the next section, we will analyze the connection between Chinese tea culture and Pu'er tea packaging design, exploring how traditional cultural elements can be integrated into modern design.

2.3 Local Culture of Xishuangbanna

Xishuangbanna, located in China's southwestern frontier, has cultivated a diverse cultural landscape thanks to its unique geographical location and multi-ethnic

population. The region's history stretches back to the ancient Silk Road, serving as both a commercial hub and a cultural crossroads (Zhou, 2002). Its architectural styles are equally distinctive, reflecting the convergence of different ethnic groups. The Bai people's "Three Courtyards with One Wall" and the Naxi people's "Four Houses with Five Courtyards" are prime examples of Xishuangbanna's ethnic architecture (Zhang, 1999). These structures are not only visually striking but also highly practical and culturally meaningful. Known as the "kingdom of plants and animals," Xishuangbanna is home to one of the world's most unique ecosystems, boasting extraordinary biodiversity (Tian, 2021). From the Yunnan snub-nosed monkey to the green peacock, and from Pu'er tea trees to various rare plant species, Xishuangbanna's natural beauty is truly breathtaking. These natural resources not only contribute to the vibrancy of Yunnan but also provide essential data for scientific research and environmental protection. Folk culture is a cornerstone of Xishuangbanna's cultural heritage. Festivals such as the Torch Festival and the Water Splashing Festival are key cultural events, serving both as important rituals for praying for bountiful harvests and as celebrations of ethnic unity (Zhou, 1991). Handicrafts like tie-dye and embroidery, with their intricate techniques and unique designs, are important cultural markers for the region's minority groups (Ling, 2016). Xishuangbanna's traditions also include a rich array of customs and rituals. The Tibetan practice of offering khata and the Yi people's "Three-Course Tea" ceremony are symbolic ways of showing respect and hospitality. These rituals not only reflect the warmth and simplicity of the people but also highlight their deep reverence for traditional culture. Music and dance are essential expressions of ethnic identity. Ethnic groups in the region have developed their own musical and dance traditions, such as the Yi people's "Jumping over the Moon" and the Dai people's "Peacock Dance" (Wang, 2016). These performances not only celebrate each group's unique heritage but also serve as important cultural exports.

A survey conducted by the Xishuangbanna Bureau of Ethnic and Religious Affairs shows that the region is home to a diverse mix of ethnic groups, with at least 13 indigenous groups, including the Dai, Han, Hani, Lahu, Yi, Bulang, Jino, Yao, Miao, Hui,

Wa, Zhuang, and Jingpo. Religious belief is an important part of local culture, with the five major religions—Buddhism, Taoism, Islam, Catholicism, and Protestantism—represented, alongside indigenous and nature-based religions (Zhang, 2010). These diverse religious practices enrich the spiritual lives of the local population and contribute to the region's cultural inclusivity and diversity.

The languages and scripts of Xishuangbanna's ethnic groups are not only vital cultural expressions but also reflect the cultural diversity of the broader Chinese nation.

From historical traditions to architectural achievements, from biodiversity to rich folk customs, from culinary delights to music and dance, and from religious practices to unique languages, every aspect of Xishuangbanna's ethnic culture is imbued with distinctive charm. These diverse cultural elements combine to create a unique cultural landscape that makes Yunnan a cultural jewel for both China and the world.

Jin Shaoping compiled the book Exploration of Yunnan Ethnic History and Culture, which chronicles the development and changes of Yunnan's ethnic culture through historical epochs, highlighting the strong regional characteristics of minority cultures in Xishuangbanna of Yunnan. This culture reflects both the historical characteristics of modern transformation and the influence of external cultures (Jin, 1966). Although this work does not explicitly focus on tea culture, it provides important information for understanding the development of Yunnan's tea culture within a broader cultural context. Liu Dacheng primarily explores how Yunnan has strived to become a culturally prominent province through the flourishing of ethnic culture and cultural industries (Liu, 2008). His academic paper, Cultural Diversity and the Prosperity of Yunnan Ethnic Culture, introduces the concepts of the "Yunnan phenomenon" and the "Yunnan model", offering a macro perspective on the role of Xishuangbanna 's local culture in cultural diversity and prosperity. This viewpoint also provides a socioeconomic background for studying the functional changes in tea culture. Yang Zhengwen introduces the concept of "Ethnic Cultural Ecological Villages" in his work Ethnic Cultural Ecological Village—Yunnan's Practice in Traditional Culture Conservation, actively exploring rural development models suitable for the inheritance and effective

protection of traditional cultures of Xishuangbanna's ethnic groups (Yang, 2010). This effort aims to provide a practical path for the preservation and inheritance of Yunnan's minority cultures and local tea culture. In subsequent years, Zhao Zizhuang emphasized the importance of constructing a regional framework for Yunnan's ethnic cultural areas (Xishuangbanna), proposing a cultural construction plan for developing distinctive cultural areas (Zhao, 2012). Deng Yuhuan and Ge Hengjun applied cultural transition theory, based on historical records, local chronicles, and ethnographic studies, to examine the functional changes of Xishuangbanna's minority tea culture (Deng & Ge, 2016). Their insights offer a new perspective on understanding the development of Yunnan's tea culture, emphasizing its multiple roles within ethnic cultures. Collectively, these studies contribute a socioeconomic context that enriches the understanding of tea culture's functional evolution within Xishuangbanna's ethnic cultural milieu, building upon Liu Dacheng's research on Yunnan's ethnic culture.



Figure 8 Ethnic Minorities in Yunnan Province

Source: How many ethnic minorities are there in Yunnan? (2023, May 31). Yue Qi's reading notes

Retrieved from

https://baijiahao.baidu.com/s?id=1767403297005216024&wfr=spider&for=pc



Figure 9 Yunnan Tea Mountains and Villages

Source: The Foundation of Chinese Pu'er Tea - Yunnan Tea Mountains (2019, Apr 3). Du Jingjing

Retrieved from http://www.xn--fiq4m90j.com/Index/detail/catid/1/artid/288f7a03-33cc-4a93-9976-96d41431717c/userid/

In conclusion, Xishuangbanna, as a multi-ethnic region in southwestern China, is home to a rich and vibrant ethnic culture as well as a unique geographical environment. The ethnic culture of Xishuangbanna, with its long history, has evolved over time, developing distinct regional characteristics and cultural diversity. This research shows how Xishuangbanna's local ethnic culture and tea culture have mutually fostered one another, contributing to Yunnan's unique cultural identity and serving as a key economic pillar. The relationship between these two cultures is evident in various areas, including cultural inheritance, social life, economic growth, and environmental conservation.

Therefore, it is crucial to base the inheritance and innovation of Xishuangbanna's tea culture on a profound understanding of its rich history and diverse ethnic characteristics. This understanding should encompass not only the tea culture itself but also the lifestyle habits, beliefs, and values related to tea among Yunnan's various ethnic groups. Moreover, the innovation of Yunnan's tea culture should occur within the framework of preserving ecological balance and promoting socio-economic

development, ensuring the preservation of the traditional essence of tea culture while adapting to the needs of modern society.

2.4 The Tea Culture of Ethnic Minorities in Xishuangbanna

Examining the tea-drinking habits of Chinese ethnic minorities from a cultural perspective, Xue Zhiyong conducted research on the tea-drinking customs among various minority groups in China (Xue, 2002). His study revealed that tea consumption among these minorities is significantly higher than among the Han ethnic group, highlighting tea drinking as an inseparable part of daily life. Xishuangbanna, home to various ethnic minorities, has developed distinctive tea-drinking traditions. The Dai people's bamboo tube tea is a form of compressed tea crafted using fragrant bamboo or sweet bamboo, both native to the Xishuangbanna region. The tea is made through a unique process that involves filling fresh bamboo tubes, compacting the tea leaves, and roasting. This tea stands out not only for its distinctive appearance but also for its high quality, featuring a bright yellow-green infusion, a fresh and sweet aftertaste, and a delightful blend of tea and bamboo aromas. With long-term ageing, bamboo tube tea naturally ferments into bamboo tube Pu'er tea, renowned for its rich red liquor, deep aroma, and mellow taste, embodying the Dai ethnic tea culture's unique charm.

The Hani people, known for their preference for strong tea, have traditional teadrinking methods such as "pot-cooked tea" and "roasted tea" that showcase their deep affection for tea. In regions like Nannuo Mountain and Suhu in Menghai, ethnic minorities traditionally use clay pots to brew tea. Spring water and sun-dried large-leaf maocha are combined and simmered for half an hour, producing a golden, bright tea soup with a distinctive aroma and a rich, lingering taste. Some ethnic groups also prefer to brew fresh tea leaves in clay pots, with the one-hour process filling the air with fragrance and creating a robust tea that reflects their refined appreciation of life's quality. Whether it's the Dai people's bamboo tube tea or the Hani people's clay pot tea, these traditional teas are integral to the cultural heritage of these ethnic groups. They not only enhance the richness of Chinese tea culture but also contribute to the diversity of global tea traditions.



Figure 10 Dai Bamboo Tube Tea

Source: Yunnan Food Culture (2023, Jun 16). Shi Wuzhe

ane.

Retrieved from

https://baijiahao.baidu.com/s?id=1768753061779300239&wfr=spider&for=pc



Figure 11 Hani Ethnic Group's Pot Tea

Source: Yunnan Food Culture (2023, Jun 16). Shi Wuzhe

Retrieved from

https://baijiahao.baidu.com/s?id=1768753061779300239&wfr=spider&for=pc

These unique tea-drinking habits not only enrich China's tea culture but also contribute to the diversity of tea culture worldwide. From an economic perspective, the connection between tea-drinking habits and socioeconomic factors has also attracted scholarly attention. For instance, the study by Zeng Zhiquan and others revealed a link between tea-drinking habits and socioeconomic factors, while the research by Zhu Shuilian and others found a positive correlation between tea drinking and cognitive function in the elderly (Zhu et al., 2016).

2.5 The History and Characteristics of Pu'er

2.5.1 The History of Pu'er

Pu'er tea, with its historical roots dating back to the Eastern Han Dynasty 1700 years ago, was initially known as "Pucha" in the early Yuan Dynasty and officially named Pu'er tea during the Wanli period of the Ming Dynasty. By the late Ming and early Qing Dynasty, Pu'er tea drinking had become fashionable among the elite and literati, highlighting its deep historical and cultural significance (Yao, 2008), blending the tea culture characteristics of multiple ethnic groups and reflecting Yunnan's unique geographical, historical, and cultural features (Yang & Mo, 2016). Pu'er tea, originating from Yunnan, China, is not just a cherished heritage of Chinese tea culture but also a radiant jewel in the global tea culture scene. Its unique fermentation process and ability to age over time have made it a subject of extensive exploration and appreciation among tea enthusiasts worldwide. Beyond being a mere beverage, Pu'er tea serves as a cultural conduit embodying China's ancient history and profound cultural values. The Pu'er tea culture encompasses various art forms such as tea art, poetry, calligraphy, and painting, reflecting the aesthetic principles and artistic pursuits of the Chinese nation. Through the study of Pu'er tea, one can delve into the artistic expressions inherent in tea culture, enriching and deepening our understanding of Chinese tea culture.

Pu'er tea has long been revered by royalty and nobility for its distinct and robust flavor. In the Qing Dynasty, Ruan Fu lauded Pu'er tea in his work "Pu'er Tea Records," declaring, "Pu'er tea is renowned throughout the world for its rich flavor,

especially esteemed in the capital." This praise not only underscores Pu'er tea's esteemed status in Qing society and the royal family's appreciation but also serves as a historical testament to its reputation as "renowned throughout the world" (Wu, 2005). Historical records indicate that any tea produced in the Xishuangbanna and Simao areas of Yunnan is referred to as "Pu'er tea," following China's traditional naming method of tea varieties based on geographical origins, akin to teas like "West Lake Longjing" and "Huangshan Maofeng." This regional naming practice does not rigidly categorize teas (Hu, 2008). According to the China Agricultural Encyclopedia - Tea Volume, Pu'er tea is defined as: "Made from fresh leaves of Yunnan large-leaf tea plants. Historically, tea produced in southern and southwestern Yunnan was all gathered in Pu'er County, hence named Pu'er." This historical tracing method is based on regional origins. The scientific definition of Pu'er tea significantly impacts the Pu'er tea industry. In recent years, with the expansion of the Pu'er tea market, differing viewpoints on its definition have sparked various debates and misconceptions (Yang et al., 2006).

In continuation, the Yunnan Provincial Bureau of Quality and Technical Supervision, while adhering to regional naming conventions, has provided a more comprehensive explanation and definition of Pu'er tea in its locally implemented standard DB53/T103-2003 "Pu'er Tea." Pu'er tea is defined as: "Pu'er tea is made from sun-dried green tea produced from Yunnan large-leaf tea plants within a specified area of Yunnan Province. It is processed into loose tea or compressed tea through post-fermentation, exhibiting a brownish-red appearance, a bright red liquor color, a unique and deep fragrance, a mellow taste, and a sweet aftertaste, with reddish-brown leaves." This definition encompasses four essential aspects: geographical location within a specified area of Yunnan Province, use of fresh leaves from Yunnan large-leaf tea plants, post-fermentation processing allowing for aging, and distinct characteristics of loose or compressed tea forms (Wu, 2005). This definition comprehensively interprets the identity of Pu'er tea based on geographical origin, raw material type, processing method, and product attributes.

Pu'er tea is categorized into raw tea and ripe tea, each with distinct characteristics (Zhang et al., 2011). Raw tea is made from fresh leaves of Yunnan large-leaf tea trees using traditional techniques. The resulting compressed tea exhibits unique quality traits: a dark green appearance, a fresh aroma, a robust and lingering flavor, and a clear, bright red liquor. With aging, its quality evolves, revealing deeper layers of taste and aroma. Ripe tea, on the other hand, undergoes accelerated fermentation through artificial means. It presents a reddish-brown appearance, a mellow taste, a unique aged aroma, a thick and bright red liquor, and reddish-brown leaves. Ripe tea is easy to brew and can be steeped multiple times.



Figure 12 Raw Pu'er Tea

Source: Baidu Encyclopedia -Entry on Raw Pu'er Tea

Retrieved from

https://baike.baidu.com/item/%E6%99%AE%E6%B4%B1%E7%94%9F%E8%8C%B6/28 00183?fr=ge_ala



Figure 13 Ripe Pu'er Tea

Source: Baidu Encyclopedia -Entry on Pu'er Ripe Tea

Retrieved from

https://baike.baidu.com/item/%E6%99%AE%E6%B4%B1%E7%86%9F%E8%8C%B6/2670928?fr=ge_ala

Another major characteristic of Pu'er tea is its potential for aging. When stored under optimal conditions, the flavor of Pu'er tea undergoes a gradual transformation, revealing complex changes and layers. Aging not only diminishes the tea's bitterness but also enhances its mellowness and prolongs its aroma. This unique aging process has positioned Pu'er tea as a sought-after item for tea enthusiasts and investors alike (Yang, 2011). The storage and packaging of Pu'er tea typically require materials with good air permeability and specific humidity levels to facilitate its post-fermentation. Common packaging formats include compressed cakes, bricks, and tuo cha. Yunnan leverages its distinctive geographical and cultural advantages to promote Pu'er tea through strategies such as participation in domestic and international tea exhibitions, online marketing initiatives, and the integration of tea culture with tourism.

2.5.2 The Characteristic of Pu'er

The historical and artistic value of Pu'er tea is not only evident in its unique tea-making process and profound cultural heritage but also in its role as a catalyst for

diverse cultural integration and inheritance. Yang and Mo (2016) assert in their research, "Pu'er, a significant symbol of Chinese tea culture," that Pu'er tea holds a prominent position within global tea culture, representing an "important symbol of Chinese tea culture." This perspective synthesizes previous discussions on Pu'er tea's cultural significance, historical evolution, and scientific exploration, underscoring its cultural and commercial impact in contemporary society.

In Xishuangbanna, Pu'er tea is enjoyed in a variety of ways, such as plain, blended, warm, and boiled. Each method showcases the unique regional identity and cultural depth of Pu'er tea (Zhou & Wei, 2006). Plain drinking is the most common method; locals enjoy a cup of Pu'er tea in the morning or after meals to aid digestion and refresh the mind. Pu'er tea can also be mixed with ingredients such as honey, lemon, or milk to create personalized flavors. When brewing Pu'er tea, Yunnan people pay close attention to the brewing techniques, adjusting the water temperature and steeping time according to the age and compactness of the tea leaves. Newer, raw teas are usually brewed with slightly lower water temperatures and shorter steeping times, while aged teas are better suited for boiling water and longer steeping to bring out deeper flavors. The appreciation of Pu'er tea is also meticulous, from observing the color changes in the leaves to the layers of aroma and the richness of the taste. Each step reflects the tea drinker's respect and passion for the tea.

In Xishuangbanna, drinking Pu'er tea is also a social activity, with friends and family gathering to enjoy tea and conversation, savoring a moment of relaxation. Furthermore, the unique effects of Pu'er tea, such as lowering fat, aiding in weight loss, enhancing beauty, and reducing blood pressure, prompt Yunnan people to be mindful of their consumption methods to maximize health benefits. When storing Pu'er tea, locals ensure it is kept in a ventilated, dry environment, away from direct sunlight, to maintain its quality. Over time, the aging process improves the tea's aroma and flavor. These combined traditional and modern tea-drinking practices reflect the deep cultural and health values of Pu'er tea in Yunnan.

In conclusion, research on Pu'er tea has evolved into a comprehensive and multi-dimensional system, encompassing scientific definitions, cultural values, market dynamics, and social influences. Each scholar's contribution has expanded the understanding of Pu'er tea, ranging from fundamental scientific research to in-depth cultural explorations and practical applications.

Therefore, I believe that Pu'er tea, as a research topic, transcends mere tea science to intersect with cultural studies, sociology, and economics. The diversity and complexity of Pu'er tea underscore its significance as a cultural heritage while illustrating its broad influence as a global commodity. Through ongoing research and dialogue, Pu'er tea will undoubtedly maintain a pivotal role in global tea culture.

2.6 Pu'er Tea Packaging Design

The packaging design of Xishuangbanna's Pu'er tea embodies its unique cultural characteristics and long-standing traditions. The primary forms of Pu'er tea packaging include tea cakes, tea bricks, loose tea, and other varieties. Each packaging form employed a specific method that facilitates storage and transportation and enhanced the maturation process of the tea (Chen, 1987). This perspective provides a historical context for understanding the traditional value and design of Pu'er tea packaging.

Tea cakes are the most common packaging form for Pu'er tea, created by compressing tea leaves into a round shape. Research on tea cake packaging design has been notably conducted by Zhang Cheng, Liu Ronghua and others, who explored this topic based on previous studies. In 2014, they proposed that the packaging of Pu'er tea cakes is highly environmentally friendly, utilizing materials such as cotton paper and bamboo leaves. They demonstrated that these materials effectively promote the post-fermentation of tea (Zhang & Liu, 2014). This study builds on Chen Yiyi's research by further emphasizing the impact of packaging material selection on the quality of Pu'er tea.



Figure 14 Tea Cake Packaging

Source: Photography by Anqi Xie, Xishuangbanna, Yunnan

Tea bricks, which are compressed into a brick shape, offer a more compact volume than tea cakes, thereby facilitating easier transportation and storage. In the realm of tea brick packaging design, Chen Hong advocated for the use of handmade cotton paper, highlighting its role in preserving and promoting traditional production techniques (Chen, 2017). Moreover, Chen found how this traditional material can enhance the overall quality and market value of Pu'er tea. This perspective deepens the exploration of the interplay between traditional craftsmanship and modern market demand.



Figure 15 Tea Brick Packaging

Source: Photography by Anqi Xie, Xishuangbanna, Yunnan

The term "loose tea" describes tea leaves that have not undergone compression and have retained their original shape. In their study, Li Yang and Zhou Miao highlighted that loose tea packaging typically offered greater flexibility, allowing for the use of paper bags, cloth bags, or sealed cans. This packaging technique offered convenience for tea storage and usage, while also facilitating the precise dispensing of the desired quantity of tea for consumers (Li & Zhou, 2023).



Figure 16 Loose Tea Packaging - Canned

Source: Photography by Anqi Xie, Xishuangbanna, Yunnan



Figure 17 Loose Tea Packaging - Sealed Bag

Source: Can Tea be Stored in Sealed Bags? White Tea Classroom

Retrieved from https://www.zhihu.com/question/315101048

In addition to the three main forms mentioned above, Yunnan Pu'er tea is also available in unique packaging methods, such as tea columns and tea barrels. These packaging forms not only serve practical purposes but also possess ornamental value, often attracting collectors. In their article "Innovative Design and Application of Packaging Materials for Pu'er Tea," Cai Wei and Wang Anxia proposed novel approaches to the design and application of Pu'er tea packaging materials. Their research emphasizes the integration of traditional and modern design elements to cater to both market demands and the interests of collectors (Cai & Wang, 2016). This perspective broadens the understanding of Pu'er tea packaging from an innovation in design viewpoint. Furthermore, Li Yang and Zhou Miao (2023) extended their research on Pu'er tea packaging by incorporating discontinued woodcut elements into the design. This evolution signifies a trend towards more artistic and personalized packaging, highlighting the significance of cultural elements in contemporary packaging design.



Figure 18 Innovative Packaging - Tea Barrel

Source: Pu'er Tea Packaging Design-Red Dot Packaging Design Award

Retrieved from

https://www.51miz.com/sucai/?utm_term=21404127&utm_source=a360&qhclickid=4e12e2e72294ac1c



Figure 19 Bamboo Carved Tea Column

Source: Yunnan Pu'er Tea Packaging Design | Graphic | Packaging | Original Work. Lao CHEN Vinegar

Retrieved from https://www.zcool.com.cn/work/ZNTM0NzU3NDA=.html

In conclusion, the continuous innovation and development of Pu'er tea packaging design demonstrate the integration of profound cultural heritage with modern trends. The packaging of Pu'er tea has evolved from merely serving a protective function to becoming a comprehensive entity that combines practicality, aesthetics, and cultural significance. This evolution indicates that Pu'er tea continues to play a unique and important role in global tea culture.

Therefore, it is evident that the packaging design of Pu'er tea has undergone a transformation from traditional to modern, maintaining its cultural foundation while satisfying the aesthetic and practical needs of contemporary consumers through continuous innovation. As a result of these developments, Pu'er tea packaging not only serves as a practical tool for protecting and promoting the maturity of the tea leaves but also functions as a medium for conveying the cultural and artistic value of Pu'er tea.

2.7 Enhancing Value and Culture through Packaging

Elevating the value-added of products is a crucial strategy for enhancing competitiveness in modern economic conditions. Value-added refers to the additional value imparted to a product beyond its physical form through methods such as technological innovation, design optimization, and brand development during its production and sales processes. In a globalized market environment, consumers expect more than mere functionality from products; they also emphasize the cultural connotations and spiritual value conveyed by these products. Therefore, while pursuing profits, enterprises should also strive to enhance the non-material value of products through cultural creativity and technological innovation. This approach not only increases market competitiveness but also fosters consumer brand loyalty.

In the article "How to Increase Product Value-Added," Jin Yu clearly points out that high value-added products typically possess higher technological content, knowledge intensity, and allure value (Jin, 1999). These factors contribute to higher profits for enterprises in the market. This viewpoint lays the foundation for subsequent research, emphasizing the relationship between technological innovation and product value. Subsequently, Wang Yanni and Wang Anmin further explore the concept of value-

added based on Jin Yu's research, suggesting that value-added is not only reflected in the physical attributes of products but also in the spiritual satisfaction they provide (Wang & Wang, 2004). This expanded understanding underscores the importance of addressing consumer psychological needs.

Dai Yuanyuan's research focuses on daily ceramic products and explores how to enhance product value-added through design (Dai, 2007). She proposes that, in addition to practicality, the design of ceramic products should also consider consumers' aesthetic and cultural needs, further emphasizing the role of design in enhancing product value-added. Following Dai Yuanyuan's research, Ma Lina and Li Binbin analyze in more detail the relationship between consumer satisfaction and product design value-added, proposing specific methods to enhance consumer satisfaction and product design value-added (Ma & Li, 2008). Their research closely links consumer satisfaction with product design, providing more concrete strategies for enhancing product value-added.

You Yue proposes strategies for increasing the value-added of products and services for agricultural processing enterprises (You, 2010). Her research builds on Ma Lina and Li Binbin's work, providing value-added enhancement models and strategies tailored to specific industries.

Liu Hongbo's research on ethnic design aims to enhance product value-added, particularly in the development cases of "Fengyu Bridge" and "Drum Tower" Ni Xing pottery teapots in Guangxi. His study, along with Dai Yuanyuan's design methods and Yang Ping's cultural creativity research, emphasizes the importance of cultural elements in design (Liu, 2011).

Yang Ping's research focuses on the role of cultural creativity in enhancing product value-added, emphasizing creative methods such as "one use for multiple purposes" and "multiple uses for one purpose" (Yang, 2013) This viewpoint complements previous studies on design and consumer satisfaction, further expanding the sources of value-added and emphasizing the importance of cultural elements.

Tani's study on "Why Specialty Tea Can Enhance Product Value-Added" discusses how specialty tea enhances product value-added through personalization and brand information transmission (Stacey, 2018). Her research further explores how specific products enhance value in competitive markets through brand building, building on Yang Ping's cultural creativity.

Li Jiaxin's study on strategies for enhancing product value-added in characteristic towns analyzes how characteristic town enterprises can increase product value-added through the combination of "five elements +" (Li, 2020). This study further develops You Yue's strategies for agricultural processing enterprises, providing practical cases of local industry specialization and branding.

In conclusion, from Jin Yu's 1999 research to Tania's 2018 research and Li Jiaxin's 2020 research, it is evident that enhancing product value-added is a gradually deepening and diversifying process. Jin Yu's research lays the foundation for subsequent work, emphasizing the relationship between technological innovation and product value. Wang Yanni and Wang Anmin expand the understanding of value-added, while Dai Yuanyuan, Marina, and Li Binbin further explore the role of design and consumer satisfaction in enhancing product value-added. Yu Yue and Li Jiaxin's research provides strategies for value-added enhancement tailored to specific industries and local enterprises. Yang Ping, Liu Hongbo, and Tania Stacey emphasize the importance of cultural creativity and ethnic design in enhancing product value-added. The interconnectedness of these studies indicates that enhancing product value-added requires comprehensive consideration of technological innovation, consumer demands, cultural creativity, design methods, and cultural resources to achieve market appreciation of products and enhance economic benefits.

Therefore, enhancing product value-added is a multidimensional process involving not only technological innovation and design improvements but also a deep understanding of consumer needs, integration of cultural creativity, and brand value shaping. By combining consumer aesthetics and usage habits, designing products that are both aesthetically pleasing and practical can enhance the consumer user

experience. By exploring and utilizing cultural resources, product uniqueness and recognition can be increased through the integration of cultural creativity. Effective brand communication and marketing promotion can establish and enhance brand image, increasing consumer awareness and loyalty. Understanding consumer needs and preferences in depth allows for the continuous optimization of products and services through market research and consumer feedback. Additionally, collaborating with other industries or sectors to develop innovative and competitive new products through resource sharing and complementary advantages can further enhance product value-added.

As we gain a deeper understanding of the traditional cultural elements in Pu'er tea packaging design, it becomes evident how these designs reflect regional characteristics and cultural significance. To further advance the cultural promotion and design innovation of Pu'er tea in both domestic and international markets, we will explore innovative strategies that incorporate modern design language to elevate the market appeal and cultural value of Pu'er tea.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter delineates the research methodology employed in this study, elucidating the specific research methods and data collection processes that underlie the scientific rigor of the investigation. The study adopts a combination of qualitative and quantitative methods, including literature analysis, field research, expert interviews, aiming to gain a deeper understanding of cultural identity and aesthetic preferences for Pu'er tea packaging. It expands upon the theories and contextual frameworks examined in preceding chapters, notably those pertaining to Pu'er tea culture and packaging design. The objective is to ensure a systematic approach to exploring the integration of cultural elements into the design of Pu'er tea packaging.

- 3.1 Research design
- 3.2 List of Interview
- 3.3 Selection of Pu'er Tea Packaging Samples
- 3.4 Research Tools
- 3.5 Data Collection
- 3.6 Data Analysis
- 3.7 Data Summarization

3.1 Research Design

This section articulates a comprehensive and multifaceted research methodology, incorporating a diverse array of approaches, including a literature review, field research, interviews, questionnaire surveys, semiotic analysis, and cross-cultural design principles. Such a methodology aims to elucidate strategies for optimizing the packaging design of Pu'er tea within its socio-cultural framework.

3.1.1 Literature Review

The literature review encompasses a rigorous process of systematically collecting, synthesizing, and critically analyzing a range of relevant sources—comprising news articles, market analyses, academic papers, and research reports. Through this systematic review, a profound understanding of the origins of Pu'er tea, its historical evolution, the nuances of its cultivation, the cultural practices of the ethnic minorities in Xishuangbanna, and the associated folklore is attained. This foundational literary analysis supports the subsequent development of design strategies and provides critical contextual knowledge for the research.

3.1.2 Field Study

The field study employs a highly immersive research approach, wherein the researcher engages with the Pu'er tea culture and local tea-drinking customs in Menghai County, situated within the Xishuangbanna Autonomous Prefecture in Yunnan Province. Menghai, recognized as a principal hub for Pu'er tea production, is rich in cultural and historical heritage, presenting an abundance of invaluable resources for this study. Visits to the Dayi Pu'er Tea Culture Museum and the Hani Ethnic Museum facilitate a deeper understanding of the historical development of tea culture, the background of ethnic minorities, and the evolution of Pu'er tea packaging. Furthermore, exploration of the Dai Paper House offers additional insights into the intersection of traditional craftsmanship and contemporary Pu'er tea packaging.

3.1.2.1 Menghai County, Xishuangbanna Autonomous Prefecture

Objective: This research undertakes a thorough examination of Menghai County, the cradle of Pu'er tea culture, through the direct observation and experience of local tea culture and customs. Such a focus ensures that the research scope is

congruent with the conceptualization of Xishuangbanna tea culture as delineated in Chapter 1.

3.1.2.2 Dayi Pu'er Tea Culture Museum in Menghai County

Interviewees: Experts and staff members of the Dayi Pu'er Tea Culture Museum.

Objective: The research aims to gain a more profound understanding of the historical framework surrounding Chinese tea culture, specifically regarding the evolution of Pu'er tea packaging design. The Dayi Museum provides extensive insights into tea culture and historical artifacts, contributing to the examination of cultural symbols and their transformations within Pu'er tea packaging design.

3.1.2.3 Nannuo Mountain Tea Plantation

Interviewees: Local tea farmers from Nannuo Mountain.

Objective: Through direct engagement with local tea farmers and observational studies of traditional practices such as tea cultivation, harvesting, and production, the research aspires to uncover the cultural origins and transmission mechanisms inherent in Pu'er tea. This approach establishes a direct comprehension of how tea culture and packaging design are intertwined.

3.1.2.4 Fangyuan Tea Factory in Menghai County

Interviewees: Factory managers and designers at Fangyuan Tea Factory.

Objective: The research seeks a comprehensive understanding of the full process of Pu'er tea production, encompassing cultivation, processing, and packaging. Site visits to the tea factory expose critical insights into modern tea packaging design methodologies and concepts, providing substantial references for future innovations in packaging design.

3.1.2.5 Hani Ethnic Museum

Interviewees: Cultural guides and specialists at the Hani Ethnic Museum.

Objective: The visit intends to provide a nuanced understanding of the Hani ethnic group's tea culture, including cultural symbols such as terraced fields and traditional attire. This exploration seeks to ascertain how these cultural motifs may be

integrated into Pu'er tea packaging design, offering conceptual inspiration for designs that reflect the unique cultural imprint of minority tea cultures.

3.1.2.6 Dai Paper House

Interviewees: Master papermakers from the Dai Paper House.

Objective: The intent of this visit is to investigate the traditional papermaking techniques of the Dai people and to explore the potential integration of these crafts into Pu'er tea packaging. The research aspires to gather creative insights on how Dai handmade paper materials can be incorporated into packaging design, merging traditional methods with contemporary design principles to innovate Pu'er tea packaging, particularly in the realms of environmental sustainability and cultural preservation.

3.1.3 Interview Method

Qualitative Research: This methodological approach is utilized to investigate the complex interrelations between the packaging design of Pu'er tea in Yunnan and its extensive socio-cultural environment. Through comprehensive and focused interviews with consumers, packaging designers, and industry specialists, the study delves into how Pu'er tea packaging not only mirrors but also shapes social phenomena, cultural heritage, and consumer aesthetic preferences.

(1) Addressing Research Objective One: The interview participants include scholars with expertise in tea culture, local tea producers from Yunnan, and proprietors of tea establishments.

Interview Content: The interview questionnaire encompasses various facets of Yunnan's tea culture, such as its historical evolution, customs surrounding tea consumption, and the cultivation and production practices associated with Pu'er tea. Moreover, the interviews also investigate the commercial and service aspects of the tea industry, highlighting the challenges and future outlook of this sector.

Data Analysis: The transcribed interview content will be rigorously organized and analyzed to reveal pivotal themes and patterns. The implications of Pu'er tea packaging design will be articulated by scholars, tea cultivators, and tea shop

proprietors, scrutinizing the intricate connections among Chinese tea culture, consumption behaviors, and the expansive packaging industry.

(2) Addressing Research Objective Two: The secondary group of interviewees includes distinguished packaging designers, especially those acknowledged for their innovative contributions to Pu'er tea packaging aesthetics. The focus will be on exploring the sources of inspiration that inform their designs and examining how they integrate the regional cultural attributes of Yunnan into their packaging concepts.

Interview Content: The inquiries will center around specific design instances, prompting designers to contemplate the sources of their inspiration and the manner in which they weave cultural elements from Yunnan and tea culture into their designs. Additionally, discussions will evaluate how successful packaging designs navigate the balance between tradition and contemporary trends, as well as the harmonization of cultural significance with market demands.

Case Study: In-depth case studies will be presented, showcasing exemplary designs characterized by innovation and cultural resonance. These cases, representing a spectrum of design styles and market positions, will provide a holistic understanding of the diversity inherent in Pu'er tea packaging design.

Data Analysis: The information derived from the interviews will undergo meticulous categorization and thematic analysis to elucidate core design principles, creative methodologies, and strategies for cultural integration. The analysis will uncover the factors influencing the success of specific designs and assess their impact on the propagation of Pu'er tea culture.

3.2. List of Interviewees

This section delineates the selection criteria for interview participants involved in the study, encompassing tea producers, tea shop proprietors, cultural scholars, factory managers, and designers. The objective is to guarantee the representativeness and diversity of the research sample, thereby enhancing the rigor and validity of the findings.

3.2.1 Population Definition

In accordance with the first research objective, the selection of interviewees must satisfy the following criteria to ensure the inclusion of individuals possessing the requisite expertise and experience:

(1) Scholars in Relevant Fields

The selected scholars should have a minimum of five years of experience in disciplines pertinent to tea culture, packaging design, or cultural studies. These individuals must occupy mid- to senior-level positions within academic institutions, research organizations, or the design sector. Furthermore, they should possess a proven history of scholarly contributions, such as published works or public speaking engagements, that demonstrate their depth of knowledge at the intersection of tea culture and packaging design. The intent of interviewing this cohort is to garner profound insights into their conceptualizations of the relationship between tea culture and packaging, alongside their unique viewpoints regarding Chinese tea culture and tea-drinking customs.

(2) Tea Producers

Tea producers, which include tea cultivators, factory administrators, and merchants, are required to have a minimum of five years of practical experience in the cultivation, harvesting, processing, and commercial distribution of Pu'er tea. These individuals should have direct involvement in every phase of the production process and possess a profound, practical understanding of the traditional knowledge and techniques utilized in the cultivation of Pu'er tea. Furthermore, they must demonstrate engagement with external markets, such as participation in tea trade fairs, tea markets, or supply chains. A fundamental criterion for selection is an in-depth comprehension of the local tea culture and its socio-economic relevance within the community. Conducting interviews with these individuals will yield valuable insights into the ways in which tea culture is intricately connected with production practices and the dynamics of external markets.

Table 1 Responding to Research Objective 1

Location	Name	Gender	Age	Position	Reason for selection
Menghai Nanuo Tea Mountain	Suo Er	Male	36	Tea Farmer	Nanuo Mountain is the most renowned ancient tea mountain on the western bank of the lower reaches of the Lancang River, a crucial source of high-quality Pu'er tea.
Menghai County	Wang Fei	Male	43	Tea Shop Owner	A local Hani ethnic group member has been engaging in tea production for 20 years.
Yunnan	He Qingyuan	Male	57	Expert	He is director of the Tea Research Institute at Yunnan Academy of Agricultural Sciences, and director of the China Tea Processing Special Committee.

Table 1 (Continued)

Jinghong City Center	Fang Fang	Female	50	Tea Shop Owner	He has been running a Pu'er tea shop for more than 20 years, also has a deep understanding of Pu'er tea culture and its drinking habits.
Fangyuan Tea Factory	Liao Chengfu	Male	38	Tea Factory Manager	This enterprise is certified by ISO9001 and the International Quality Management System
Da Yi Culture Centre	Cai Jianming	Male	39	Center	8 years working experience in the Daiyi Culture Centre with a good understanding of the local tea culture in Yunnan and the development process of the Daiyi brand.

Source: Self-created

In alignment with the second research objective, the criteria for sample selection must encompass the following pertinent conditions:

The interview participants are required to possess a minimum of five years of pertinent professional experience, having made significant contributions to various Pu'er tea packaging design initiatives. These individuals should occupy mid- to senior-level roles within the design industry and have cultivated a robust professional reputation, as evidenced by a portfolio that includes published works or public speaking engagements within the design field, academic institutions, exhibitions, or seminars. Additionally, they are expected to demonstrate a verified capacity for innovative thinking and possess extensive practical experience in packaging design. The purpose of engaging this group is to garner comprehensive insights into the perspectives of packaging designers concerning contemporary trends in Pu'er tea packaging, with particular emphasis on their methodologies for integrating Chinese cultural elements to enhance both market competitiveness and consumer attraction. This cohort will furnish expert insights into the challenges, future trajectories, and emerging trends in Pu'er tea packaging design, thereby contributing invaluable guidance for the advancement and innovation of packaging strategies within this sector.

Table 2 Responding to Research Objective 2

Location	Name	Gender	Age	Position	Reason for selection
Yunnan	Yang Yaolun	Male	43	Designer	With 20 years of design experience.

Table 2 (Continued)

Beijing	Huang Linjie	Male	43	Designer	With 15 years working in the packaging design industry and involved in Pu'er tea packaging design projects.
Hani Ethnic Museum	Ms. Huang	Female	33	Staff Member	She has been working as a tour guide at the Hani Ethnic Museum for 5 years.
Dai Paper House	Mr. Yan	Male	37	Paper House Operator	He has been engaged in Dai papermaking for nearly 15 years.

Source: Self-created

3.3 Selection of Pu'er Tea Packaging Samples

This study shall engage in photographic sampling of extant local tea packaging, supplemented by materials sourced from online platforms to augment the field samples. Packaging design images of Yunnan Pu'er tea from 2004 to 2024, encompassing an extensive timeframe of nearly two decades, will be scrupulously

compiled and systematically arranged. The primary classification will emphasize the types of pattern elements and chronological periods. A more detailed examination of these distinctive design patterns will be presented in Chapter 4. (It should be noted that in 2004, Menghai Tea Factory experienced a substantial economic transformation, transitioning from a state-owned to a privately-owned enterprise.)

Expert Interviews: The expert interviews will comprise a judiciously selected cohort of 10 individuals with substantial expertise and in-depth research experience in the domain of Pu'er tea. This group will provide profound insights and expert perspectives essential for a comprehensive understanding of the cultural, economic, and design dimensions of Pu'er tea packaging.

The sample selection process will amalgamate both random sampling and purposive sampling techniques, guaranteeing that the research findings possess both broad applicability and necessary depth to meet the research objectives.

3.4 Research Tools

In this study, photographs of Pu'er tea cakes were collected through fieldwork, for which coding was carried out for better data analysis. In the analysis process, SPSS software was used for data processing, combining cluster analysis and factor analysis methods to extract underlying structures and patterns in the photographs. Cluster analysis helped to identify groups of similar photographs to reveal relationships and feature distributions among the photographs, while factor analysis further mined the factors behind the data to reveal the underlying dimensions of the features of different photographs.

A digital camera, along with computer software, is employed to capture the packaging design patterns of Yunnan Pu'er tea.

Data analysis is performed using interview transcripts along with statistical software, which aids in the thorough interpretation of the collected data.

3.5 Data Collection

This study employs a robust mixed-methods approach, integrating both qualitative and quantitative research techniques, including interviews, photographic documentation, recorded interviews, and questionnaires, to conduct a comprehensive analysis of the cultural identity associated with Pu'er tea. Initially, mathematical and statistical methodologies will be employed to analyze the data collected from the questionnaires to investigate the extant state of Pu'er tea's cultural identity. The data will undergo thorough analysis utilizing SPSS software, thereby ensuring the precision, accuracy, and reliability of the outcomes.

To further substantiate the validity and credibility of the questionnaire findings, the study will embark on rigorous assessments of both validity and reliability. This will incorporate evaluations of content validity, construct validity, internal consistency reliability, and stability reliability, all of which are imperative to assure the robustness and generalizability of the research results.

3.6 Data Analysis

The data analysis phase will concentrate on systematically processing the data acquired through literature reviews, field investigations, interviews, and questionnaires. The analytical procedure will adhere to the following key steps:

Interview Transcription: All interview and discussion recordings will be transcribed into written records to guarantee the accurate capture of information. This procedure ensures the integrity of the data for subsequent analysis.

Coding and Categorization: Qualitative analysis software will be utilized to code the interview transcripts and discern prominent themes and patterns. For instance, consumer preferences concerning packaging design will be categorized, alongside the significance of cultural elements and other pertinent perspectives.

Thematic Analysis: Key themes will be identified and developed through thematic analysis. These may include, for instance, the incorporation of traditional Chinese design elements in Pu'er tea packaging, as well as the impact of local Yunnan cultural motifs on the packaging design of Pu'er tea.

Cross-validation: Data from multiple sources will be compared and contrasted to ensure robustness in the findings. This will involve examining discrepancies between consumer perspectives and designer insights, as well as exploring the correlation between the practical experiences of tea farmers and the examination of market trends.

Case Study: Various examples of Pu'er tea packaging designs will be scrutinized to uncover the critical elements that contribute to their success. Valuable insights will be derived from these case studies, furnishing actionable information for the design industry.

Quantitative Data Analysis: The data obtained from the consumer questionnaire will be entered into statistical software, such as SPSS or Excel, for quantitative analysis. Descriptive statistical techniques will be employed to summarize pertinent demographic information pertaining to packaging designers, scholars, and consumers. Furthermore, consumer preferences regarding the design of Pu'er tea packaging—including design style, color, patterns, and materials—will undergo analysis. Statistical tests will investigate the relationships between various demographic characteristics and design preferences. The influence of Yunnan's cultural elements on packaging design will be scrutinized, along with the impact of these cultural factors on consumers' purchasing decisions, analyzed through correlation and regression analysis.

3.7 Data Summarization

This study amalgamates both qualitative and quantitative research methodologies to investigate the packaging design of Pu'er tea in Yunnan, China, through the perspective of cultural cognition. Based on the data analysis, the study anticipates emerging trends in Pu'er tea packaging design and evolving patterns of consumer preferences. It presents strategic recommendations for enhancing Pu'er tea packaging, emphasizing more effective integration of cultural elements, improvement of environmental sustainability, and promotion of innovative design practices. Additionally, the study offers insights into market positioning and brand communication strategies for tea producers and designers, derived from an extensive analysis of consumer behavior and market dynamics.

The contributions of this research to the academic discipline and to the practice of packaging design are encapsulated, covering the development of novel theoretical frameworks, innovative applications of research methodologies, and the broadening of existing knowledge. The study also acknowledges its limitations and recommends avenues for future scholarly inquiry, informed by the findings and insights derived from the research.



CHAPTER 4

RESEARCH FINDINGS

This chapter investigates the specific applications of ethnic cultural elements from Xishuangbanna in Pu'er tea packaging design. It scrutinizes how design methodologies involving color, patterns, and materials adeptly assimilate cultural symbols into packaging. Through the examination of interview data and practical design case studies, this chapter further elucidates how these cultural elements are manifested in Pu'er tea packaging and assesses their design efficacy.

Ultimately, this chapter aspires to provide a structured cultural perspective on Pu'er tea packaging design, investigating how traditional ethnic culture can be seamlessly integrated with contemporary design principles to enhance the cultural value and artistic quality of the packaging.

4.1 Exploring the Connotation and Artistic Aesthetic Value of Chinese Tea Culture

4.1.1 Chinese Tea Culture

Chinese tea culture has a long history, as an important part of traditional Chinese culture, the connotation of tea culture is not only limited to the cultivation, production and consumption of tea, but also incorporates philosophical thinking, lifestyle and aesthetic concepts, becoming an important symbol of Chinese social and spiritual life. The core value of tea culture is 'harmony', which emphasises the harmony between man and nature, man and man, and the mind and the world. This cultural idea is embodied in the form of tea ceremony, tea art, tea utensils design, etc. Tea culture not only shows the combination of nature and humanity, but also reflects the depth and philosophical nature of traditional Chinese culture.

In terms of art and aesthetics, Chinese tea culture has a unique form of expression, which is closely related to traditional art forms such as calligraphy, painting, sculpture, etc., and the cultural connotation is vividly conveyed to consumers through exquisite tea utensils, tea table arrangement and tea packaging design. The artistic value of Chinese tea culture is embodied in its pursuit of beauty of form and beauty of

mood, both the meticulous carving of tea utensils and the delicate expression of the spirit of tea culture.

The visual presentation of tea culture is particularly important, especially in packaging design, which shows the deep cultural heritage and aesthetic value through color, pattern, font and other elements. Packaging design is not only the shell of the product, but also the carrier of culture, which through the modern transformation of traditional symbols, makes tea culture in the contemporary design context with new vitality. Therefore, analysing the artistic and aesthetic embodiment of Chinese tea culture, especially through the specific expression in Pu'er tea packaging design, can help us understand how tea culture can be combined with modern design concepts and how it can trigger the emotional resonance of consumers in terms of visual and sensory experience.

In the following chapters, we will start from the seven dimensions of font style, pattern, main colors, regional characteristics, cultural symbols, artistic style and Xishuangbanna culture, and specifically analyse how these cultural elements are effectively integrated into Pu-erh tea packaging design, and how they can have a farreaching impact on visual performance and cultural communication. By analysing these dimensions, we can better understand the artistic value of Chinese tea culture in modern packaging design, and provide strong theoretical support for design practice.

4.1.2 Integration of Cultural Elements in Pu'er Tea Packaging Design

This section presents a multidisciplinary research methodology that amalgamates literature review, field studies, interviews, semiotics, and cross-cultural design to explore strategies pertinent to Pu'er tea packaging design. Through an exploration of the ethnic cultures of Xishuangbanna, this study evaluates how patterns, symbols, colors, and craftsmanship are incorporated into the design of Pu'er tea packaging. During field investigations in Yunnan, a comprehensive collection of 313 photographs of Pu'er tea cake packaging was amassed and systematically categorized. The coding process centered on seven fundamental features frequently identified in Pu'er tea packaging design.

Font Styles

Font styles in Pu'er tea packaging design can be classified into calligraphic styles, which epitomize traditional culture, and non-calligraphic styles, which align with modern design principles. A statistical analysis of the 313 packaging samples indicated that 262 samples (83.7%) employed Chinese traditional calligraphic font styles, whereas 51 samples (16.2%) utilized non-calligraphic font styles.

This predominance of traditional calligraphic styles underscores the significance of preserving cultural heritage in the visual identity of Pu'er tea.

Table 3 Font Style Classification Count

NO.	Font Style	Example Codes	Count	Percentage	
1	Calligraphic Style	Calligraphic Style = 1	262	83.7%	
2	Non-calligraphic Style	Non-calligraphic Style = 2	51	16.3%	

Source: Self-created

From the perspective of traditional Chinese calligraphy, it has been a core symbol of Chinese culture since the Tang and Song dynasties, particularly during the Ming and Qing dynasties. Calligraphy not only became an important component of literary and artistic culture, but also gradually symbolized social status and cultural identity. Pu'er tea, a traditional beverage originating from Yunnan, has a history that dates back to the Tang dynasty. During this period, it underwent significant development and became a symbol of cultivation for scholars and intellectuals, as seen in works like the Cha Jing (Tea Classic), which blends tea culture and calligraphy, carrying a deep historical connection with calligraphy.

In traditional Chinese culture, calligraphy embodies the spiritual connotations of "tranquility, harmony, righteousness, and truth." These four characters represent the ideal realms sought in Chinese culture: tranquility represents inner peace and focus, harmony symbolizes balance and unity, righteousness indicates that one should approach life with composure, and truth stands for the pursuit of sincerity and authenticity. Calligraphy, as an art form, aptly expresses these ideas: through every stroke and character, the calligrapher embodies "tranquility," the undulations and strength of the brush reflect "harmony," and the structure and flowing lines of each character demonstrate the philosophy of "truth." Pu'er tea, as a cultural symbol of "ancient, traditional, and natural" values, aligns perfectly with this concept. By skillfully utilizing calligraphic fonts, the Pu'er tea brand can not only highlight its deep cultural heritage in its packaging design but also allow consumers to feel the cultural atmosphere, rich with history and tradition, when enjoying a cup of tea, thus deepening their recognition and admiration of the brand's long-standing heritage.

The brushstrokes of calligraphic fonts are thick and the lines are rich, reflecting both the strength and artistry of the writing. This can visually attract consumers' attention and stimulate their interest. The dynamic variations of the calligraphy complement the image of Pu'er tea as a product that embodies the tradition of craftsmanship.

The characters "jing" and "he" in calligraphy fonts, particularly in the designs featuring running script or cursive script styles, prominently embody the profound and reserved nature of Pu'er tea culture. For instance, the fluidity of running script and the unrestrained quality of cursive script create a visually dynamic balance, which not only highlights the traditional charm of tea culture but also displays the unique aesthetic of modern design. Through this visual expression, Pu'er tea brands can convey an atmosphere of tranquility, enabling consumers to experience a profound cultural encounter while enjoying the tea.

As a product with a rich cultural heritage, Pu'er tea's high-end positioning is often expressed through elements of traditional calligraphy. For example,

font designs in running script or cursive script styles not only enhance the artistic value of the packaging but also endow the product with deeper cultural connotations, making it more collectible and meaningful as a gift.

The introduction of packaging devoid of traditional calligraphy into the market indicates that, with the acceleration of globalization and modernization, especially after China's entry into the World Trade Organization (WTO) and its subsequent opening up and marketization, Pu'er tea packaging design has gradually incorporated modern design language. This trend not only adapts to the demands of the global market but also caters to the preferences of younger consumers for simplicity, fashion, and modernity. Its design language is concise and modern, effectively conveying the brand's fashionable aura and international perspective.

The widespread use of calligraphic styles indicates that traditional calligraphy in Pu'er tea packaging design can effectively build a cultural emotional connection, satisfying consumers' psychological expectations for the product's cultural value. At the same time, the moderate use of non-calligraphic styles reflects the diversity of design language, catering to the internationalization needs of the market. The introduction of modern design language enriches the visual expression of Pu'er tea packaging and provides greater potential for its dissemination in the global market. Therefore, in the future design of Pu'er tea packaging, finding a balance between tradition and modernity will be crucial. The aesthetic preferences and cultural demands of the target consumer group should be fully considered, ensuring a reasonable balance between calligraphic and non-calligraphic styles, so that the product retains its cultural essence while adapting to market development. Typeface styles in packaging design are not only visual elements but also key media for cultural inheritance and market adaptation. Calligraphic styles convey a sense of tradition and history, while noncalligraphic styles incorporate the simplicity and internationalism of modern design. Pu'er tea packaging design has found a unique balance between tradition and modernity, providing strong support for brand image building and laying a solid foundation for market expansion.

Patterns

Patterns assume a pivotal role in the design of Pu'er tea packaging, acting as a vehicle for the communication of cultural and artistic value. The variety of patterns reflects diverse interpretations and expressions of cultural themes. Statistical analysis of 313 packaging samples has identified six primary categories of patterns: traditional auspicious patterns, ethnic characteristic patterns, natural landscape patterns, plant patterns, designs without specific patterns, and depictions of human figures.

Traditional auspicious motifs appeared in 19.1% of the samples (60 cases). These patterns, which feature traditional symbols such as clouds, dragons, phoenixes, and mythical creatures, convey auspicious meanings entrenched in Chinese culture. They are frequently employed in high-end Pu'er tea packaging to articulate cultural heritage and premium quality. Since the Tang Dynasty, auspicious patterns have held an important place in Chinese tea culture. Especially during the Ming and Qing Dynasties, tea was not only a daily consumable but also a symbol of social etiquette and cultural identity. For example, the patterns of dragons and phoenixes, as well as auspicious beasts, represent good wishes such as "good fortune" and "wealth and health," which align closely with the natural, healthy, and culturally inherited characteristics of Pu'er tea.

A total of 19 cases (6.1%) featured ethnic characteristic patterns. These patterns are inspired by the traditional decorative motifs of the ethnic minorities in Xishuangbanna, including Dai weaving patterns and Hani geometric designs. The rapid development of China's economy and the rise of cultural confidence have made the revival of national culture an essential part of the national cultural strategy. In this process, cultural symbols of ethnic minorities, especially regionally strong ethnic art forms, have become key elements in Pu'er tea packaging design. This shift is due to the support and advocacy of the Chinese government for the inheritance of ethnic culture, particularly under the context of "cultural confidence" becoming a national strategy. Traditional culture is seen as the foundation of national revival. Since General Secretary

Xi Jinping introduced the concept of cultural confidence in 2012, the revival of ethnic culture has advanced beyond the theoretical level and been systematically promoted through cultural policies and practical actions.

A total of 69 cases (22.0%) featured natural landscape patterns. This category frequently features depictions of tea gardens, misty mountains, and additional scenic elements. Such patterns underscore the natural ecological characteristics and regional identity of Pu'er tea. Their fresh and elegant visual appeal aligns with consumer expectations for "pure" and "high-quality" tea.

In traditional Chinese culture, landscape painting, as an art form, has been refined over thousands of years and became an important painting genre as early as the Tang Dynasty. Landscape painting not only reproduces natural scenery but also carries philosophical ideas, expressing the natural view of "the unity of heaven and man" and the concept of harmonious coexistence between humans and nature. From the "scholar's landscape" of the Song Dynasty to the "landscape imagery" of the Ming and Qing Dynasties, landscape painting has maintained a significant place in Chinese culture. This cultural tradition provides a solid foundation for the use of natural landscape patterns in Pu'er tea packaging. The recent emphasis on "green development" in China, particularly under the strategy of Building a Beautiful China, makes the use of landscape patterns not only convey the charm of Pu'er tea's natural origin but also respond to consumers' expectations for "green, pollution-free, and ecofriendly" products. These pattern designs often feature elements like mountains, clouds, and tea gardens to highlight the natural environment of Pu'er tea from the high mountains and misty surroundings of Yunnan, giving the brand an image of nature, health, and high quality. The cultural connotation of natural landscape patterns aligns with contemporary ecological consciousness and reflects people's desire to return to nature and pursue a healthy lifestyle.

A total of 39 cases (12.5%) featured plant patterns. In traditional Chinese culture, plant patterns hold profound symbolic meaning. Plants such as tea tree leaves, bamboo, and orchids have long transcended their role as mere natural symbols,

becoming significant emblems in traditional culture. The tea tree itself is not only the foundation of Pu'er tea but also symbolizes the vitality of "eternal life" and the gifts of nature. Bamboo symbolizes resilience, purity, and noble character, while the orchid represents scholars and literati, symbolizing elegance, independence, and refined taste. The incorporation of these plant elements into the packaging design of Pu'er tea conveys respect for nature and a profound understanding of life and culture.

As China enters an era of marketization and globalization, environmental awareness has gradually become an important criterion for consumers when choosing products, particularly among the younger generation. Health, green practices, and sustainability have increasingly become mainstream consumption concepts. Plant motifs, including tea leaves, bamboo, and orchids, utilize simple forms to emphasize the natural essence of Pu'er tea. This pattern is prevalent in eco-friendly and youth-oriented packaging designs, resonating with contemporary consumers' aspirations for nature and health.

No specific patterns were observed in 81 cases, making up 25.9% of the total sample. This is a category with a relatively high usage rate. Its design reflects the "negative space" aesthetic in traditional culture through a minimalist style. The "negative space" aesthetic has a long history in traditional Chinese art, particularly in calligraphy, painting, and garden design. Negative space is not only a part of the aesthetic composition but also carries profound philosophical significance. Ancient Chinese culture emphasizes the harmony between nature and humanity, believing that "empty space" is not void, but an invisible space that offers the viewer unlimited imaginative potential and profound intellectual inspiration. In Pu'er tea packaging, this category embraces minimalist styles that reflect the Chinese aesthetic principle of "leaving space." Designs typically focus on brand names or variants of tea, resulting in a sophisticated yet unembellished visual effect. This style appeals to younger consumers and enhances brand recognition through prominent typography.

A total of 29 cases (9.3%) featured human figures. Human figures include scenes of tea farmers at work and images of ethnic minorities. By depicting the

activities and expressions of people, these designs convey the humanistic care within tea culture. From ancient landscape paintings to modern oil paintings, Chinese traditional art often conveys the relationship between society, family, and nature through the portrayal of people. This form of art not only showcases individual life scenes but also reflects the social climate and cultural changes of different eras. Xishuangbanna is one of the main production areas of Pu'er tea, known not only as the birthplace of tea but also for its rich ethnic minority culture. The tea-picking scenes of ethnic minorities have become an important element in the packaging design of Pu'er tea. By depicting the daily lives of ethnic minorities such as the Dai and Hani, particularly traditional processes like tea picking and tea-making, the packaging design highlights the regional characteristics of Pu'er tea while conveying the long history and humanistic value of tea culture. Through dynamic representations of human figures, the emotional connection of the design is enhanced, resonating more directly with consumers. The use of human figures, especially the images of ethnic minorities, has become an important symbol of Chinese tea culture, helping Pu'er tea brands gain cultural recognition.

In packaging design, some patterns incorporate multiple elements, showcasing rich cultural connotations and design layers. For example, 9 designs (accounting for 2.9%) combine traditional auspicious patterns with natural landscape elements, conveying both auspicious meanings and the natural attributes of Pu'er tea. One design (accounting for 0.3%) integrates traditional auspicious patterns with ethnic characteristics, exploring the fusion of traditional and regional cultures. Another design (accounting for 0.3%) combines natural landscape elements with human figures to reflect the harmonious coexistence of humans and nature. The use of composite patterns requires balancing complexity and harmony to avoid visual confusion. It provides a design direction that merges tradition and modernity, as well as culture and nature, offering inspiration for the future diversity of Pu'er tea packaging design. With the global convergence of design languages and the strengthening of the revival of local cultures, composite patterns will continue to be an important innovation in Pu'er tea packaging design. Designers need to seek inspiration from traditional cultural symbols

while considering a global perspective, exploring ways to combine Eastern traditional culture with Western modern design, injecting new vitality into Pu'er tea packaging design.

Table 4 Pattern Classification Count

Pattern Types	Count	Percentage
Traditional auspicious patterns	60	19.1%
Ethnic characteristic patterns	19	6.1%
Natural landscape patterns	69	22.0%
Plant patterns	39	12.5%
No specific patterns	81	25.9%
Human figures	29	9.3%
Others	16	5.1%

Source: Self-created

The statistical analysis of patterns in Pu'er tea packaging elucidates the following salient trends:

Natural landscape motifs (22.0%) and traditional auspicious symbols (19.1%) represent the most prevalent categories, underscoring a simultaneous focus on ecological and cultural themes within the design of Pu'er tea packaging. The significant proportion of designs devoid of specific motifs (25.9%) underscores the surging popularity of minimalist aesthetics, particularly those emphasizing typography and brand identification. Despite ethnic characteristic patterns comprising merely 6.1% of the total, their cultural expressiveness and distinctiveness render them a promising avenue for future design exploration. The implementation of composite patterns illustrates the potential for the integration of diverse cultural elements, providing a pathway for innovation in design.

The variety of patterns present in Pu'er tea packaging exemplifies a profound integration of cultural depth and aesthetic expression, enabling the packaging to fulfill traditional cultural expectations whilst simultaneously presenting innovative designs suitable for global markets.

Major Colors

The study categorized the primary colors employed in Pu'er tea packaging designs, encompassing red, green, black, blue, yellow, and white. The selection of colors plays an essential role in conveying product characteristics and cultural ambiance. Given the vast array of color combinations (114 groups), the analysis concentrates on the five most frequently utilized combinations.

The analysis manifests diverse trends in the application of colors for packaging design, accentuating both cultural significance and aesthetic allure. Below are the leading five color combinations along with their interpretations:

The most common color combination, red and white (9.9%), is often used in high-end packaging. In Chinese culture, red symbolizes celebration and auspiciousness and has long been used in the packaging of tribute tea and royal teas. For example, during the Ming and Qing dynasties, red decorations were commonly

used to highlight the noble status of tribute teas. White, on the other hand, represents purity, simplicity, and Zen, holding an important place in traditional Chinese calligraphy and painting. The aesthetic concept of using white as the background to highlight the artistic conception of tea culture has been passed down from the Song Dynasty to the present day. The popularity of red and white packaging stems from its ability to convey passion and vitality, while integrating traditional Chinese auspicious meanings with modern minimalist styles, creating a fresh and elegant visual effect.



Figure 20 Color combination: Red and White, Black and White

Source: Photography by Angi Xie, Xishuangbanna, Yunnan

The second most common color combination is the black and white combination (9.6%). The pairing of black and white is rooted in Chinese ink painting art, which emphasizes the use of blank space and conveys a sense of artistic conception. During the Tang and Song dynasties, tea culture emphasized the spirit of the tea ceremony, and the black-and-white combination aligned with the philosophical concept of tranquility and non-action. Moreover, the aging process of Pu'er tea is often associated with the color black, symbolizing tradition, timelessness, and a sense of classic elegance. In modern packaging, the black-and-white combination fits minimalist design principles, making it suitable for international markets and young consumers, highlighting the product's high quality and professionalism. Other less common combinations include blue and yellow (3.5%), the three-color combination of black, red, and white (3.2%), and green and white (3.2%). These combinations reflect a fusion of

modern and traditional innovations, as well as a lifestyle philosophy centered on nature and health. The use of color in Pu'er tea packaging design not only integrates traditional culture with modern aesthetics but also conveys the product's quality, cultural depth, and natural attributes, fully responding to consumers' demand for high-end, healthy, and eco-friendly products.

Table 5 Primary Color Classification Count

Primary color	Count	Percentage
Red= 1, White = 0	31	9.9%
Black = 3, White = 0	30	9.6%
Blue = 4, Yellow = 5	11	3.5%
Black = 3, Red= 1, White = 0	10	3.2%
Green= 2, White = 0	10	3.2%

Source: Self-created

Statistically, the choice of colors in Pu'er tea packaging design reflects both the heritage of traditional culture and the exploration of simplicity and diversity in modern design.

The balance between tradition and modernity is the core issue of both cultural and aesthetic demands in Pu'er tea packaging design. In terms of continuing traditional colors, red, yellow, and other traditional hues still dominate. This not only reflects the historical depth of Pu'er tea as a traditional cultural product but also reinforces its cultural attributes. The selection of these colors is not just a design consideration but also a tribute to the inheritance of traditional culture. Meanwhile, the incorporation of modern colors infuses new vitality into the Pu'er tea packaging. The use of color combinations such as black and white, and blue and yellow, showcases the modernization and internationalization of the design language. This is particularly competitive when attracting younger consumers and overseas markets, breaking the limitations of traditional design, bringing a sense of fashion and international flair, and enhancing its appeal in the global market. Moreover, diversity and innovation are important characteristics in Pu'er tea packaging, and the diversity of color schemes demonstrates the designer's ability to balance cultural expression and market demands. For example, the blue and yellow combination reflects an innovative attempt, while the green and white combination reinforces the product's ecological theme.

From an academic and design perspective, the cultural symbolism of color is of great importance in Pu'er tea packaging. The color choices in Pu'er tea packaging are not merely a design technique, but a means of conveying cultural symbols. The auspicious connotation of red, the understated classicism of black and white, and the natural attributes of green all enhance the cultural characteristics of Pu'er tea. The choice of colors in Pu'er tea packaging, while satisfying traditional aesthetic expectations, also meets the modern consumer's diverse aesthetic needs through innovative color combinations such as blue and yellow. Future designs could focus more on exploring multidimensional color combinations, such as incorporating more complex color schemes to enhance the visual layers and cultural expression of packaging design.

In conclusion, the main color choices in Pu'er tea packaging design fully reflect the dual demands of culture and the market. Traditional colors like red and yellow

not only highlight cultural attributes but also enhance brand recognition, while modern color schemes such as black and white and blue and yellow inject fashion and international appeal into the design. This diverse use of color not only meets the psychological expectations of different consumer groups but also provides a broader creative space for Pu'er tea packaging design, offering valuable inspiration for future design endeavors.

Regional Characteristics

To evaluate the correlation between packaging design and regional culture, designs were classified into With Regional Characteristics and Without Regional Characteristics.

The design reflecting regional characteristics in packaging amounts to 183 cases, accounting for 58.5%. These designs highlight the origin of the tea through place names, regional patterns, landscape elements, or color schemes. For example, place names such as "Xishuangbanna" and "Lao Banzhang" are indicated, or local symbols like peacocks, elephants, and terraced fields are used to strengthen the expression of regional culture. This design conveys the unique origin attributes of Pu'er tea, enhancing consumer recognition and trust, increasing cultural appeal, and establishing an emotional connection with consumers. In terms of market adaptability, these designs are particularly suitable for the high-end tea market, as they enhance the product's uniqueness and sense of value by reinforcing the "origin concept." Typical examples include the use of patterns from ethnic minorities in Yunnan or geographical symbols (such as the waves of the Lancang River), as well as integrating real-life images from the origin (such as tea mountains, clouds, and ancient tea trees). Xishuangbanna, as the core production area of Pu'er tea, has a rich ethnic culture and profound historical heritage. It is the birthplace of ethnic minorities such as the Dai and Hani, and the natural scenery and ethnic customs here have become an inspiration for Pu'er tea packaging design. From the ancient Tea Horse Road to the modern international tea market, Xishuangbanna's tea culture has been passed down for thousands of years and is deeply rooted in the land. For example, "Lao Banzhang," one

of the traditional tea-producing areas of Pu'er, is said to have been an important node on the Tea Horse Road since the Tang Dynasty. The tea trees and natural environment in this area have a deep historical connection. According to historical records, the Banzhang area has long been one of the birthplaces of Pu'er tea, and the legendary "Lao Banzhang tea" is famous for its high-quality tea leaves and unique environmental conditions. By incorporating the place name "Lao Banzhang" in the packaging design, Pu'er tea not only emphasizes its historical and high-quality origin characteristics but also conveys the cultural story closely tied to the land. For instance, using the Lancang River wave pattern in the packaging design communicates that the tea grows in the region along the Lancang River, an area rich in natural resources and ecological advantages. The Lancang River is not only an important water source for the Xishuangbanna region but also flows through areas with abundant vegetation, providing unique growing conditions for Pu'er tea. Through this wave pattern design, the packaging not only shows the close connection between Pu'er tea and the Lancang River but also enhances the unique value derived from the "origin concept."

Packaging without regional features typically adopts a minimalist design style, emphasizing the brand identity while downplaying connections to local culture. It mainly uses abstract patterns, modern typography, or monochromatic color schemes to reflect a simple and fashionable design language. Although such designs may lack cultural attributes, they enhance the brand's universality and international appeal, making them especially suitable for the aesthetic demands of younger consumers and international markets. In the market, this style is more suitable for fast-moving or mass-market Pu'er tea products, avoiding cultural barriers that may arise from excessive localization. Typical examples include the use of simple brand logos and minimalist layouts, as well as abstract patterns (such as tea leaf shapes or wavy lines) to replace regional symbols.

Table 6 Regional Characteristics Classification Count

Regional characteristics	count	percentage
With Regional characteristics	183	58.5%
Without Regional characteristics	130	41.5%

Source: Self-created

Statistical analyses reveal that over half of the packaging designs for Pu'er tea manifest regional characteristics, illustrating designers' focus on local cultural elements. These distinct regional designs not only underscore the product's uniqueness but also contribute to the promotion of the cultural attributes of the tea-producing regions. Conversely, 41.5% of the packaging lacks regional characteristics, which may be attributed to the strategic intent to appeal to a broader consumer demographic or to enhance the brand's international identity.

Cultural Symbols in Pu'er Tea Packaging Design

Cultural symbols represent a pivotal method for conveying the product's cultural worth and spiritual significance. An analysis of 313 Pu'er tea packaging samples categorizes cultural symbols into five primary types: auspicious, ecology, unity, historical heritage, and integrity and character. Among them, there are 125 occurrences of historical heritage, accounting for 39.9%. Auspicious has 78 occurrences, accounting for 24.9%. Ecology has 58 occurrences, accounting for 18.5%. There are 43 occurrences of integrity and character, accounting for 13.7%. Unity has 9 occurrences, accounting for 2.9%.

Historical Heritage: Continuation of Cultural Roots

As the preeminent cultural symbol, historical heritage encapsulates the extensive history, traditional craftsmanship, and local narratives associated with Pu'er tea. These designs enhance Pu'er tea's role as a cultural vessel through the exploration of diverse cultural symbols. Traditional calligraphy is used, such as inscriptions, seal script, or imitations of Ming and Qing dynasty tribute tea seals or antique calligraphy, directly conveying historical depth. Classic patterns, like ancient tea trees and caravan motifs, highlight the close connection between Pu'er tea and the Tea Horse Road. Craftsmanship heritage is emphasized through the use of retro-style design language, conveying the spirit of meticulous, handcrafted tea production.

Auspicious: A Symbol of Traditional Culture

Auspicious symbols convey blessings and positive meanings via traditional Chinese cultural icons (such as auspicious clouds, dragons, phoenixes, and auspicious beasts). It ranks as the second most prevalent cultural symbol in Pu'er tea packaging.

Prevalent motifs include auspicious clouds signifying elevation and joy, dragons and phoenixes representing nobility and harmony, and auspicious beasts symbolizing protection and prosperity. The color palette typically features red, gold, and yellow to emphasize a regal and festive ambiance. This design is frequently employed in gift tea and premium products, enhancing the brand's visual resonance through cultural symbols.

Ecology: Expression of Natural Attributes

Ecological symbols emphasize nature, showcasing Pu'er tea's green, natural, and eco-friendly characteristics, in alignment with contemporary consumer concerns regarding health and sustainability. Common elements found in the design include tea gardens, bamboo, foliage, and other natural motifs. The visual language predominantly employs green and white to project an ecological and pure visual experience. This symbol frequently features in packaging designs for youthful products or those underscoring health, thereby addressing contemporary consumers' desires for

"natural" and "environmentally friendly" options. By embodying concepts of sustainable development, ecological symbols resonate with the values of young consumers.

Integrity and Character: A Symbol of Spiritual Value

Symbols of integrity and character encapsulate the spiritual connotations of Pu'er tea as a cultural artifact, such as noble character, independence, and the pursuit of excellence. Symbolic elements, including plum, orchid, bamboo, and chrysanthemum, express uprightness and elegance. Employing simple and refined designs, utilizing techniques such as white space and minimalist layouts, underscores the superior quality of Pu'er tea. This design is particularly well-suited for upscale tea markets or culturally themed products, appealing to consumers who prioritize spiritual identity. Symbols of integrity and character convey the distinctive personality of the product and the essence of the brand, rendering it highly attractive to consumers who appreciate cultural identity.

Unity: Expression of Harmony

Symbols of unity emphasize themes of cohesion among ethnic minorities or "harmonious coexistence". While their usage may be less prevalent, they hold substantial meaning in articulating harmony between humanity and nature. Illustrations depicting ethnic unity or labor scenes communicate the concept of harmonious coexistence between individuals and nature. These designs are more frequently employed in packaging that accentuates local cultural features, thereby reinforcing the regional identity of Pu'er tea. Unity symbols resonate with consumers who are mindful of social responsibility and the preservation of culture.

Diversity and Fusion of Cultural Symbols

Certain packaging designs amalgamate multiple cultural symbols, thereby enriching the connotation of the design. For instance, the integration of Historical Heritage and Auspicious utilizes traditional symbols (such as auspicious clouds) alongside historical texts (like "Gong Tea") to convey both traditional and historical values. The combination of Ecology and Integrity employs simple, refined design language to express ecological sustainability and the spiritual essence of Pu'er tea.

Table 7 Classification and Count of Cultural Symbols

Cultural Symbol	Count	Percentage	
Auspicious	78	24.9%	
Ecology	58	18.5%	
Unity	9	2.9%	
Historical Heritage	125	39.9%	
Integrity and Character	43	13.7%	

Source: Self-created

Statistical analyses reveal that the cultural symbols employed in the packaging of Pu'er tea exhibit a remarkable diversity and complexity. Notably, Historical Heritage (39.9%) and Auspicious symbols (24.9%) represent the most prevalent cultural motifs, underscoring the designers' initiative to harmonize the promotion of traditional culture with consumer preferences. Furthermore, the considerable utilization of ecological symbols (18.5%) aligns with contemporary market trends emphasizing health and environmental sustainability.

The use of cultural symbols in the packaging of Pu'er tea conveys the product's spiritual essence and cultural significance through visual representation. Dominated by Historical Heritage and Auspicious symbols, with ecological motifs closely following, these designs reflect an effort to amalgamate traditional and

contemporary elements. Future designs ought to prioritize the integration of varied symbolic elements, employing innovative design language that preserves the profound expression of traditional cultural symbols, while simultaneously addressing the multifaceted needs of the modern market, thereby enhancing the cultural integrity and market competitiveness of Pu'er tea packaging.

Artistic Style

The artistic styles present in Pu'er tea packaging have been categorized into Traditional, Modern, and Mixed styles to assess the continuity and innovation of traditional culture within contemporary design.

Traditional Artistic Style: Total Instances: 207 (66.1% of total). The traditional artistic style represents the most prevalent category in Pu'er tea packaging design. Typically characterized by calligraphic fonts, traditional patterns (such as auspicious clouds, dragons, and phoenixes), and classic color palettes (including red and gold), this style accentuates the cultural richness and historical legacy of the tea. It is particularly favored in mid- to high-end products underscoring the quality and cultural significance of the tea.

Traditional Artistic Style is not merely a design choice; it is a profound response to China's rich historical and cultural heritage. In Chinese traditional culture, calligraphy, patterns, and colors hold significant symbolic meanings. Calligraphy, as a quintessential element of Chinese culture, represents the wisdom and refinement of Chinese civilization; patterns such as dragons, phoenixes, and auspicious clouds are important symbols in the cultural inheritance of the Chinese nation for thousands of years, symbolizing good fortune, harmony, and longevity. The use of these elements in Pu'er tea packaging leverages these symbolic meanings to convey the cultural connotations of Pu'er tea as "ancient, traditional, and natural."

This traditional style of design not only reflects the value of Pu'er tea as a long-established cultural symbol but also aligns with the broader context of China's increasing emphasis on the revival of traditional culture. Since the reform and opening-up, especially in the 21st century, as China has placed greater importance on the revival

of traditional culture, more and more brands have returned to traditional cultural roots, emphasizing "cultural confidence." The concept of "cultural confidence" proposed by General Secretary Xi Jinping has become an important direction for contemporary Chinese cultural development. The traditional style of Pu'er tea packaging is an important embodiment of this cultural confidence, as it not only allows consumers to feel the deep connection between Pu'er tea and Chinese culture but also strengthens the uniqueness of Chinese tea culture in the context of globalization.

Modern Artistic Style: Total Instances: 18 (5.8% of total). Modern artistic style designs frequently incorporate minimalist geometric forms, contemporary typefaces, and monochromatic color schemes, producing a refreshing and stylish visual impression. Although less prevalent, this style resonates with the preferences of younger consumers who favor modern aesthetics and is increasingly utilized for products appealing to younger demographics.

Mixed Artistic Style: Total Instances: 88 (28.1% of total). The mixed artistic style endeavors to reconcile traditional and modern elements, frequently integrating traditional features (such as ethnic patterns and calligraphic fonts) with contemporary design techniques (such as minimalist layouts and novel materials). This design approach not only conveys cultural richness but also caters to contemporary aesthetic expectations, establishing it as a prominent trend in recent Pu'er tea packaging design.

Table 8 Count of Art Style Categories

Artistic style	Count	percentage
Traditional	207	66.1%
Modern	18	5.8%
Mixed	88	28.1%
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Source: Self-created

Statistical results indicate that Pu'er tea packaging design tends to favor traditional styles (66.1%), reflecting the designers' strong emphasis on cultural heritage. The relatively high proportion of Mixed style (28.1%) reflects the active exploration in the design field of integrating traditional and modern elements. In contrast, the proportion of Modern style (5.8%) is relatively low, but its unique minimalist approach offers the potential to attract younger consumers to Pu'er tea brands.

Xishuangbanna Culture

This section evaluates whether Xishuangbanna culture is manifested in the packaging design (Yes/No) to ascertain the extent of local cultural application within the Pu'er tea brand. No Xishuangbanna culture occupies a higher proportion in packaging, reflecting the main issue of the research - how to integrate Xishuangbanna culture into packaging design. It further proves that the design should focus more on Xishuangbanna culture, and further enhance the cultural expression and local identity of the packaging by integrating local symbols and national cultural characteristics.

With Xishuangbanna Culture (Yes): Total Instances: 141 (45.0% of total)

These packaging designs integrate elements that reflect the local attributes of Xishuangbanna, such as patterns, symbols, colors, and language. For instance, the incorporation of traditional Dai patterns, local tropical flora motifs, regional names (e.g., "Jingmai Mountain," "Yiwu"), and symbols of ethnic architecture enhance the cultural recognition of the packaging while accentuating Xishuangbanna's significance as a paramount tea production region.

Without Xishuangbanna Culture (No): Total Instances: 172 (55.0% of total)

These packaging designs may incorporate certain regional characteristics (such as a general Yunnan culture or natural landscapes) but do not distinctly embody Xishuangbanna local culture. Such designs tend to focus more on universality and broad market adaptability, aiming to appeal to a wider consumer base and enhance the product's market acceptance and competitiveness. However, they fall short in conveying local culture, failing to fully showcase the unique cultural charm of Xishuangbanna as the core production area of Pu'er tea. Firstly, as Yunnan is a multiethnic and multicultural province, its overall cultural features are more easily understood and accepted by consumers both nationally and internationally. Designers tend to select more universal symbols. Secondly, while the local culture of Xishuangbanna is rich, it is regionally distinct and may be unfamiliar to non-local consumers, making it difficult to achieve widespread cultural recognition in a short period of time. Thirdly, with the development of globalization, packaging design has trended toward simplicity and modernity, and the elements of Xishuangbanna culture may be relatively complex and regionally specific, making them difficult to integrate into modern or hybrid packaging styles. Finally, considering the complexity of special elements, production costs, and market acceptance, brands often opt for more generic and easier-to-produce design solutions.

In the earlier section, the presence of regional characteristics, it was determined that 183 packaging designs exhibit regional characteristics. Among these,

141 packaging designs expressly reflect Xishuangbanna culture, constituting approximately 77.0% of the designs featuring regional characteristics. This indicates that while some designs exhibit regional characteristics, only those that accurately incorporate elements of Xishuangbanna culture can authentically represent the unique identity of this tea-producing area.

Regional Characteristics as the Foundation of Xishuangbanna Culture Expression: 183 packaging designs manifest regional characteristics, providing extensive design opportunities for local cultural expression. Regional characteristics serve as the external manifestation of Xishuangbanna culture, while designs that amalgamate Xishuangbanna culture (141 instances) enhance the significance and depth of these regional traits.

Xishuangbanna Culture as the Precise Expression of Regional Characteristics:

Not all packaging designs exhibiting regional characteristics include elements of Xishuangbanna culture. For example, certain designs with regional attributes may utilize broader Yunnan symbols or motifs related to natural landscapes (e.g., "Yunnan Mountains and Rivers"). Conversely, designs that reflect Xishuangbanna culture are more specific, integrating local symbols with accuracy, such as Dai patterns, Hani ethnic motifs, and particular tea mountain names. Xishuangbanna culture, serving as a central theme within Pu'er tea packaging design, epitomizes the sophistication and precision of regional characteristics. While 58.5% of packaging designs exhibit regional traits, only 45.0% encapsulate Xishuangbanna culture. This evolution from broad regional features to defined local culture underscores the transition in design focus from generalized regional elements to more specific cultural representation. This accentuates the necessity for designs to incorporate local symbols and ethnic cultural features to elevate cultural representation and regional identity within Pu'er tea packaging.

Table 9 Classification and Count of Xishuangbanna Culture

Xishuangbanna Culture	Count	Percentage
Yes	141	45.0%
No	172	55.0%

Source: Self-created

4.1.3 Coding and Data Analysis

The seven classification groups—namely, "Font Style, Pattern, Primary Color, Regional Characteristics, Cultural Symbols, Art Style, Xishuangbanna Culture"—are organized into six dimensions: Ethnic, International, Regional, Global, Humanistic, and Natural. Initially, the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test were conducted to evaluate the appropriateness of the data for factor analysis. Subsequently, a scree plot and total variance analysis were performed to identify the principal components. Following this, a component matrix was employed to classify the factors and ascertain the most significant categories. Finally, a confirmatory factor analysis was undertaken to validate the primary components, complemented by a correlation analysis among the factors.

KMO and Bartlett's Test

Data analysis was executed utilizing SPSS version 26, with the results presented below:

KMO Sampling Adequacy Measure: The KMO value is recorded at 0.722, indicating that the data is deemed "suitable" for factor analysis, as the value lies within the range of 0.70 to 0.79.

Bartlett's Test of Sphericity: Approximate Chi-square value: 2397.478; Degrees of freedom: 15; Significance: 0.000.

Given that the significance (p-value) is less than 0.05, the null hypothesis is rejected, indicating that the correlation matrix does not conform to an identity matrix. Therefore, significant correlations among the variables exist, validating the appropriateness of factor analysis.

Table 10 KMO and Bartlett's Sphericity Test Data

KMO and Bartlett's Test				
KMO Measure of Sampling A	0.722			
Bartlett's Test of Sphericity	Approximate Chi-Square	2397.478		
	Degrees of Freedom	15		
	Significance	0.000		

Source: Self-created

Scree Plot

Upon analysis of the scree plot, it is evident that the first factor possesses a characteristic value markedly higher than that of the other factors (approximately 5), accounting for the majority of the variance. Although the characteristic value of the second factor approaches 1, it demonstrates a substantial decline in comparison to the first factor. The characteristic values for the third factor and

those beyond are nearly 0, contributing minimally. Thus, based on the trend of the characteristic values, it is reasonable to retain solely the first factor. This observation implies that within the current data structure, the first factor can effectively encapsulate the primary characteristics and sufficiently elucidate the core relationships among the variables, while the remaining factors contribute insubstantially and may be disregarded.

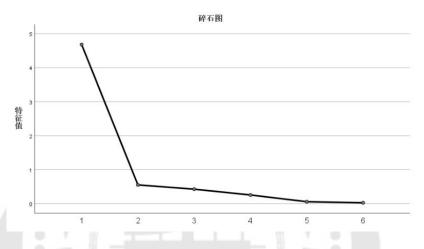


Figure 21 Scree Diagram

Source: Self-created

Component Matrix

Pu'er Tea Cake Packaging Design Score Matrix Description: This score matrix assesses the multifaceted cultural characteristics intrinsic to Pu'er tea packaging design (including ethnic, international, regional, global, humanistic, and natural dimensions) to illustrate the performance of various design elements within these cultural contexts.

Font Style

Calligraphic Style has achieved higher scores in ethnic, regional, and natural dimensions (all 2), while it attained lower scores in both international and global dimensions (both 1). On one hand, this reflects the Pu'er tea brand's focus on emphasizing cultural roots and natural attributes, as well as its strong ability to convey

traditional culture and regional characteristics. On the other hand, it also indicates that its universality and communicability in the global context might be relatively limited.

Non-Calligraphic Style has secured elevated scores in both international and global dimensions (both 2), but it received lower scores in ethnic and regional dimensions (both 1). This suggests that while the style enhances the modern appeal of the brand, it may fall short in conveying traditional cultural values and local characteristics. For example, the simplified fonts often used by Menghai Tea Factory for the international market effectively enhance the brand's modern feel but lack in conveying the traditional cultural value and regional features of Pu'er tea.

Patterns

In Pu'er tea packaging design, different pattern elements exhibit diverse characteristics and adaptability across cultural dimensions. Traditional auspicious patterns and ethnic characteristic patterns are central to cultural identity and local expression, standing out particularly in ethnicity, regional, and humanity (traditional characteristic patterns all score 5, ethnic characteristic patterns all score 6). However, possibly due to the regional nature of traditional symbols, these patterns show weaker adaptability in internationality and naturality dimensions (traditional characteristic patterns all score 1, ethnic characteristic patterns all score 0). The use of traditional auspicious patterns and ethnic characteristic patterns in Pu'er tea packaging design reflects an emphasis on Chinese traditional culture and local identity. These traditional design elements, such as the dragon and phoenix and auspicious clouds, are not only a legacy of traditional culture but also represent a cultural renaissance after social turmoil, emphasizing the continuity of history and the revival of culture.

Natural landscape and plant patterns perform excellently in the naturality and internationality dimensions (natural landscape patterns score 4, plant patterns score 5). Natural landscape patterns break cultural boundaries with their unique natural imagery, while plant patterns align with modern global market aesthetics through simple and ecological design. However, these two types of patterns have limited direct representation of traditional cultural symbols (natural landscape patterns score 2, plant

patterns score 1), weakening their ethnic and regional characteristics and reducing their connection to traditional culture. This suggests that in the context of internationalization, the adoption of natural landscape and plant patterns reflects a growing societal focus on ecological conservation and natural health. These elements break cultural boundaries, align with global market aesthetics, and symbolize Pu'er tea as a representative of a healthy lifestyle.

Patterns with no specific design score higher in globality and naturality (5 and 4, respectively), demonstrating their flexibility and adaptability in modern design. However, they score lower in ethnicity (3), indicating a dilution of traditional cultural connections. In contrast, human figure patterns score higher in ethnicity and locality (both 4), showcasing the advantages of human imagery in expressing locality and cultural connotations. However, due to the regional nature of visual language, these patterns score lower in internationality and globality (both 2).

Primary Colors

Red, green, and black score higher in terms of ethnicity and locality. Red represents celebration and auspiciousness, green emphasizes ecology and nature, and black symbolizes stability and depth. These colors reflect their significant role in conveying traditional culture and regional characteristics, though their adaptability on an international and global scale is relatively weak. On the other hand, blue, yellow, and white focus more on meeting the internationalization demands of modern design, performing outstandingly in global and natural aspects, highlighting simplicity, nature, and universal aesthetic features. The differences and similarities in color usage illustrate the integration and balance between traditional culture and modern design in packaging.

Regional Characteristics

Designs with regional characteristics score higher in terms of ethnicity, locality, and humanity (all scoring 2), emphasizing their importance in reflecting local culture and conveying cultural connotations. In contrast, designs without regional characteristics perform better in international and global aspects (both scoring 2), reflecting the more universal globalization trend in modern design. Particularly in the

early 2000s, as Chinese culture gradually rose, local characteristics became key factors for many brands to enhance cultural identity and competitive differentiation. Menghai Tea Factory's packaging designs often incorporate patterns or local symbols from ethnic groups such as the Dai and Hani, which not only enhance the cultural appeal of the products but also increase consumer identification with local culture.

Cultural Symbols

Pu'er tea packaging design showcases rich cultural connotations and diverse features through themes such as auspiciousness, ecology, unity, historical inheritance, and moral character. Among these, auspiciousness and historical inheritance highlight ethnicity and humanity, reflecting the transmission and recognition of traditional cultural values. The ecological theme, centered on nature, emphasizes environmental protection concepts and a brand image that harmonizes with nature. Unity, as a symbol of local culture, underscores the importance of locality and social recognition. Moral character and integrity express ethical implications and the spiritual core through humanity. These themes intertwine, not only enriching the cultural expression in packaging design but also strengthening consumers' cultural identity with the product.

Artistic Style

Among various artistic styles, traditional styles score higher in ethnicity and humanity (2 and 3, respectively), reflecting the significant role of traditional art in cultural identity and emotional resonance. Modern styles stand out in terms of internationality and globalization (3 and 2, respectively), showcasing the widespread adaptability of modern design in the context of globalization. The mixed style scores higher in nature and humanity (both 2), reflecting the combination of traditional and modern design languages, conveying cultural depth while meeting diversified market demands.

The revival of Chinese culture and the emphasis on traditional culture in the early 2000s prompted many brands to strengthen this direction in packaging design. Brands like Menghai Tea Factory often use traditional calligraphy and ethnic patterns to highlight the historical and cultural heritage of Pu'er tea. This design approach

stimulates emotional resonance with consumers, especially in the domestic market, effectively conveying cultural identity and emotional value. However, as globalization accelerated, the application of modern styles gradually became more prominent, particularly after the 2010s, when Pu'er tea brands began targeting a more diversified international market. Packaging designs gradually became simpler, fresher, and more aligned with international aesthetic standards. This design style was particularly popular in European and American markets as it quickly adapted to the global market, aligning with the modern aesthetic of international consumers.

At the same time, the rise of mixed styles reflects the effective integration of tradition and modernity, especially in the late 2010s, when brands increasingly focused on how to incorporate modern design elements within the framework of traditional culture to enhance product international competitiveness. By combining traditional cultural symbols with modern design techniques, Menghai Tea Factory successfully achieved a balance between traditional culture and global market demands in packaging.

Xishuangbanna Cultural Heritage

Designs with Xishuangbanna cultural elements score higher in terms of ethnicity, locality, and nature (all scoring 2), highlighting the importance of local culture in packaging design. In contrast, designs without Xishuangbanna cultural elements perform more prominently in international and global contexts (both scoring 2), demonstrating their advantages in international dissemination and universality.

Menghai Tea Factory has continuously evolved its packaging design, particularly in the classic "7542" series, which has undergone several transformations from 1975 to 2004. This reflects a commitment to maintaining and innovating traditional design elements. However, with the globalization of the market and the diversification of consumer aesthetics, Menghai Tea Factory gradually incorporated modern elements into its packaging design, such as minimalist lines and international color combinations, to meet the needs of different consumers. This integration embodies the harmonious coexistence of traditional culture and modern design.

Located in the core production area of Pu'er tea, the packaging design of Menghai Tea Factory fully highlights the regional features of Xishuangbanna. It often incorporates various ethnic patterns and natural landscapes. The use of traditional Dai patterns and colors effectively enhances the regional identity of the product, showcasing the rich ethnic culture and natural resources of the Menghai area.

Cluster Analysis

The cluster analysis was conducted to classify the fundamental characteristics of Pu'er tea packaging design, uncovering the distinctions and similarities across diverse cultural dimensions. The study identified seven attributes—typographic style, patterns, color schemes, regional characteristics, cultural symbolism, artistic styles, and Xishuangbanna culture—as variables. These attributes were examined within the context of six cultural dimensions: ethnic, international, regional, global, humanistic, and natural.

Xishuangbanna cultural elements were classified into Cluster 0, and they were particularly prominent in the two dimensions of ethnicity and naturalness. Xishuangbanna is an ecological and cultural area in China where many ethnic groups live together. It has a profound Buddhist tradition, nature worship beliefs, and ethnic aesthetics, such as the Dai elephant totem, peacock imagery, terraced field patterns, and ethnic handicrafts. These cultural symbols not only reflect regional characteristics in Pu'er tea packaging, but also contain visual communication of ecological ethics and national spirit.

However, the integration of Xishuangbanna cultural elements in the international design context is still limited, and it is difficult to fully meet the modern market's aesthetic preference for simple and universal styles, so it shows a certain degree of adaptability in the score.

Overall, Pu'er tea packaging design presents the following three clustering characteristics in the six cultural dimensions (nationality, internationality, regionality, globality, humanity, and naturalness):

Cluster 2 (Cultural Heritage), mainly based on calligraphy fonts, traditional patterns, and red and green colors, emphasizing nationality and regionality, and focusing on reflecting the visual essence of Xishuangbanna culture, such as the festive colors of the Dai Water Splashing Festival and the "one bud and two leaves" totem of the Bulang people, etc., constructing a packaging expression with a strong sense of cultural identity.

Cluster 1 (Fusion), using non-calligraphy fonts, character images, modern style and black color matching, it strikes a balance between humanity and internationalization, represents the reprocessing and contemporary expression of traditional elements, and is suitable for the communication needs of a wider consumer group.

Cluster 0 (Ecological Simplicity), mainly based on natural landscapes, plant patterns, blue and white tones, emphasizing nature and globality, combining ecological symbols such as Xishuangbanna tropical rainforest culture and the concept of symbiosis between man and nature, while incorporating minimalist style to enhance international communication power.

This study shows that Xishuangbanna culture not only carries national spirit and ecological wisdom in Pu'er tea packaging, but also reflects the multi-dimensional interaction between traditional craftsmanship and modern vision in design strategy. The three types of design tendencies revealed by cluster analysis not only reflect the tension and integration between tradition and modernity, local and global in the current Pu'er tea packaging, but also provide designers with multiple paths and strategic references in future cultural expression, visual construction and international communication.

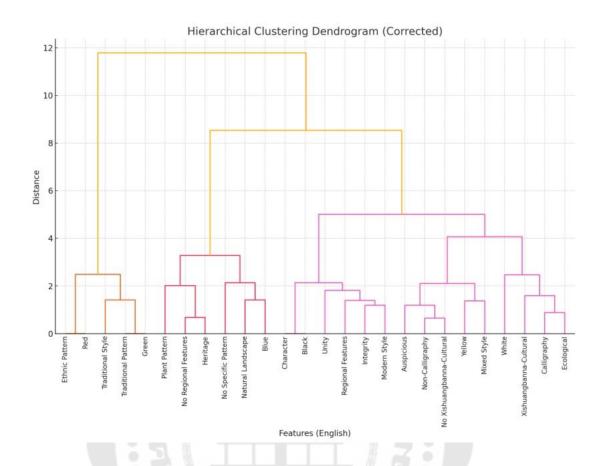


Figure 22 Clustering Dendrogram

Source: Self-created

Factor Correlation Analysis

The factor correlation analysis, employing the Pearson Correlation method, uncovers the associative characteristics between different cultural dimensions. This analysis further illustrates the complex and intertwined interactions among cultural factors in Pu'er tea packaging design.

CORRELATION							
		Ethnic	International	Regional	Global	Cultural	Natural
ETUNIC	Pearson Correlation	1	762**	.844**	650**	.947**	686**
ETHNIC	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	313	313	313	313	313	313
INTERNATIONAL	Pearson Correlation	762**	1	586**	.648**	695**	.732**
INTERNATIONAL	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	313	313	313	313	313	313
REGIONAL	Pearson Correlation	.844**	586**	1	767**	.861**	572**
REGIONAL	Sig. (双尾)	.000	.000		.000	.000	.000
	N	313	313	313	313	313	313
CI ODAI	Pearson Correlation	650**	.648**	767**	1	716**	.777**
GLOBAL	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	313	313	313	313	313	313
CHITUDAL	Pearson Correlation	.947**	695**	.861**	716**	1	773**
CULTURAL	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	313	313	313	313	313	313
NATURAL	Pearson Correlation	686**	.732**	572**	.777**	773**	1
NATURAL	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	313	313	313	313	313	313
AT THE 0.01 SIGNIFICANCE LEVEL (TWO-TAILED), CORRELATIONS ARE SIGNIFICANT.							

Figure 23 Factor Correlation Scores

Source: Self-created

These scores display the correlation between six variables (Ethnic, International, Regional, Global, Humanistic, Natural). We can observe the Pearson correlation coefficients between variables and the corresponding significance levels (two-tailed). The Pearson correlation coefficient ranges from -1 to 1, where 1 indicates a perfect positive correlation (both variables increase or decrease together), -1 indicates a perfect negative correlation (one variable increases while the other decreases), and 0 indicates no correlation. In this table, the Sig. (two-tailed) value indicates the significance level of the correlation coefficient. If the value is less than 0.01, the correlation is significant at the 0.01 level.

(1) Ethnic Dimension (Ethnicity) Correlations

Ethnicity has significant negative correlations with Internationality (r = -0.762) and Globality (r = -0.650), indicating that the reinforcement of national culture often accompanies the weakening of international features and global elements, particularly in font styles or pattern designs, where traditional symbols may diminish their global adaptability. Ethnicity has significant positive correlations with Regionality (r = 0.844) and Humanism (r = 0.947), reflecting a high fit between national culture and regional characteristics. Traditional auspicious patterns not only embody national culture but also highlight regional features. Meanwhile, the deep integration of national culture and humanistic culture contributes to the joint transmission of national spirit and humanistic values.

(2) International Dimension Correlations

Internationally designed elements have significant positive correlations with Globality (r=0.648) and Naturalness (r=0.732), indicating that internationally designed elements are closely integrated with global styles, such as the use of blue and white tones, minimalist modern styles, and the widespread use of natural themes (e.g., plant patterns and natural colors). Additionally, internationally designed elements have a significant negative correlation with Regionality (r=-0.586), suggesting a tendency to weaken specific regional cultural features to adapt to a broader cultural context; they also have a significant negative correlation with Humanism (r=-0.695), indicating that the enhancement of modernity may weaken the narrativity of traditional culture and the expression of humanistic connotations.

(3) Regional Dimension Correlations

The correlation analysis between Regionality and other cultural dimensions reveals its multifaceted adaptability. Regionality has significant negative correlations with Globality (r = -0.767) and Naturalness (r = -0.572), suggesting that the reinforcement of regional cultural features may diminish the prominence of global design elements, particularly when emphasizing local cultural symbols, which may conflict with the minimalist abstract expression of global aesthetics and natural themes. On the other

hand, Regionality has a significant positive correlation with Humanism (r = 0.861), indicating a high consistency between regional cultural symbols and humanistic connotations. The patterns and colors of local culture not only showcase regional characteristics but also effectively enhance cultural narrativity.

(4) Global Dimension Correlations

With Humanistic: Pearson's correlation coefficient = -0.716 (indicating a significant negative correlation). Globalized, minimalist design may restrict the expression of profound humanistic and cultural values, prioritizing form over narrative.

With Natural: Pearson's correlation coefficient = 0.777 (indicating a strong significant positive correlation). Global design incorporates natural elements to enhance cross-cultural appeal, rendering natural themes more universally acceptable in international markets.

(5) Humanistic Dimension Correlations

With respect to Natural: Pearson's correlation coefficient = -0.773 (indicative of a significant negative correlation). The emphasis on humanistic culture frequently encompasses intricate cultural narratives, which may contrast with the abstract and minimalist characteristics inherent in designs inspired by nature.

The factor correlation analysis reveals both synergistic and conflicting relationships among the cultural dimensions of Pu'er tea packaging design. In terms of synergistic relationships, Ethnicity exhibits high correlations with Humanism and Regionality, reflecting the deep binding between traditional cultural symbols and local cultural connotations. For example, calligraphy styles and traditional auspicious patterns jointly enhance the cultural expression of nationality and regionality. In terms of conflicting relationships, the dimensions of Internationality and Globality have significant negative correlations with Ethnicity, Regionality, and Humanism, indicating that traditional cultural elements face certain adaptability challenges in the context of internationalized and globalized designs. A balance needs to be found between these two aspects in the design process. The dual role of Naturalness is demonstrated by its

positive correlation with Internationality and Globality, showcasing its flexibility as a modern design language, but its negative correlation with Ethnicity and Humanism reflects that the abstract expression of natural themes may weaken the narrativity of traditional culture.

Combining the results of the correlation analysis, Pu'er tea packaging design should focus on the following points: Enhance synergies by finding more cultural intersections between Ethnicity, Humanism, and Regionality, for example, by incorporating ethnic cultural symbols and local ecological characteristics to enhance the narrative capability of the design. Balance conflicts by integrating traditional culture with internationality and globality through modern design language, such as enhancing international acceptability through natural colors and abstract patterns while emphasizing regional features. Expand the expression of Naturalness by using natural themes as a bridge to promote the integration of international and global design dimensions with traditional culture, for example, by combining natural landscape patterns and ethnic colors to give Pu'er tea packaging more cross-cultural appeal. This analysis provides theoretical support for innovation in Pu'er tea packaging design across multiple cultural dimensions, showcasing the cultural potential in design while also revealing challenges and directions for future development.

4.2 Typical Embodiment of Xishuangbanna Minority Culture in Pu'er Tea Cake Packaging

Among the 141 packaging designs featuring distinct Xishuangbanna cultural traits, 10 representative Pu'er tea cake packages were selected for analysis. Through the study of Xishuangbanna ethnic minority culture, the embodiment of its patterns, symbols, colors, craftsmanship and other elements in Pu'er tea packaging is analysed.

4.2.1 Bulang Ethnic Group

The designation 'Daughter Tribute Cake' derives from a legend originating during the Qing Dynasty. It is said that a young woman, referred to as 'Daughter,' presented a particularly superior Pu'er tea cake to the emperor; in recognition of its

exceptional quality, it became known as a 'tribute cake.' Over time, this term has come to be synonymous with high-quality Pu'er tea.

The production process of Bulang Mountain Daughter Tribute Cake is characterized by meticulous attention to detail, particularly during the harvesting phase, which is traditionally undertaken by young unmarried women (in this context, 'daughter' denotes unmarried women). The packaging design of Bulang Mountain Ancient Tree Tea – Daughter Tribute Cake prominently features an image of a young woman from the Blang ethnic group carrying a tea basket, serving as a principal design element (Bulang Mountain Ancient Tree Tea – Daughter Tribute Cake). Simple lines are employed to depict the labor scene of Blang women. This design directly reflects the traditional labor practices associated with tea production in the Bulang Mountain region, thereby emphasizing the cultural heritage linked to the origins of Pu'er tea.

The Blang ethnic group stands as one of the prominent minorities in Xishuangbanna and has maintained a longstanding association with Pu'er tea production. The depiction of Blang women carrying tea baskets symbolizes the industriousness and tradition inherent in tea cultivation, thereby underscoring the cultural connection between the ethnic group and the production of Pu'er tea.



Figure 24 Women Picking Tea

Source: Self-collected



Figure 25 Brown Mountain Ancient Tree Tea - Daughter Tribute Cake

Source: Photography by Anqi Xie, Xishuangbanna, Yunnan

The attire depicted on the female figure in the packaging is inspired by traditional Bulang ethnic clothing, featuring tight-fitting tops paired with tube skirts. Despite its simplicity, Bulang clothing is distinguished by the "Qing Poluo Brocade" used

in their tube skirts, known for its intricate patterns and craftsmanship. While the design elements in the packaging are simplified and abstracted, the key characteristics of traditional Bulang attire are preserved, providing unique cultural value and enhancing the visibility of regional culture.

Red and green are the dominant colors in the design. Red serves as the main decorative color, symbolizing celebration and auspiciousness in Chinese tradition while underscoring the high quality and market appeal of the tea. Green, representing nature and ecology, emphasizes the natural attributes of Pu'er tea and reflects the pristine environment of the Bulang Mountain region.

4.2.2 Hani Ethnic Group

Lao Ban Zhang Village, with its ancient roots, was historically part of the Bulang people's territory in Old Man'e Village before 300 CE. Its thousand-year-old arbor tea trees remain vibrant, bearing witness to centuries of history. In 1476, according to legend, the Aini people, ancestors of the Hani ethnic group, migrated to this region from Gelanghe Mountain. Welcomed by the Bulang people, they were granted land abundant in ancient tea trees, which led to the establishment of Lao Ban Zhang Village. As the population grew, part of the community relocated, forming New Ban Zhang Village, while the original village became known as Lao Ban Zhang or Old Ban Zhang.

Ban Zhang Pu'er Tea derives its name from the region, with Lao Ban Zhang serving as its historical origin. Its unparalleled quality and distinctive mountain character have made it a hallmark of premium Pu'er tea.

The Hani ethnic group, integral to Xishuangbanna, is renowned for its vibrant clothing featuring geometric motifs in bold colors such as red, blue, yellow, and green. These patterns, rich in cultural symbolism, often represent unity, prosperity, and reverence for nature.

The packaging design of Lao Ban Zhang tea cake incorporates these traditional motifs, featuring vibrant geometric patterns on the left to highlight the artistry of Hani weaving (Lao Ban Zhang Tea Cake). A diverse palette of contrasting colors

symbolizes vitality and harmony. Centralized text in deep purple accentuates the premium quality, while the gold background reinforces its classical and cultural essence. By blending ethnic tradition with modern minimalism, the design captures the cultural heritage and commercial appeal of Lao Ban Zhang tea.



Figure 26 Hani Ethnic Costume Patterns

Source: Self-collected



Figure 27 Lao Ban Zhang Tea Cake

Source: Photography by Anqi Xie, Xishuangbanna, Yunnan

4.2.3 Jinuo Ethnic Group

Youle Mountain, currently referred to as Jinuo Mountain, has historically been recognized as the most prominent among the ancient six major tea mountains. Situated in Jinuo Township, Jinghong City, Xishuangbanna Prefecture, it is separated from Gedeng, Mangzhi, and Kongming tea mountains by the Buyuan River (Xiaohei River). The mountain is home to the Jinuo ethnic group, who were historically known as the Youle people. They began tea cultivation along the banks of the Buyuan River over a millennium ago. By the early Ming Dynasty, Youle Mountain already featured over 4,000 acres of tea gardens. Today, Longpa and Balai villages still retain more than 2,000 acres of ancient tea trees, many with trunk circumferences exceeding 100 centimeters. Tea harvesting on Youle Mountain is a family-centered activity, with men, women, and children all participating together. Dressed in colorful traditional attire, the Jinuo people's labor amid the ancient tea trees exemplifies the aesthetic beauty of tea culture while highlighting the natural ecological charm of Youle Mountain.



Figure 28 Te Mao Ke Festival

Source: Festivals in Yunnan | Drum music in Jinuo Village, the Te Mao Ke Festival

Retrieved from http://wl.hubeitoday.com.cn/post/6894



Figure 29 Youle Mountain Tea Cake

Source: Photography by Anqi Xie, Xishuangbanna, Yunnan

Youle Mountain, the primary settlement of the Jinuo ethnic group, reflects the cultural richness of China's last officially recognized minority. Jinuo traditional clothing features vibrant primary colors—red, blue, and black—adorned with geometric patterns that symbolize harmony between nature and life. Women's attire includes short tops and long skirts, often complemented by embroidered belts and headscarves, while men typically wear loose cotton shirts and trousers in bold, contrasting colors.

The annual "Te Mao Ke Festival", equivalent to the Jinuo New Year, is celebrated with singing and dancing to express gratitude for nature and life. The packaging design for Youle Mountain tea cake draws heavily from Jinuo cultural elements. The central imagery depicts Jinuo men and women dancing and singing amidst tea mountains, with a backdrop of radiant sunlight and distant peaks symbolizing the grandeur of Youle Mountain and its tea culture's historical significance.

The warm tones of red and orange dominate the packaging, evoking celebration and harmony, while green hues in the background highlight the natural ecology and sustainability of Youle tea. Handwritten calligraphy of the name "Youle Mountain" enhances cultural depth, and the auspicious cloud motif in the top right corner symbolizes purity and good fortune.

4.2.4 Dai Ethnic Group

The elephant is a prominent symbol of Xishuangbanna and a representative of the tropical rainforest ecosystem. Asian elephants, revered for their strength, wisdom, and unity, hold a special place in Dai culture. Elephants frequently appear in traditional festivals and ceremonies, such as the Dai Water-Splashing Festival, where they serve as a central theme for various activities (Xishuangbanna Water-Splashing Festival Elephants). The image of the elephant signifies nature, peace, and respect for the environment, making it a quintessential representation of Xishuangbanna's cultural and ecological heritage.



Figure 30 Elephant in Xishuangbanna Water Splashing Festival

Source: Elephants splash water to celebrate the Dai New Year

Retrieved from https:

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Pu'er tea thrives in the ecologically rich region of Xishuangbanna, where its growth is closely tied to the tropical rainforest. Elephant motifs in packaging design symbolize the natural origins of Pu'er tea while promoting the philosophy of coexistence and harmony between humans and nature.

Elephant is a totem symbol of nature worship, and an important carrier of ecological wisdom and spiritual beliefs in Xishuangbanna. The packaging of Purple Bud takes the dark purple background and the front totem of a single elephant as the core, and through the double semantic association of purple color and the name of 'Purple Bud', and the cultural symbols of 'strength and steadiness' of elephant, it constructs the visual narrative of 'Rarity of Ecological-Pu'er Tea in Xishuangbanna'. The elephant motif emphasizes the tea's natural origins and highlights the role of Xishuangbanna's ecological environment in shaping its superior quality. The deep purple color further signifies the value of the tea's aging potential and cultural depth.

The packaging of figure.32 adopts the light tone of the elephant herd (family imagery) and green calligraphy font, 'natural symbiosis' as the design logic. The mother elephant guards the baby elephant, just like the wisdom of tea planting inherited by the Dai people for generations, echoing the Dai proverb "a tea tree feeds three generations", emphasizing the relationship between tea and the continuation of the family. This design language highlights the natural attributes of Pu'er tea and also conveys the value of environmental protection and ecological protection to people. As a cultural symbol of Xishuangbanna, the elephant is closely connected with Dai culture.

At the same time, this packaging uses traditional handmade paper from the Dai ethnic group in Xishuangbanna. The papermaking craft has been passed down from generation to generation by the Dai people. It not only reflects the exquisite folk skills, but also carries the symbol of national identity and the continuation of cultural heritage. The combination of Dai paper and Pu'er tea packaging is a deep fusion of traditional craftsmanship and regional culture in the context of contemporary design. It not only enriches the cultural connotation of the packaging, but also gives Pu'er tea a unique visual language and spiritual value.



Figure 31 Purple Bud Tea Cake

Source: Photography by Anqi Xie, Xishuangbanna, Yunnan



Figure 32 Elegant Tea Cake

Source: Photography by Anqi Xie, Xishuangbanna, Yunnan

With its distinctive characteristics, Xishuangbanna's ethnic minority culture has injected highly recognizable regional elements into the design of Pu'er tea packaging through patterns, colors and themes. The vivid use of classic symbols not

only directly conveys Xishuangbanna's unique ecological culture, but also uses the emotional connection function of ethnic symbols to establish a deep cultural identity with people in a visual form. This type of packaging design tells local stories through visual language, making ethnic minority culture an effective communication medium.

4.3 Xishuangbanna Culture and Industry Excellence: The "Peacock" Series Packaging Design by Dayi

As an iconic cultural symbol of Xishuangbanna, the peacock holds an unrivaled position in regional symbolics. In Dai culture, the peacock is a symbol of kindness, wisdom, freedom, peace, and auspicious happiness. The famous legend of the "Peacock Princess" and the awe-inspiring sight of peacocks flying southeast in Xishuangbanna further elevate the peacock's status as a central totem in Dai cultural heritage.



Figure 33 Xishuangbanna Peacock

Source: Photography by Anqi Xie, Xishuangbanna, Yunnan

The peacock stands as a natural and cultural emblem of Xishuangbanna, embodying the spirit of local ethnic groups and their beliefs. Its elegant and vibrant patterns are frequently utilized in artistic creations and product packaging, acting as a vital conduit for spreading Dai cultural heritage. As a key cultural icon of Xishuangbanna, the peacock has found its way into Pu'er tea cake packaging designs, most notably in Dayi Tea Factory's Peacock Series. This series integrates rich cultural connotations with distinctive branding, symbolizing not only natural beauty but also the intrinsic connection between tea and local traditions.

Since its inception, Dayi has committed itself to the production and innovation of Pu'er tea, developing numerous renowned series such as the Cabbage, Numbered, and Yunxiang Series. Among these, the Peacock Series debuted in 2003 and has become a staple in Dayi's product lineup, consistently releasing new products annually. Its development can be divided into three distinct stages.

4.3.1 The First Stage (2003–2008): Transitional Phase

During the first stage (2003–2008), coinciding with the transitional period surrounding Dayi's restructuring, the Peacock Series introduced a range of new products. Highlights included the 2003 Four-, Five-, and Six-Star Peacock Ban Zhang, the 2006 Five-Peacock set, and the 2008 Colorful Peacock set. These releases consistently delivered high quality and gained significant acclaim within the industry.

The design approach in this phase emphasized minimalism, with single-line drawings focusing on the peacock's head and select feathers, creating a clean and recognizable silhouette. The color scheme favored monochromatic tones, avoiding overly intricate combinations to achieve a straightforward yet striking aesthetic. This minimalist style underscored the peacock as the central design element while preserving its symbolic significance as a totem of auspiciousness in Xishuangbanna culture.

A standout example from this period is the 2003 "Peacock's Hometown" green cake. Its packaging featured a fully displayed peacock with intricately detailed feathers as the focal point. Red dominated the color scheme, accented with golden

elements, reflecting a traditional cultural aesthetic. The peacock motif, primarily outlined in green, remained central, becoming the design's visual highlight.

The detailed and decorative approach aimed to underscore the tea's rich cultural heritage and historical importance, showcasing its premium quality and rarity. The fully spread peacock tail symbolized prosperity and good fortune, while the red background conveyed a festive and celebratory atmosphere, reinforcing the product's cultural attributes and significance.

Table 11 Phase One Peacock Tea Cake



Ban Zhang Four-Star Peacock Qing Tea Cake



Peacock Homeland Qing Tea Cake



Pink Peacock No. 2 Ripe Tea Cake

2003

Table 11 (Continued)



401 Peacock Ban Zhang Tea Cake

2004



402 Peacock Homeland Arbor Eco Tea Cake



501 Dong Song Ancient Tea Mountain Peacock Tea Cake

2005



501 Bada Tea Mountain Peacock Tea Cake

Table 11 (Continued)



Source: Self-collected

4.3.2 Second Stage (2009–2014): Consolidation and Decline of the Peacock Series Style

Between 2009 and 2014, the Peacock Series continued its product releases, but the variety of offerings rapidly declined. Iconic collections such as the "Five-Peacock" series were phased out, while new products like Bulang Peacock and Menghai Peacock rose to prominence. Market attention shifted towards the Menghai-Bulang tea region, with interest in Mengsong, Bada, and Nannuo regions waning. During this phase, the peacock motif transitioned from being the focal point of packaging to a decorative or background role.

In 2009, the peacock motif, while still present, was shifted from the visual center to the periphery as a decorative accent. The simplified design minimized the peacock's presence, transforming it into a subtle background element rather than a dominant feature.

Between 2010 and 2011, the design moved towards greater minimalism, with the peacock motif completely removed from visuals. The word "Peacock" was retained as a branding element, with the focus shifting to typography and layout. Packaging during these years prioritized textual communication over decorative embellishments.

In 2012, the peacock motif returned in a more dynamic and artistic form, featuring extended wings with detailed, flowing feather patterns. Blue dominated the color palette, complemented by white, creating depth and elegance. The extended feathers symbolized elegance and expansion, aligning with the brand's growth and influence. The design reflected high-end aesthetics and catered to the market's preference for premium Pu'er tea.

In 2013, the peacock motif became abstract, with only feather outlines remaining as background textures. This marked a shift from representational to symbolic design. Minimalist aesthetics were emphasized, with intricate textures adding sophistication and referencing the aging value of Pu'er tea.

In 2014, the peacock motif became further abstracted, appearing as an indistinct background pattern. The design adopted a clean, modern look, with a light

green color scheme emphasizing ecological and environmental themes, reflecting the brand's ties to its natural origin.

During this period, the peacock transitioned from a central totemic figure to a decorative and symbolic element, reflecting a broader shift in design language from figurative to abstract. This change aligns with the brand's move toward a premium and internationalized identity.

The 2012 design stood out with its expressive feather motif, symbolizing continuity and growth potential in Pu'er tea. The color scheme evolved from the monochrome simplicity of 2009 to the layered blue-and-white aesthetic of 2012 and finally to the green minimalism of 2014, showcasing the brand's commitment to exploring the intersection of nature and artistry.

The Peacock Series' packaging design from 2009 to 2014 illustrates an evolution from traditional representation to modern abstraction. By gradually transforming the peacock into a supporting design element, the series successfully integrated the symbolic attributes of Pu'er tea—nature, artistry, and premium quality—with a contemporary visual language suited for an international audience.

Table 12 Phase Two Peacock Tea Cake

□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	2009
901 Golden Peacock	
001 Silver Peacock	2010
101 Silver Peacock Qing Cake	2011
布朗孔雀 A MAR A MAR	2012

Table 12 (Continued)



Source: Self-collected

4.3.3 Third Stage (2015–2023): From Design Interruption to Cultural Revival

From 2015 to 2023, the Dayi Peacock Series experienced a notable hiatus in design, with only three products released: the 1601 Collectible Peacock (2016), the 1801 Thousand-Feather Peacock (2018), and the 2201 Premium Peacock (2022). Although scarce in quantity, the rarity of these tea cakes heightened their value in the collectible market, establishing them as flagship products of the brand's high-end range. This stage balanced a revival of classic design elements with modern minimalist aesthetics, reflecting an effort to reconcile tradition with contemporary consumer preferences.

In 2016, the 1601 Collectible Peacock tea cake reintroduced the iconic peacock motif from the 2003 "Five-Peacock" series, positioning it prominently in the packaging's center. The design retained only the core peacock figure, contrasting with the intricate compositions of 2003. A red-and-white color scheme dominated the design, with red outlining the peacock's silhouette and feather details, set against a white

background that emphasized simplicity and premium quality. The revival of this classic motif paid homage to the cultural heritage of the Peacock Series while infusing traditional imagery with a contemporary minimalist aesthetic. This approach resonated strongly with loyal consumers and collectors.

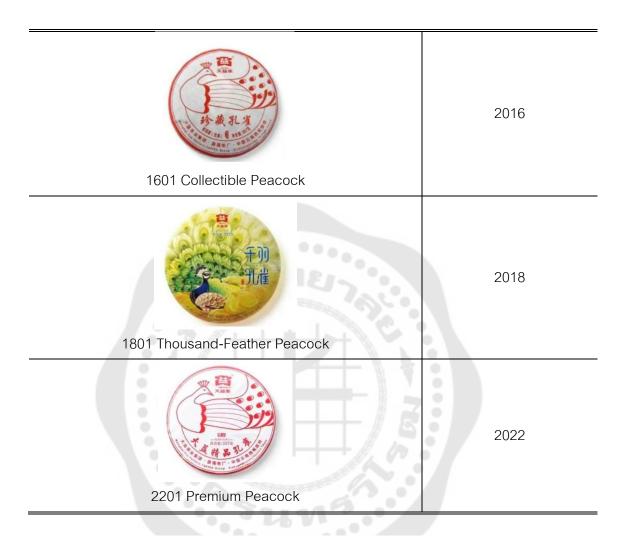
In 2008, The 1801 Thousand-Feather Peacock broke away from the minimalist trend by showcasing a fully displayed peacock with vibrant feathers as the central design element. The feathers, rendered in gradient green and yellow, covered most of the packaging, creating a rich decorative effect. Symbolizing the layered complexity of Pu'er tea flavors, the "Thousand-Feather" motif embodied prosperity and inheritance. This design built upon the "feather extension" concept introduced in earlier phases, while the intricate detailing underscored the tea's artistic and high-end positioning.

In 2022, the 2201 Premium Peacock was similar to the 1601 Collectible Peacock, the Premium Peacock revisited the classic peacock motif from the 2003 series. The design language remained consistent, with a simplified red-and-white palette. The peacock figure was further refined, with smoother lines and a modernized layout. Standardized typography and subtle feather embellishments enhanced brand identity, while the minimalist design reflected modern consumer preferences. The reuse of the classic motif reinforced cultural continuity and emotional resonance, while the "Premium" label underscored the product's exceptional quality.

This stage of the Peacock Series illustrates the brand's effort to merge heritage with innovation. By reintroducing iconic designs and integrating minimalist aesthetics, Dayi succeeded in aligning its products with modern consumer trends while preserving its cultural essence.

The 2016 and 2022 designs emphasized continuity and emotional connection through the revival of classic motifs. Meanwhile, the 2018 Thousand-Feather Peacock leveraged intricate detailing and dynamic gradients to elevate the artistic value of the series, strengthening its appeal in the premium Pu'er tea market.

Table 13 Phase Three Peacock Tea Cake



Source: Self-collected

The packaging designs of the 1601 Collectible Peacock (2016) and 2201 Premium Peacock (2022) hold significant importance in the evolution of Dayi's Peacock Series. Both designs directly reused the iconic peacock motif from the 2003 "Five-Peacock" series. This decision highlights the brand's dedication to honoring its classic designs while reinterpreting traditional elements in a modern minimalist aesthetic. The 2003 peacock design remains one of the most recognizable symbols of the brand, carrying strong emotional resonance. In the context of a premium and collectible market, reviving this classic motif reinforced the brand's cultural depth and strengthened consumer loyalty. The original intricate composition of five peacocks was

simplified to focus on a single peacock. This streamlined approach created a more concentrated visual effect, balancing tradition and modern aesthetics. The simplified color palette and layout catered to contemporary consumer tastes, combining cultural heritage with a clean, modern artistic touch.

Initial Phase (2004–2008), the peacock functioned as the central visual component, with figurative and totemic designs accentuating cultural symbolism. Subsequent Phase (2009–2014), the peacock evolved into a decorative or abstract motif, signifying the brand's pursuit of opulent and contemporary aesthetics. Final Phase (2015–2023), the design revisited traditional motifs, integrating minimalist styles with selective innovations to revitalize the peacock imagery.

The repetition of the iconic peacock motif from the 2003 "Five-Peacock" series in 2022 incited inquiries regarding innovation in branding. Evaluating this design decision from the lenses of continuity and originality revealed rationality alongside potential creative stagnation. The 2003 peacock design inaugurated the Peacock Series and possesses substantial emotional resonance. Reutilizing this archetypical design invokes people's nostalgia, thereby strengthening brand loyalty. It also corresponds with the intensifying market enthusiasm for "classic reissues," thus attracting attention and enhancing product value.

Serving as a symbol of Xishuangbanna culture, the peacock solidifies the brand's cultural identity. By fusing classic motifs with minimalist designs, the brand adeptly connects heritage with contemporary aesthetic inclinations. The designs from 2016 and 2022 were largely reliant on minor modifications to the 2003 motif, lacking significant reinterpretation, which indicates a void of innovative visual language. The recurrent employment of the 2003 design highlights a cautious market strategy. While it remains commercially viable, this approach risks stagnation within a competitive market, where innovation is pivotal for maintaining relevance.

In this case, the packaging of Dayi Peacock series has evolved from "concrete peacock totem" to "abstract minimalist reconstruction" and finally returned to "classic symbol redesign", with the symbol density and visual focus of peacock imagery

shifting to reflect the iteration of Pu'er tea brand's cultural output strategy. However, the return of the classics also means a bottleneck in design innovation, a lack of new visual language and breakthroughs, and an overly conservative design strategy. This is also consistent with what was found in data research, that traditional national culture is difficult to be well integrated into packaging design.



CHAPTER 5

CONCLUSIONS DISCUSSIONS AND SUGGESTIONS

With the continuous deepening of global tea culture dissemination, the packaging design of Pu'er tea is gradually shifting from a single functionality to a more culturally expressive visual communication method. This study systematically explores the inheritance and innovation paths of cultural symbols in the packaging design of Pu'er tea through the extraction and analysis of cultural elements from the ethnic minorities in Xishuangbanna, combined with the phased evolution of the Dayi "Peacock" series packaging.

This chapter aims to summarize the main research findings, reflect on the performance and limitations of current the packaging design of Pu'er tea in the process of cultural dissemination, and propose future development directions and suggestions for packaging design from multiple perspectives, including cultural cognition, design language, and regional characteristics. At the same time, by combining the rich regional cultural background and ethnic symbol resources of Xishuangbanna, this study attempts to provide an outlook on the research trends and development space of the packaging design of Pu'er tea from the perspectives of cross-cultural communication and cultural sustainability.

This chapter not only summarizes the research content but also hopes to provide theoretical support for the cultural innovation of Pu'er tea packaging through discussions on future design strategies, and to propose new ideas and inspirations for the modern expression and contemporary value expansion of ethnic culture.

5.1 A Brief Summary of the Study

This study first focuses on the close relationship between tea culture and packaging design. As an important part of traditional Chinese culture, Chinese tea culture has developed over thousands of years, accumulating profound philosophical connotations, humanistic feelings, and aesthetic spirit. Its connotation is reflected not only in the ways of drinking tea, etiquette systems, and philosophical principles but also

more broadly permeates artistic expressions such as tea utensils, calligraphy, and poetry. The research finds that tea culture is not limited to the ways of consuming tea or daily habits; it is a comprehensive cultural system that carries historical memories and embodies social etiquette and aesthetic spirit. In this system, packaging design not only fulfills the basic functions of product protection and information transmission but also gradually evolves into an important carrier for the dissemination of tea culture as a visual language and cultural medium. Tea packaging not only carries the functionality information of the product but also undertakes multiple functions such as cultural symbolism, aesthetic presentation, and emotional transmission. The relationship between Chinese tea culture and packaging design forms a complementary connotation and an image that shapes each other, where tea culture endows packaging with cultural depth and narrative foundation, while packaging design helps tea culture achieve broader sensory communication and modern transformation.

Through the field collection and analysis of hundreds of Pu'er tea packaging samples, the study further finds that under the grand atmosphere of tea culture, the expression of regional and ethnic characteristics cannot be ignored. This paper explores the application of cultural elements in the packaging design of Pu'er tea in depth, especially how to effectively combine traditional culture with modern design language under the influence of the culture of ethnic minorities in Xishuangbanna. Based on the systematic analysis of design elements such as fonts, patterns, and colors in Pu'er tea packaging, the study reveals the action of these cultural symbols in conveying ethnic culture and the history of Pu'er tea in packaging, and proposes the advantages and disadvantages in design. the packaging design of Pu'er tea plays an important role in conveying local cultural characteristics, especially the integration of cultural elements from ethnic minorities in Xishuangbanna, which endows the packaging with profound cultural connotation. From the use of traditional calligraphy in font styles to the application of ethnic symbols in pattern design, and to the choice of traditional auspicious colors in color selection, these elements not only highlight the historical heritage of Pu'er tea but also meet the market's demand for cultural uniqueness and artistic value. Although the design reflects the connotation of traditional culture, the lack of modern design innovation, especially in font innovation and color matching that does not align well with ethnic culture, remains a challenge faced by current the packaging design of Pu'er tea. Although traditional elements dominate the packaging, how to integrate modern design language while maintaining cultural heritage and enhancing innovation is still the key direction for future design. How to continue cultural heritage through innovative visual design is an important topic in the packaging design of Pu'er tea.

Therefore, the future studies for the packaging design of Pu'er tea should further explore the balance between tradition and modernity, integrating the in-depth excavation of ethnic culture with innovative design language. At the same time, designers should pay more attention to the diverse expression of cultural symbols, not just staying on the surface of traditional symbols, but digging into the cultural stories and spiritual connotations behind them.

5.2 Discussion

In the field of the packaging design of Pu'er tea, the combination of cultural inheritance and modern design, as well as the balance between design innovation and traditional ethnic culture, are always two core challenges. This study conducts a systematic analysis of the packaging design of Pu'er tea, identifying some existing problems and limitations, which are reflected not only in design practice but also in the limitations of research methods and scope.

5.2.1 Comparison with the Existing Literature

This study delves into the ethnic cultural symbols in the packaging design of Pu'er tea, particularly the influence of the culture of the ethnic minorities in Xishuangbanna on packaging design. This not only provides theoretical support for the study of cultural symbols in the packaging design of Pu'er tea but also offers innovative perspectives on how to effectively integrate local cultural elements of ethnic minorities into modern packaging design.

In chapter 2, the theory of cultural ecology emphasizes the interaction between culture and environment, pointing out that cultural characteristics need to adapt and innovate according to environmental changes. This theory provides strong theoretical support for the discussion in this Chapter regarding the inheritance and innovation of cultural symbols in the packaging design of Pu'er tea. Research shows that the application of ethnic cultural symbols in the packaging design of Pu'er tea is still insufficient, with a simplification of traditional symbols, failing to effectively conduct indepth cultural excavation and innovative transformation. This phenomenon aligns with the views in cultural ecology theory, indicating that culture needs to continuously innovate and adapt in the context of modernization.

The study of the local culture in Xishuangbanna in chapter 2 analyzes the region's rich ethnic cultural characteristics, particularly the tea culture of ethnic minorities, and explores the application of these cultural elements in the packaging design of Pu'er tea. However, this study finds that the ethnic cultural elements of Xishuangbanna in the packaging design of Pu'er tea mostly remain superficial, lacking in-depth cultural exploration and innovative transformation. This is consistent with the views of scholars like Xu Mingsheng, who emphasize the inheritance and innovation of tea culture, especially in how traditional tea culture can be integrated into modern design. The findings of this study also align with scholars' discussions on the application of traditional cultural symbols (such as peacock patterns), resonating with calls for the protection and innovation of tea culture.

However, the research also reveals shortcomings in the deep expression and innovation of ethnic cultural symbols in the packaging design of Pu'er tea, which deviates from the views of some scholars. Shen Zuomin mentioned the spiritual aspect and deep expression of tea culture, while this study finds that the packaging design fails to effectively delve into and recreate the ethnic cultural background, which presents a certain deviation from the cultural depth expression advocated by scholars.

The innovation of this study lies in the recreation of cultural symbols in the packaging design of Pu'er tea. Traditional patterns and symbols are no longer used merely as decorative elements; instead, there is a need to further explore the cultural connotations behind them, especially the innovative expression of minority symbols. This innovation not only enhances the cultural depth of the packaging design but also provides new ideas for future design innovation. The research emphasizes that design should not only focus on visual effects but also integrate cultural stories and historical backgrounds. This fusion of design language provides a more narrative direction for the future packaging of Pu'er tea.

The innovative and recreative methods of cultural symbols proposed in this study are applicable not only to Pu'er tea but can also be extended to the packaging design of other types of tea. For example, teas like Fujian Tieguanyin, which have unique cultural backgrounds, currently face bottlenecks such as the separation of packaging effects from the tea itself and a lack of uniqueness in outer packaging. This directly leads to the lagging and severe homogenization of Anxi Tieguanyin's packaging design (Kang & Chen, 2021). As Chen Fengzhe mentioned, if the three characters 'Tieguanyin' are removed, it is difficult for anyone to recognize it as tea (Chen, 2021). This not only fails to reflect the attributes of the tea but also does not showcase the brand's characteristics, let alone convey tea culture, resulting in a failed packaging design. Similar types of tea can also draw on the design methods mentioned in this study, especially in enhancing the expression and depth of regional culture in packaging design, thereby improving the innovativeness and appeal of cultural symbols. However, when applying these methods to other types of tea, it is necessary to consider their respective regional cultural differences. For instance, the cultural symbols and aesthetic tendencies of Tieguanyin may differ from those of Pu'er tea, thus requiring appropriate adjustments based on the cultural background of each type of tea. The packaging design of each tea should be integrated with its cultural background, avoiding the simple replication of Pu'er tea's design strategies.

This chapter aligns closely with the cultural ecology theory in chapter 2 and the academic viewpoints on the inheritance and innovation of tea culture, particularly in the application and innovation of cultural symbols. The innovation of this research lies in the recreation of cultural symbols and the in-depth narrative of design, providing a new direction for the future packaging design of Pu'er tea. The strategies for Pu'er tea have a certain universality, especially for other types of tea with strong local cultural characteristics, but should be moderately adjusted according to the unique cultural background of each type of tea.

5.2.2 Comparison with Other Types of Tea

In the cultural symbol transmission of the packaging design of Pu'er tea, it can be analyzed not only from the perspective of the culture of the ethnic minorities in Xishuangbanna but also by comparing how the packaging designs of other tea types reflect their unique cultural connotations. For example, Zhejiang Longjing tea, its packaging design is also greatly influenced by the local culture.

In contrast, the packaging of Longjing tea reflects more of the elegance and beauty of the Jiangnan water town, using images of tea farmers picking tea against the backdrop of the surrounding mountains of West Lake. The joyful expressions of the tea farmers and their busy figures in the lush green tea gardens create an immersive feeling, bringing a wonderful experience and imagination (Li, 2018). Common elements in the design, such as willows, ponds, and landscape paintings, reflect the integration of the cultural environment and natural scenery of Jiangnan. These elements not only beautify the tea packaging but also strengthen the identification with the traditional culture of the region. Secondly, tea has a strong sense of ethnicity and tradition; as such a commodity, it is inseparably linked to Chinese tea culture and Chinese characters. The calligraphy on Pu'er tea is based on the shape of Chinese characters as the basic prototype, usually written with a brush, producing beautiful lines and strong strokes that reflect the unique artistic style of Chinese characters. Based on the characteristics of the tea itself and the local customs of the tea-producing area, the qualities of the characters

are found, and the art of calligraphy is directly applied to the packaging of West Lake Longjing tea, making the packaging more meaningful.

Compared to Pu'er tea, the packaging design of these tea types focuses more on the abstraction and universality of symbols, with their cultural elements often integrated into the representation of natural landscapes, and they can involve more specific ethnic cultural symbols. The differences in packaging design between West Lake Longjing and Pu'er tea essentially reflect the "unified" characteristic of Han culture formed during historical evolution, which endows its symbolic system with a stronger cultural universality. Taking West Lake Longjing as an example, its packaging design constructs a cultural consensus that transcends regional and ethnic boundaries through the integration of abstract natural landscapes (such as the Jiangnan scenery and teapicking scenes) and Chinese calligraphy (such as running script and seal carving). This universality is rooted in the underlying logic of Han culture. In contrast, the Pu'er teaproducing region relies on the cultural ecology of multi-ethnic coexistence in Yunnan, and its packaging design extensively employs concrete symbols such as the peacock pattern from Xishuangbanna and the Hani terraced rice field totems. These symbols, due to the locality and heterogeneity of ethnic cultures, must directly point to the specific history, beliefs, and production practices of particular ethnic groups through concrete visual elements (such as Dai brocade patterns and tea ancestor statues) to fulfill the function of cultural tracing. Therefore, the expression of ethnic cultural symbols in Pu'er tea must be more detailed and specific to respond to the cultural demand for the imagination of "borderland mysteries" and "multicultural coexistence." The integrative and universal nature of Han culture leads to a tendency for the packaging symbols of West Lake Longjing to express an abstract "nature-culture" artistic conception. In contrast, the ethnic cultural symbols of Pu'er tea, due to the locality of Yunnan's multiethnic groups, need to achieve precise anchoring of cultural identity through specific totems and patterns. The differences between the two essentially reflect the tension of "universal-special" cultural narratives.

By comparing with the packaging designs of other tea types, it can be seen that Pu'er tea packaging has unique advantages in the innovation and deep transmission of cultural symbols, but it also reflects the core contradiction of minority cultures in modern design—how to maintain the authenticity of symbols while achieving creative transformation in a globalized context.

5.2.3 The Conflict Between Cultural Heritage and Modern Design

In recent years, China has promoted the "Chinese Excellent Traditional Culture Inheritance and Development Project" and related local cultural protection policies, explicitly encouraging designers to incorporate traditional cultural elements into modern design to enhance cultural soft power. The application of cultural elements in the design of Pu'er tea packaging is a process of mutual balance. On one hand, designers need to draw inspiration from local culture to create designs with cultural recognition. On the other hand, modern design trends and market demands require designers to simplify and innovate cultural symbols, resulting in an expression of cultural elements in design that is often insufficient or superficial.

The National Cultural and Technology Integration Demonstration Base Construction Guidelines clearly state the need to promote the digital and innovative transformation of traditional cultural resources, providing policy support and funding guarantees for the recreation of font culture. In terms of the use of fonts and colors, there are clear limitations in the cultural transmission within Pu'er tea packaging design. Data shows that the use of calligraphy styles in Pu'er tea packaging accounts for as high as 83.7%, but many designs stay at the level of direct reference to traditional calligraphy, lacking a deep integration of font style and cultural imagery. For instance, although the unique scripts of ethnic minorities in Xishuangbanna, such as Dai and Lahu scripts, carry deep cultural symbolism, they are rarely applied in packaging design, indicating significant room for improvement in exploring and innovating font cultural elements. Although non-calligraphic fonts account for 16.3%, their innovativeness is weak, lacking visual recreation of ethnic cultural symbols. Similar to some international research findings, certain studies indicate that the lack of creativity in fonts in modern design

limits the depth of traditional cultural expression, but compared to other studies, this phenomenon is particularly prominent in Pu'er tea packaging.



Figure 34 Dai Ethnic Script

Source: Photography by Anqi Xie, Xishuangbanna, Yunnan

In the application of color, while traditional auspicious colors (such as red and gold) are widely used in design, their cultural symbolic significance has gradually been weakened in modern design. Designers often focus on the visual aesthetics of color combinations, neglecting the important role that color plays in conveying cultural messages. For example, the combination of green and yellow in the Kinuo ethnic group culture symbolizes nature and vitality. At the same time, local governments have encouraged designers to enhance the visibility and influence of regional ethnic cultural symbols in commercial products through the implementation of the *Yunnan Ethnic Culture Protection Regulations*. However, in packaging design, these cultural symbols are often simplified into ecological themes, failing to deeply reflect their

ethnic cultural background. In comparison with other research, it can be seen that tea culture packaging design in other regions places greater emphasis on the deeper cultural meanings of traditional colors, while the packaging design of Pu'er tea is relatively simple and lacks in-depth exploration of the cultural significance behind the colors.

In terms of pattern design, the cultural symbols in Pu'er tea packaging are often more decorative than cultural. According to data analysis, the proportion of traditional auspicious patterns and ethnic characteristic patterns is 19.1% and 6.1%, respectively, while the proportion of designs without specific patterns (such as calligraphy or simple geometric designs) is as high as 25.9%. This indicates that while packaging design seeks simplicity and modernization, it may weaken the depth of cultural symbols. Even in designs with regional cultural characteristics, the use of patterns tends to be limited to a decorative level, lacking a deep presentation of the cultural stories and historical meanings behind them. The Chinese Traditional Crafts Revitalization Plan points out the need to explore the cultural stories behind traditional crafts and emphasize their narrative function in product design to enhance cultural identity and market appeal. For example, although the peacock pattern of the Dai ethnic group is widely used, which highlights local cultural symbols, the design focuses more on the decorative beauty of the peacock, rather than the cultural background of the peacock as a symbol of local religion and folklore beliefs. This phenomenon differs from the packaging design of tea culture in other regions, where cultural symbols are more effectively used to convey the historical and cultural depth, while Pu'er tea packaging design places greater emphasis on visual effects and immediate market appeal.

The trend in modern Pu'er tea packaging design is more inclined towards a minimalist style and geometric composition. Although this design language enhances visual appeal, it also weakens the expression of traditional cultural elements. Modern design's minimalism emphasizes simplicity and efficiency in visuals, while traditional cultural elements often carry complex symbols and multi-layered meanings. How to incorporate these complex cultural messages within the framework of simplicity

has become a major challenge for designers. This contradiction is also reflected in other research, where many designers feel confused in the process of blending modern design with traditional culture. International research on the integration of traditional culture and modern design mainly focuses on the simplification and symbolization of symbols, but the innovation of Pu'er tea packaging design has been limited by the tension between the complexity of traditional culture and the simplicity of modern design. In recent years, the Ministry of Culture and Tourism has introduced several policies to support the integration of traditional culture into the creative industry, including the establishment of special funds for the fusion of culture and design, providing more space for innovation. Therefore, how to reflect the depth and connotation of traditional culture in modern packaging design will be an important challenge for the future of Pu'er tea packaging design.

This study shares many similarities with other research on tea packaging design, as well as some differences. In the application of cultural symbols in Pu'er tea packaging design, this study, like other related literature, highlights the limitations of traditional cultural symbols (such as auspicious patterns and ethnic characteristic patterns) in modern packaging design. However, compared to other research, this study finds that Pu'er tea packaging design has a more serious tendency to simplify cultural symbols. This finding suggests that cultural transmission in Pu'er tea packaging design still faces challenges in balancing tradition and modernity, regionalism and globalism. Although other studies also point out the influence of modern design language in cultural symbol transmission, this study provides a deeper analysis of the inadequacies of fonts and colors in conveying cultural symbols, offering more specific examples of the lack of innovation in ethnic cultural symbols in design. This finding provides a new research perspective for the re-creation of cultural symbols in future Pu'er tea packaging design.

5.2.4 Limitation of the Research

In this study, despite the systematic exploration of Pu'er tea packaging design through data analysis and case studies, there are still some limitations that cannot be ignored.

Limitation of data coverage

The 313 samples in this study are mainly from Xishuangbanna brands, which do not adequately cover the cities of Lincang and Pu'er as well as small and medium-sized tea enterprises, and the high end brands account for a high proportion of the sample, lacking analysis of the middle and low-end markets. In addition, because the data is concentrated after 2000, it fails to present a comprehensive picture of the evolution of Pu'er tea packaging design in the 20th century.

Subjectivity in methodology

When analysing the visual representation of Xishuangbanna cultural symbols, some of the conclusions may be subjective to the researcher's tendency, failing to take into full consideration the actual intention of designers or the diversified interpretations of consumers. For the deeper connotation interpretation of cultural symbols, some analyses lack the support of field interviews, which may affect the comprehensiveness of the research results.

Limitations of the International Perspectives

The research framework focuses on local culture and traditional design, lacking an international perspective. It provides limited research on international market packaging design and does not explore the path of design globalization in depth.

5.2.5 Improvement Direction for Research Methodology

In response to the limitation of data coverage, it is necessary to expand the sample scope to include production areas such as Lincang and Pu'er City, and incorporate packaging samples from small and medium-sized tea enterprises to balance different market levels. Additionally, the research period should be extended to

collect data on Pu'er tea packaging from the 20th century and analyse design evolution in combination with historical documents.

To address the subjectivity of the research methodology, interdisciplinary validation should be adopted by involving ethnographic scholars in the interpretation of cultural symbols, thereby enhancing the objectivity of the analysis.

To address the limitations of international perspectives, it is essential to incorporate international case studies, such as analysing tea packaging design in Japan and the UK to identify transferable visual expression strategies. Furthermore, introducing theoretical tools such as cultural dimension theory (e.g., the Hofstede model) or semiotic analysis frameworks can help systematically evaluate the cross-cultural communication potential of packaging design.

5.3 Design Strategies and Recommendation

In the development of Pu'er tea packaging design, cultural excavation and visual innovation have always been the core driving force for design progress. Based on the analyses and summaries of the current Pu'er tea packaging design, this study puts forward the following future design directions and suggestions, taking into account the cultural characteristics of Xishuangbanna and international trends.

5.3.1 Deep Exploration and Expression in Cultural Elements

As an important medium for cultural dissemination, the packaging design of Pu'er tea plays a crucial role in conveying local culture and traditional art to consumers. In order to enhance the cultural depth and appeal of the packaging design, designers need to delve deeper into the cultural symbols of Xishuangbanna and creatively transform these symbols into visual elements through innovative design techniques. Firstly, designers can draw inspiration from the traditional costumes, festive rituals, and religious beliefs of the ethnic minorities in Xishuangbanna. For example, the Water Splashing Festival pattern of the Dai ethnic group can symbolize freshness and vitality, while the terraced rice fields culture of the Hani ethnic group conveys the idea of harmonious coexistence between humans and nature. The historical background and local legends of Xishuangbanna, such as the story of the Peacock Princess and the

legend of the ancient tea tree, also serve as important sources of material for packaging design. These elements not only enhance the storytelling aspect of the packaging but also allow consumers to better perceive the cultural value and historical significance behind Pu'er tea. According to the 14th Five-Year Plan for Cultural and Tourism Development, local ethnic culture should be at the core of promoting the integration of cultural creative products and industries. It encourages innovative design to creatively transform and develop traditional cultural resources, providing policy support and creative momentum for Pu'er tea packaging design.



Figure 35 Hani Ethnic Group Traditional Clothing

Source: Photography by Anqi Xie, Xishuangbanna, Yunnan

On the other hand, visual innovation of cultural symbols is key to enhancing the artistic quality of packaging design. By employing geometric and

abstract methods to modernize traditional patterns, designers can retain the uniqueness of cultural symbols while meeting contemporary aesthetic needs and enhancing visual appeal. Incorporating dynamic symbol designs, such as dynamic QR codes, allows the packaging design to be deeply integrated with cultural content through digital media, further enhancing the interactivity and dissemination of the packaging. Additionally, strengthening cultural narratives with local characteristics is an effective way to enhance the cultural value of packaging design. Through narrative design, designers can incorporate interpretations of the tea's origins, local culture, and stories of tea farmers. Illustrations or photography can directly present the natural landscapes and tea production scenes of Xishuangbanna, fostering an emotional connection between consumers and tea culture and creating a more immersive cultural experience. According to the *Cultural Industry Development Special Action Plan for Yunnan Province (2021-2025)*, local historical and cultural resources should be fully utilized to transform cultural heritage into marketable and digital cultural products, thus enhancing the recognition of regional cultural brands.

5.3.2 Innovative Strategies for the Packaging Design of Pu'er Tea

This study shows that the implementation path for the packaging design strategy of Pu'er tea from the ethnic minorities in Xishuangbanna is: the essence of Chinese tea culture + cultural symbols of Xishuangbanna + regional culture.

Firstly, the essence of Chinese tea culture is reflected in its profound cultural heritage and philosophical thoughts, with the core being the tea spirit of 'harmony, tranquility, enjoyment, and truth'. This spirit embodies the harmonious coexistence of tea culture with nature and the environment, and emphasizes achieving physical and mental tranquility and inner joy through tea tasting. Tea is not just a beverage; it is also an attitude towards life and a carrier of culture. Chinese tea culture advocates the 'tea way', which is to experience the beauty of nature and comprehend the philosophy of life through the process of tea tasting, with the flavor of tea seen as a symbol of spirit and culture.

Secondly, the packaging design of Pu'er tea needs to innovate in visual language, materials, and craftsmanship to achieve a balanced development and inheritance of traditional culture and the culture of the ethnic minorities in Xishuangbanna. Innovation in visual language is key to enhancing the packaging design of Pu'er tea. The design should break through the limitations of a single traditional or mixed style and explore more modern and innovative design styles. For example, minimalist, futuristic, or postmodern styles can be combined with traditional cultural symbols.

Thirdly, dynamic packaging design is an effective way to enhance visual appeal. Through the use of 3D printing or dynamic colors, packaging presents diverse effects under different lighting. This design technique vividly reflects the ecological sense of tea and the philosophical depth of tea culture.

Fourthly, symbol overlay and multi-layered design can increase the visual details of packaging, integrating multiple cultural symbols together, such as incorporating ethnic patterns into the main background and traditional cultural connotations into secondary elements, enhancing the layering and cultural depth of the packaging. In terms of material and craftsmanship innovation, the packaging design of Pu'er tea should focus on sustainable development, using eco-friendly packaging materials such as biodegradable paper, plant-based plastics, or bamboo fiber materials to meet modern consumers' demands for environmental protection and sustainability. At the same time, by combining the traditional handicraft techniques of the ethnic minorities in Xishuangbanna, such as Dai brocade patterns, with modern manufacturing processes, local characteristics can be integrated into the materials and decorations of the packaging, preserving cultural heritage while enhancing the uniqueness of the product. The bamboo weaving craft of the Jino ethnic group can be referenced to design packaging forms with local characteristics.

The introduction of smart packaging is also an important direction, as it combines NFC tags or QR codes to provide access to the cultural stories of the ethnic

minorities in Xishuangbanna and the spirit of traditional Chinese tea, achieving multidimensional cultural dissemination.

Innovation in the packaging design of Pu'er tea also requires exploration in series design. First, brands should emphasize the systematic and coherent nature of the design, forming a complete series design. For example, special editions of different mountain teas can be launched each year based on the "mountain culture" of Pu'er tea, continuing the regional cultural characteristics. Another example is that the packaging of Nan Nuo Mountain ancient tree tea can showcase the sea of flowers in spring as experienced by the Hani people, combining the season of "spring warmth and blooming flowers" with local cultural elements, conveying the natural and pure quality of the tea leaves from this ecologically preserved tea garden. Design elements can include floral patterns with local characteristics and colors that symbolize good fortune, such as a yellow-green main tone, representing the freshness and richness of the tea soup. The packaging design of He Kai ancient tea mountain can highlight modern people's pursuit of "harmony between man and nature," using lines of forests and mountains to express its rich vegetation and ecological environment. The packaging can incorporate tree patterns that represent the local ecology, such as the water winter melon tree and the red-haired tree, along with a green-dominated color scheme, symbolizing the natural charm of this pollution-free tea garden. The packaging of Pasha ancient tree tea can draw inspiration from the historical heritage of the Hani people, using high mountain clouds and terraced fields as design themes to showcase the tea's sweetness and elegance. Simple geometric lines and colors can be used on the packaging to convey the elegant temperament of the tea, while incorporating local cultural symbols of tea, such as terraced fields and cloud patterns, highlighting the unique climatic conditions and environment of the area. The packaging design of Bulang ancient tree tea can deeply explore the long-standing tea culture of the Bulang ethnic group, showcasing the close relationship between the Bulang people and tea trees. Rich earthy colors and deep greens can be used to symbolize the strong flavor of the tea and the resilient vitality of the tea trees, while incorporating traditional symbols of the Bulang ethnic group, such as family totems and ancient tea garden scenes, conveying the profound cultural roots of Pu'er tea. The packaging design of Meng Song ancient tree tea can resonate with the fresh air of the mountains and its high-altitude environment, using a fresh blue-green tone combined with simple lines and soft patterns to convey the delicacy and elegance of the tea. The packaging design of Bada Mountain Ancient Tree Tea can showcase the intertwined cultural backgrounds of the Blang and Hani ethnic groups. The packaging integrates traditional patterns from the Blang ethnic group's clothing or silhouettes of village architecture, combined with the natural growth forms of the tea trees, highlighting the purity and naturalness of its wild tea trees. Through this series of designs based on mountain culture, each packaging of Pu'er tea can be rooted in unique regional culture, not only showcasing the characteristics of the tea itself but also effectively conveying the history and ethnic customs of the tea-producing area.



Figure 36 Renderings of Pu'er Tea Packaging Box

Source: Designed by Anqi Xie



Figure 37 Rendering of Xishuangbanna Ethnic Minority Pu'er Tea Cake Packaging

Source: Designed by Anqi Xie



Figure 38 Rendering of Pu'er Tea Packaging Bag

Source: Designed by Anqi Xie

5.3.3 Conclusion

This study systematically examines the current application status of cultural elements in Pu'er tea packaging design, especially the expression and influence of ethnic minority cultural symbols in Xishuangbanna, and has made important breakthroughs in both theoretical and practical levels. At the theoretical level, research innovatively integrates cultural ecology and design innovation theory, constructs a "cultural symbol layered transformation model", breaks through the single paradigm of innovation in artistic research, and provides a systematic strategy for the modern design application of traditional cultural elements. This theoretical innovation is not only applicable to the field of tea packaging design, but also has important inspirational significance for exploring the modern expression of regional culture.

At the practical level, the research reveals the current situation of "traditional symbols dominate but insufficient innovation" in Pu'er tea packaging design, proposes a balance strategy of "regional cultural symbols + tea ceremony spirit", and advocates the establishment of a "national symbol database" to promote the organic integration of intangible cultural heritage protection and commercial design. Pu'er tea packaging design innovation can also achieve multi-dimensional dissemination of cultural connotations by using ethnic elements such as Dai brocade patterns and Jino bamboo weaving technology and combining NFC intelligent labeling technology. Research has found that by transforming the national cultural spirit into design narratives, Pu'er tea packaging can transcend the functions of the commodity and become an important carrier for the living inheritance of national culture. All research conclusions are based on mixed research methods and ensure the objectivity and reliability of the research results through strict coding verification.

These findings and suggestions not only provide practical guidance for improving the cultural recognition of Pu'er tea packaging, but also provide valuable reference paradigms for the design innovation of other intangible cultural heritage derivatives, which has important theoretical and practical significance for promoting the

creative transformation and innovative development of traditional culture in the modern design context and internationalization.



REFERENCES

- Cai, W., & Wang, A. X. (2016). Innovative design and application of packaging materials for Pu'er tea. *Tomorrow'S Fashion*(19), 42.
- Chen, F. (2021). Tea culture perspective on Anxi Tieguanyin packaging design. . *Thinking* & *Exploration*(12), 187–188.
- Chen, H. (2017). Production technology and development prospect of Yunnan Pu'er tea packaging hand-made cotton paper. *Commodity and Quality*(35), 236-237. https://doi.org/10.3969/j.issn.1006-656X.2017.35.222
- Chen, H. (2023). The inheritance and innovation of tea culture in rural revitalization.

 Guangdong Tea Industry(5), 27-31. https://doi.org/10.3969/j.issn.1672-7398.2023.05.006
- Chen, M. (2012). Theories and methods in cultural ecology. *Journal of Yunnan Normal University (Philosophy and Social Sciences Edition)*, *44*(5), 58–64.
- Chen, X. B. (1994). On the principles and core of Chinese tea ceremony. *Chinese Culture Research*(3), 81-86, 84. https://doi.org/10.15990/j.cnki.cn11-3306/g2.1994.03.017
- Chen, Y. Y. (1987). Research on the history of Pu'er tea. *Tea Industry Bulletin*(01), 20-25. https://doi.org/10.16015/j.cnki.jteabusiness.1987.01.007
- Cronk, L. (1995). Is there a role for culture in human behavioral ecology? *Ethology and Sociobiology*, *16*(3), 181–205. https://doi.org/10.1016/0162-3095(95)00001-2
- Dai, Y. Y. (2007). Research on design methods to enhance the added value of daily ceramic products Wuhan University of Technology]. Wuhan.
- Deng, X. (2003). On cultural ecology and its study significance. *Journal of Central China Normal University (Humanities and Social Sciences)*, 42(1), 93–97.
- Deng, Y. H., & Ge, H. J. (2016). Deified tea, ritualized tea and commercialized tea: Change of the function of tea culture among ethnic minorities in Yunnan province. *Journal of Guangxi University for Nationalities (Philosophy and Social Science Edition)*, 38(5), 10-16.
- Hall, E. T. (1976). Beyond culture. Anchor Books.

- Hu, J. M. (2008). My opinion on the definition of Pu'er tea. *Guangdong Tea Industry*(2), 36-37. https://doi.org/10.3969/j.issn.1672-7398.2008.02.011
- Jin, S. P. (1966). *Exploration of Yunnan national history and culture*. Yunnan Nationalities Publishing House.
- Jin, Y. (1999). How to increase product added value. *Price and Market*(3), 45-46.
- Kang, J., & Chen, Z. (2021). Packaging design of Anxi Tieguanyin from the perspective of tea culture. *Furniture*, 42(1), 85-89. https://doi.org/10.16610/j.cnki.jiaju.2021.01.019
- Li, J. (2018). Research on material selection and decorative design of West Lake

 Longjing tea packaging [Master's thesis, Soochow University]. Suzhou China.
- Li, J. X. (2020). Research on strategies for enhancing product value added by small town enterprises with characteristics: A case study of Datang sock art town in Zhuji, Zhejiang province. *Scientific Consult*(16), 41.
- Li, L. L. (2009). A Preliminary Exploration of Chinese Buddhist Tea Culture. The history, Reality and future of Zen tea--the second Zen Tea Culture Forum, Hangzhou.
- Li, Y., & Zhou, M. (2023). Packaging design of Pu'er tea and the integration of out-of-print woodcut elements. *Tea in Fujian*, *45*(10), 65-67. https://doi.org/10.3969/j.issn.1005-2291.2023.10.023
- Liao, F. Z., & Li, C. Y. (2023). Research on the historical and cultural inheritance and innovative development of Wuzhou Liupao tea. *Journal of Tea*, 49(3), 179-182. https://doi.org/10.3969/j.issn.0577-8921.2023.03.013
- Ling, Z. (2016). Memory and skills: the inheritance of traditional arts and crafts--a case study of Dai embroidery craft in Zhongmeng Village, Mengla Township, Jinping County. *Art & Life*(2), 34-37.
- Liu, D. C. (2008). Cultural diversity vs. The flourishing minority cultures of Yunnan province. *Journal of Dali University*, 7(1), 7-10, 14. https://doi.org/10.3969/j.issn.1672-2345.2008.01.004
- Liu, H. (2015). The practical research of traditional tea culture etiquette in middle school. Charm China(16), 149-150. https://doi.org/10.3969/j.issn.1673-0992.2015.16.156
- Liu, H. B. (2011). National design to enhance the added value of products: A case study of

- the development of "Wind and Rain Bridge" and "Drum Tower" Nixing pottery teapot in Guangxi. *China Newspaper Industry*(2), 56-57. https://doi.org/10.13854/j.cnki.cni.2011.02.007
- Lu, C. Y. (2013). Discussion on upgrading development path of Chinese tea industry. *China Tea*(11), 4-6. https://doi.org/10.3969/j.issn.1000-3150.2013.11.001
- Ma, L. N., & Li, B. B. (2008). Consumer satisfaction and added value of product design.

 Industrial & Science Tribune, 7(12), 151-153. https://doi.org/10.3969/j.issn.1673-5641.2008.12.066
- Netting, R. M. (1965). A trial model of cultural ecology. *Anthropological Quarterly*, 38(2), 81–96.
- Shen, Z. M. (2007). China's Tea Cultural Development and Its Role in Harmonious Society

 Construction. *Journal of Chizhou University*, 21(2), 18-21.

 https://doi.org/10.3969/j.issn.1674-1102.2007.02.007
- Stacey, T. (2018). Why can premium tea increase product added value. *Tea World*(8), 39-40.
- Steward, J. H. (1995). *Theory of culture change: The methodology of multilinear evolution*.

 University of Illinois Press.
- Sun, Y. X. (2021). Inheritance and innovation of Chinese traditional tea culture space. *Tea in Fujian*, *43*(8), 76-77. https://doi.org/10.3969/j.issn.1005-2291.2021.08.037
- Tan, H. N. (2017). The inheritance of tea culture and traditional arts and crafts. *Tea in Fujian*, 39(6), 93-94. https://doi.org/10.3969/j.issn.1005-2291.2017.06.063
- Tian, Z. Q. (2021). Handdrawn long scroll condensed Yunnan's "Kingdom of Animals and Plants". *Forest & Humankind*(12), 8-13.
- Wang, J. Q., Hu, Z. Y., & Yuan, W. (2022). Reflection on Anshun tea culture intangible cultural heritage status quo, inheritance and innovation. *Comparative Study of Cultural Innovation*, 6(10), 76-79. https://doi.org/10.3969/j.issn.2096-4110.2022.10.019
- Wang, L. (2009). Chinese Tea Culture: Color map updated edition. Jiuzhou Press.
- Wang, L. (2016). The forms and structural characteristics of the Yunnan ethnic music

- visualized by music and dance images. *Ethnic Art Studies*, 29(2), 191-201. https://doi.org/10.21004/issn.1003-840x.2016.02.191
- Wang, Y. N., & Wang, A. M. (2004). Ways to increase the added value of products.

 Finance and Accounting Monthly(4), 56. https://doi.org/10.3969/j.issn.1004-0994-C.2004.04.038
- Wu, J. N. (2005). Tea Classic Review: Tea review. China Agriculture Press.
- Xu, M. S. (2007). On the Inheritance and Innovation of Tea Culture. Pan-pearl River Delta (9+2) Tea culture Tea Industry Summit Forum, Guangzhou.
- Xu, Y. C. (1999). On the definition, connotation and function of tea culture. *The Beverage Industry*(2), 44-46.
- Xue, Z. Y. (2002). Tea drinking habits of some ethnic minorities in China. *Guangdong Tea*(5), 34. https://doi.org/10.3969/j.issn.1672-7398.2002.05.022
- Yan, L. (2001). Light tea culture phenomenon. *Agricultural Archaeology*(2), 37. https://doi.org/10.3969/j.issn.1006-2335.2001.02.008
- Yang, C. R., Chen, K. K., & Zhang, Y. J. (2006). Classification of tea and definition of Pu'er tea. *Tea Science and Technology*(2), 37-38. https://doi.org/10.3969/j.issn.1007-4872.2006.02.015
- Yang, P. (2013). On the Role of Cultural Creativity in Enhancing Product Value Added. Shangqing(45), 100-100.
- Yang, Y., & Mo, L. X. (2016). SI MAO·Pu-Erh A significant sign in Chinese tea culture. *Pu-Erh*(10), 250-255.
- Yang, Z. Q., & Li, F. Q. (2008). Inheritance and promotion of traditional tea culture by tourism industry. *Journal of Anhui Agricultural Sciences*, 36(34), 15144-15146,15196. https://doi.org/10.3969/j.issn.0517-6611.2008.34.131
- Yang, Z. W. (2010). Ethnic culture and ecological village——the practice of traditional culture protection in Yunnan. Chinese National Cultural Heritage (Series 3).
- Yang, Z. Y. (2011). New Pu'er tea. Yunnan Science and Technology Press.
- Yao, X. J. (2008). Say Pu'er tea. Ecological Culture(2), 33-35.
- Yi, C. (2003). Ecological culture and cultural ecology. Journal of Kunming Teachers

- College.
- You, Y. (2010). Research on strategies to improve the value of adhesion II of products and services of agricultural products and metallurgical enterprises. *Economic Review*(5), 80-83.
- Zhang, C., & Liu, R. H. (2014). Study on packaging design of Yunnan Pu'er tea. *China Packaging Industry*(6), 60. https://doi.org/10.3969/j.issn.1006-4621.2014.06.040
- Zhang, H. Y. (2017). Discussion on the rise and development of ancient Chinese tea literature. *Tea in Fujian*, 39(10), 331. https://doi.org/10.3969/j.issn.1005-2291.2017.10.238
- Zhang, J. W. (2015). The cultural significance of a tea tree. Tea in Fujian, 37(1), 57-58.
- Zhang, L., Li, N., Che, Y. Y., Ma, Z. Z., & Tu, P. F. (2011). Study on fingerprint of ripe and raw Pu'er tea. *Journal of Chinese Pharmaceutical Sciences*, *20*(4), 352-359. https://doi.org/10.5246/jcps.2011.04.044
- Zhang, Q. G. (2010). Main Reasons of Multi-religion in the Yunnan Province Getting harmoniously along with. *Studies in World Religions*(2), 19-24. https://doi.org/10.3969/j.issn.1000-4289.2010.02.003
- Zhang, Z. Q. (1999). History of Yunnan Architecture. Yunnan Fine Arts Publishing House.
- Zhao, Z. Z. (2012). Regional construction of ethnic culture in Yunnan. International Symposium on the Protection of the Artistic Heritage of Ethnic Minorities in China and the Development of Contemporary Art,
- Zhou, G. A. (1991). The social function of national traditional festivals is briefly discussed.

 National Art Research(5), 69-74.
- Zhou, H. J., & Wei, H. (2006). *Yunnan Tea Brewing Techniques*. Yunnan Science and Technology Press.
- Zhou, Z. S. (2002). Interflow between Yunnan and india in ancient times: A historical outline (I). South Asian Studies(1), 55-64. https://doi.org/10.3969/j.issn.1002-8404.2002.01.009
- Zhu, S. L., Zhu, X. Y., & Li, J. (2016). Relationship between tea consumption and cognitive function in elderly. *Chinese Mental Health Journal*, *30*(12), 916-922.

https://doi.org/10.3969/j.issn.1000-6729.2016.12.007

Zhuang, W. F. (1993). The 1260th anniversary of the birth of tea saint Lu Yu. *Journal of Tea*(1), 5.





Appendix A Interview Questionnaire Basic information

Name:
Gender: □Male □Female
Age:
Occupation:
Your location:
Contact information (optional):

Interview Outline for Tea farmers

- Q1. How do people in your hometown usually drink tea? Are there any special tea-drinking customs or habits?
 - Q2. What role does Pu'er tea play in the daily life of people in Yunnan?
- Q3. What differences do you think exist between the tea-drinking habits of people in Yunnan and those in other regions?
- Q4. Have you observed any changes in the tea-drinking habits of people in Yunnan? What factors have caused these changes?
- Q5. As a tea farmer, what impact do you think tea culture has on your life and family?
- Q6. What tea culture-related activities or traditions are there in your daily life?
- Q7. How do you pass on the tea culture to the next generation of tea farmers?
- Q8. What are your expectations and suggestions for the future of local tea culture and Pu'er tea cultivation?
- Q9. How do you view the balance between traditional tea culture and modern lifestyle?
- Q10. Can you share a personal story or experience related to Pu'er tea or tea culture?

Interviews Outline for Tea Shops

- Q1. What's the business scope of tea shops and their specialities?
- Q2. The status and representative activities of Yunnan tea culture in the region?
- Q3. How do Yunnan tea shops meet the tea drinking needs of local residents? What are the popular tea varieties and tea sets?
 - Q4. How are the teas packaged and stored in your shop?
 - Q5. What are the challenges and future prospects of tea shops?
- Q6. How does Yunnan tea culture affect the sales and promotion of Pu'er tea?
- Q7. How do you see the relationship between the traditional packaging of Pu'er tea and the needs of modern consumers?

Interviews Outline for Tea Culture Scholars

- Q1. What are the similarities and differences between Yunnan tea culture and tea cultures in other regions?
- Q2. How do you view the preservation of Yunnan tea culture's regional characteristics in the context of globalization?
 - Q3. How does Yunnan tea culture stand out in the global tea culture?
- Q4. Are there any differences in tea-drinking habits in Yunnan based on geography, ethnicity, or other factors? Can you give an example?
- Q5. What is the relationship between Yunnan's tea-drinking habits and its local natural environment, socio-economic conditions, and cultural traditions?
 - Q6. How does Yunnan tea culture adapt to social and cultural changes?
 - Q7. How do you see the impact of modern lifestyle on Yunnan tea culture?
- Q8. How can the uniqueness of Yunnan tea culture be transformed into design elements?
- Q9. How do you think Yunnan tea culture should be reflected in modern design?

Interviews Outline for Packaging Designers

- Q1. What is your understanding of Yunnan's local tea culture? How did it influence your design concept?
- Q2. In your opinion, what are the unique elements or characteristics of Yunnan tea culture? How are these elements or characteristics reflected in your design work?
- Q3. When designing Pu'er tea packaging, where do you usually find inspiration?
- Q4. Has the natural environment and historical culture of Yunnan provided you with design inspiration? Please give examples.
- Q5. What factors do you usually consider when designing Pu'er tea packaging, such as brand image, market positioning, target consumer groups, etc.?
- Q6. How do you highlight the quality and characteristics of Pu'er tea in packaging design? Please provide examples.
- Q7. How do you balance traditional elements with modern aesthetics in the design process?
- Q8. What characteristics do you believe a successful Pu'er tea packaging design should possess?
- Q9. How do you design different packaging solutions for Pu'er tea for various occasions, such as festivals, business, daily use, etc.?
- Q10. What unique insights and experiences do you have in selecting packaging materials and production techniques?
- Q11. In your design career, what are some successful examples of Pu'er tea packaging design? Please share the design ideas and process of these cases.
- Q12. What challenges have you encountered during the design process? How did you overcome these challenges?
- Q13. Please share your latest research and exploration directions in the field of Pu'er tea packaging design.

Appendix B Interview Summary

Insights from Mr. Cai at Dayi Culture Center

Mr. Cai accentuated the significance of the 2003 peacock design in assimilating traditional Dai cultural symbols into the brand's identity. He spotlighted the peacock as a vessel of cultural identity, rendering it a hallmark component of Pu'er tea packaging. By amalgamating cultural elements with minimalist aesthetics, Dayi proficiently catered to both traditional and modern markets.

Observations from Mr. Liao at Tea Factory

Mr. Liao emphasized how the ecological and health virtues of Pu'er tea are illustrated in the packaging design. He contended that Pu'er tea packaging must articulate its position as a luxury product, integrating traditional cultural motifs alongside premium aesthetics. Mr. Liao highlighted the ecological characteristics and health attributes of Pu'er tea, such as its resistance to brewing and richness of inner substances, which are reflected through the colors and patterns of the packaging design. He mentioned the history of Pu'er tea as a tribute tea and the perception of its high-end brand image among consumers. He believes that Pu'er tea packaging design should reflect the qualities of a 'status symbol'. He also pointed out that the use of traditional cultural symbols (e.g. small and medium leaf varieties and specific regional symbols) needs to take into account the modern aesthetic needs of consumers and strengthen the brand's influence through the combination of high-end positioning and marketing strategy.

Perspectives from Designer Allen, Xishuangbanna

Designer Allen remarked on merging ethnic patterns (e.g., Dai and Hani motifs) with contemporary layout techniques to harmonize tradition and innovation. He mentioned the importance of 'originality', believing that ethnic cultural elements must be expressed creatively in design rather than simply copying traditional symbols. He identified the global market demands for both localized and universal design as a primary challenge facing Pu'er tea packaging.

Insights from Wang Fei, Xishuangbann

Wang Fei mentioned that Pu'er tea consumers, predominantly aged 35 and above, prioritize packaging that embodies cultural authenticity and legacy. This customer group has a high demand for cultural heritage in packaging design. He believes that packaging designs with visual impact are more likely to attract consumers, especially those that can convey cultural connotations, for example, cultural symbols such as peacocks and elephants can effectively attract consumers because these elements are not only aesthetically pleasing, but also have deep cultural symbolism. Wang Fei mentioned that the packaging of tea cakes is not only a protective function, but also a reflection of culture and brand value, and the design needs to balance visual aesthetics and cultural significance, so that it cannot only attract the attention of consumers, but also convey the brand's cultural essence and quality commitment.

An Analysis Conducted by Designer Huang Linjie from Xi Lin, Beijing

Huang Linjie underscored the significance of symbolic design elements, such as peacocks and auspicious motifs, in augmenting global recognition. He recommended customizing packaging designs to accommodate varying market demands, achieving a harmonious balance between traditional and contemporary aesthetics.

Summary

All five interviewees emphasized the importance of incorporating elements of Yunnan's ethnic minority cultures in the packaging design of Pu'er tea, particularly the role of symbolic design in enhancing brand recognition. Symbols such as peacocks, elephants, and ethnic patterns not only carry strong cultural significance but also enable consumers to intuitively perceive the cultural depth of Pu'er tea. Through symbolic design, Pu'er tea packaging can establish a unique brand image in the global market while also effectively supporting the spread of tea culture.

Designers Allen and Beijing Huang Linjie pointed out that Pu'er tea packaging design needs to find a balance between traditional symbols and modern design language. In the globalized market, traditional cultural symbols should be integrated with modern design elements to appeal to a broader consumer base. Allen

mentioned that through modern typography and innovative expression, traditional symbols can be made more in line with contemporary aesthetics, ensuring that the packaging design not only possesses cultural depth but also meets the demands of modern consumers, especially in younger and international markets.

General Manager Liao and Wang Fei approached the issue from the perspectives of market and consumer demand, emphasizing the importance of conveying a high-end brand image in tea cake packaging. Packaging design should not only communicate Pu'er tea's health and ecological values but also highlight its highend and luxurious market positioning through exquisite design. General Manager Liao noted that packaging should reflect the "status symbol" quality of Pu'er tea, enhancing brand recognition in the market. Wang Fei, on the other hand, believed that the visual impact and cultural connotations of the packaging were key to attracting target consumers, particularly those aged 35 and above with strong economic backgrounds.

Through a comprehensive analysis of the interview records, it is evident that Pu'er tea packaging design is not only a form of visual art but also an integral representation of cultural transmission, brand building, and market competition. While acting as an emotional link between consumers and the product, packaging design plays a crucial role in promoting the global spread of Pu'er tea culture and enhancing brand influence. This provides valuable insights and perspectives for future research.

Appendix C Related Tables

Data Analysis: Clustering Scores

		Ethnic	International	Regional	Global	Cultural	Natural
Font Style	Calligraphy Style	2	1	2	2	1	2
	Non-calligraphy Style	1	2	1	1	2	1
Pattern	Traditional Auspicious Pattern	5	1	5	1	5	1
	Ethnic Characteristic Pattern	6	0	6	0	6	0
	Natural Landscape Pattern	2	4	2	4	3	3
	Plant pattern	1	5	3	3	1	5
	No Specific Pattern	3	3	1	5	2	4
	Human Figure	4	2	4	2	4	2
Primary Color	Red	6	0	6	0	6	0
	Green	5	1	5	1	5	1
	Black	4	2	4	2	4	2
	Blue	3	3	3	3	3	3
	Yellow	2	4	2	4	2	4
	White	1	5	1	5	1	5
Regional Characteristics	With Regional Features	2	1	2	1	2	1
	Without Regional Features	1	2	1	2	1	2
Cultural Symbols	Auspicious	3	2	2	3	4	1
	Ecological	1	4	1	4	1	4
	Unity	2	3	5	0	2	3
	Historical Heritage	5	0	4	1	5	0
	Integrity and Character	4	1	3	2	3	2
Art Style	Traditional	2	1	3	0	3	0
	Modern	0	3	1	2	1	2
	Mixed	1	2	2	1	2	1
Xishuangbanna Culture	Yes	2	1	2	1	2	1
	No	1	2	1	2	1	2

Source: Self-created

Calligraphy Style (Cluster 1) stands out for its strong emphasis on ethnicity (score of 2) and regionality (score of 2), highlighting its significant role in conveying traditional cultural values and local characteristics. Non-Calligraphy Style (also Cluster 1) has a relatively lower score, suggesting it is more suitable for international and modern design contexts, although it reflects weaker ethnic and regional expressions.

Traditional Auspicious Patterns and Ethnic Patterns are grouped into Cluster 2, indicating that these patterns dominate in terms of ethnicity, regionality, and cultural factors, but perform weaker in terms of international and natural qualities. On the other hand, Natural Landscape Patterns, Plant Patterns, and No Specific Pattern fall into Cluster 0, showing a stronger adaptability to international and natural themes. These patterns not only highlight the advantages of minimalist modern styles but also leverage natural themes to facilitate cross-cultural communication. Character Patterns fall into Cluster 1, reflecting their focus on expressing cultural and regional identity.

Red and Green (Cluster 2): Achieve the highest scores in ethnicity, regionality, and humanistic dimensions (scores 5 or 6), underscoring their central role in traditional culture. Black and Yellow are grouped into Cluster 1, balancing traditional and modern elements. Black symbolizes tradition with a stable nature while also maintaining some modern universality (with balanced scores of 4 points), and yellow retains its traditional auspicious meaning while being well-received internationally. Blue and White belong to Cluster 0, showcasing a strong presence in the natural and global dimensions, reflecting their universal applicability and cross-cultural adaptability in modern design.

With Regional Characteristics are placed into Cluster 1, significantly associated with ethnicity, regionality, and humanistic dimensions, highlighting the emphasis on Xishuangbanna's cultural heritage and local identity. Without Regional Characteristics are classified into Cluster 0, better suited to international and global design needs, reflecting modern trends in downplaying regional specificity.

Auspicious, Unity, Ecological, and Integrity are all placed in Cluster 1, reflecting a balance between traditional cultural connotations and modern design themes. Auspicious and Unity score high in ethnicity and regionality, emphasizing traditional culture and local identity. Ecology stands out in the natural dimension, highlighting its appeal in modern design contexts. Integrity is influential in both the natural and cultural dimensions, enriching the spiritual depth of packaging design.

Heritage is the only symbol placed in Cluster 0, with the highest scores in ethnicity and regionality, indicating a stronger emphasis on the continuity of traditional culture.

Traditional Style is grouped into Cluster 2, strongly emphasizing ethnicity and culture (scores of 5 and 4), representing a prominent display of cultural heritage. Modern Style and Mixed Style are placed in Cluster 1, with modern style focusing more on the universality of contemporary design, while mixed style demonstrates a more balanced performance in the natural and cultural dimensions. This reflects the fusion and balance of traditional and modern, local and international elements in Pu'er tea packaging design.

With Xishuangbanna Culture is classified as Cluster 0, which mainly reflects its prominent role in ethnicity and naturality, but scores lower overall, indicating limited integration with modern international design. Without Xishuangbanna Culture is classified as Cluster 1, scoring higher in internationality and globality, suggesting broader applicability in universal design.

Appendix D Field Study Pictures

Pu'er Tea Cake Packaging Collection 1



Pu'er Tea Cake Packaging Collection 2



Pu'er Tea Cake Packaging Collection 3



Pu'er Tea Cake Packaging Collection 4



Pu'er Tea Cake Packaging Collection 5



Menghai County, Xishuangbanna Autonomous Prefecture



Dayi Pu'er Tea Culture Museum in Menghai County



Fangyuan Tea Factory in Menghai County



Dai Paper House



Hani Ethnic Museum







Interviewing with Designer



Interviewing with Tea Shop Operator



Interviewing with Expert



