



A Comparative Cultural Ecological Analysis of Zhuang and Dong Polyphonic Folk Songs in Guangxi Province, China

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Received 12/03/2025

Revised 01/04/2025

Accepted 07/05/2025

Abstract

Background and Aim: Cultural Ecology examines how traditions evolve in response to their environments. The polyphonic folk songs of the Zhuang and Dong ethnic groups in Guangxi have developed over centuries through interactions with their unique geographical, linguistic, and social contexts. Despite their recognition as intangible cultural heritage, comparative studies on the ecological factors shaping these traditions remain scarce. This study investigates how geography, language, and social structure influence the similarities and differences between Zhuang and Dong polyphonic folk songs. The objectives are 1. To study the relationship between the natural environment and the musical characteristics of polyphonic folk songs. 2. To study the connection between Ethnic languages and the rhythm of polyphonic folk songs. 3. To study the impact of social customs on the performance environment and cultural functions of polyphonic folk songs. 4. To explore the intrinsic connection between polyphonic folk songs and cultural ecology.

Materials and Methods: A triangulation approach was used, combining: (1) a review of academic articles on Zhuang and Dong music; (2) field observations conducted between 2022 and 2024 in Nanning, Hechi, Jingxi and Sanjiang, including 12 recorded performances and 5 semi-structured interviews with folk musicians; and (3) case studies of key traditions like the 'Song Festival' and 'Dong Grand Choir.' Data were analyzed using cultural ecology mapping and thematic content analysis.

Results: Three key findings emerged: (1) Geographical Influence: The Zhuang tradition varies significantly across 26 counties, adapting to local micro ecologies, while the Dong tradition remains highly unified despite being geographically dispersed. (2) Linguistic Impact: Both traditions reflect their languages differently—Zhuang polyphony mirrors tonal speech patterns, whereas Dong polyphony prioritizes harmonic blending over tonal accuracy. (3) Social Structure: Performance contexts differ—the Zhuang tradition emphasizes dialogic exchanges, reflecting interpersonal communication, whereas the Dong tradition follows a hierarchical format aligned with its communal "Kuan" system.

Conclusion: Though the Zhuang and Dong traditions share a cultural-linguistic heritage, they have evolved distinctively due to ecological adaptation. Geographic isolation has preserved their uniqueness while shaping divergent musical developments. These insights highlight the importance of considering ecological factors in cultural conservation efforts rather than treating minority music traditions as homogeneous. Future studies should examine how contemporary environmental and social changes impact these ecological relationships.

Keywords: Cultural Ecology; Polyphonic Folk Songs; Zhuang and Dong; Dynamic Symbiosis

Introduction

Cultural ecology is an interdisciplinary framework that examines how cultural practices adapt to and influence their natural, social, and economic environments. Steward (1955) introduced this concept to analyze human-environment interactions, and later, scholars such as Titon (2009) applied it to ethnomusicology, exploring how musical traditions emerge and evolve within specific ecological contexts. This study employs a cultural ecology perspective to investigate how Zhuang and Dong polyphonic folk songs in Guangxi have developed in response to distinct environmental and social factors.

Fu and Wu (2024) propose that the cultural ecology of ethnic music operates on two levels. The superficial level examines musical elements such as melody, harmony, and performance practices, while the deep level explores interactions between music and its broader ecological context, including geography, social organization, and economic conditions. For instance, Zhuang polyphonic folk songs exhibit regional melodic variations shaped by their tonal language, whereas Dong polyphony prioritizes harmonic blending.





At a deeper level, Zhuang traditions emphasize dialogic singing as a form of social interaction, while Dong folk songs reflect their “Kuan” communal structure through highly organized choral performances.

Located in southwestern China, the Guangxi Zhuang Autonomous Region is home to diverse ethnic cultures, among which the Zhuang and Dong polyphonic folk songs are significant musical traditions. These songs, developed over centuries through daily life and communal practices, are not only artistic expressions but also reflections of ethnic history, cultural identity, and religious beliefs. Zhuang polyphonic folk songs are characterized by antiphonal singing and flexible melodic variations, while Dong polyphony, best represented by the “Dong Grand Choir,” emphasizes structured harmonic layering and collective performance. These traditions serve as important “Living” cultural materials for understanding the historical and social evolution of the Zhuang and Dong peoples.

Despite their recognition as intangible cultural heritage, comparative studies on the ecological factors shaping these traditions remain scarce. Existing research has primarily documented the musical characteristics of Zhuang and Dong polyphony but has not systematically examined the environmental and social mechanisms driving their diversity and resilience. Additionally, while the two ethnic groups share linguistic ancestry, their music has developed distinct ecological adaptations, which remain understudied. Furthermore, modernization and environmental change pose significant threats to these traditions, highlighting the need for a deeper understanding of their cultural ecology to inform preservation strategies.

This study addresses these gaps by analyzing the ecological influences on Zhuang and Dong polyphonic folk songs and comparing their adaptation mechanisms. Understanding these factors enhances our knowledge of ethnic music traditions and contributes to broader discussions on cultural preservation, globalization’s impact on minority traditions, and the role of music in sustainable cultural development. By examining the relationship between music and its ecological context, this research provides valuable insights into the resilience of traditional music and informs future conservation efforts.

Objectives

1. To study the relationship between the natural environment and the musical characteristics of polyphonic folk songs
2. To study the connection between Ethnic languages and the rhythm of polyphonic folk songs
3. To study the impact of social customs on the performance environment and cultural functions of polyphonic folk songs
4. To explore the intrinsic connection between polyphonic folk songs and cultural ecology

Literature review

Zhuang and Dong polyphonic folk songs, while sharing similar natural environments and linguistic roots, have developed unique ecological adaptations. Zhuang polyphonic songs are primarily two-part, formed through collective work and life activities, and reflect ancient Baiyue cultural characteristics. In contrast, Dong polyphonic songs, exemplified by the Dong Grand Choir, feature a high part led by one person and a low part sung in unison by others, closely tied to Dong social organization and traditions. These songs, rooted in collective singing, are shaped by the interaction of the natural environment, language, and social structures (Fan, 2016).

The Baiyue people, ancestors of the Zhuang-Dong ethnic group, adapted to the humid, mountainous environment of southern China and the Indochina Peninsula, where rice farming and river systems shaped their culture. Similar geographic conditions led to shared lifestyles and cultures, though the complex terrain influenced language communication, creating dialectal differences. The Dong people's river valley settlements emphasize harmony with nature, reflected in their music, while Zhuang polyphonic songs are concentrated in specific regions in Guangxi (Zhu, 2023; Pu, 2023).

The social structure of the Zhuang-Dong ethnic groups, rooted in farming and a strong family system, has influenced their music. Elders play a central role in maintaining social order, but also limit personal development. Traditional social structures, like the village assembly and joint contribution



systems, have impacted Zhuang and Dong music and culture, with the Song Festival playing an important role in Zhuang villages. Dong music, including the “ye” song, emerged from collective labor and political structures, evolving into the Dong Grand Choir (Fan, 1991; Yang, 1997).

Festivals, based on agricultural cycles, are central to Zhuang and Dong cultures, with music at their core. Zhuang folk songs are closely tied to farming life, while the Dong Grand Choir has political and social origins. The music of both groups shares common features, such as a moderate range, tonal focus, and free rhythm (Yang, 1997). Dance forms like the Zhuang embroidered ball dance and the Dong lusheng dance highlight the cultural diversity of both groups.

Architecturally, the Zhuang and Dong have adapted their dwellings to the humid environment. Dong stilt houses protect from moisture and flooding, offering ventilation, while Zhuang stilted buildings serve similar purposes. These structures are not just living spaces but also venues for cultural activities like bullfighting and singing folk songs (Zhu, 2023).

Conceptual Framework

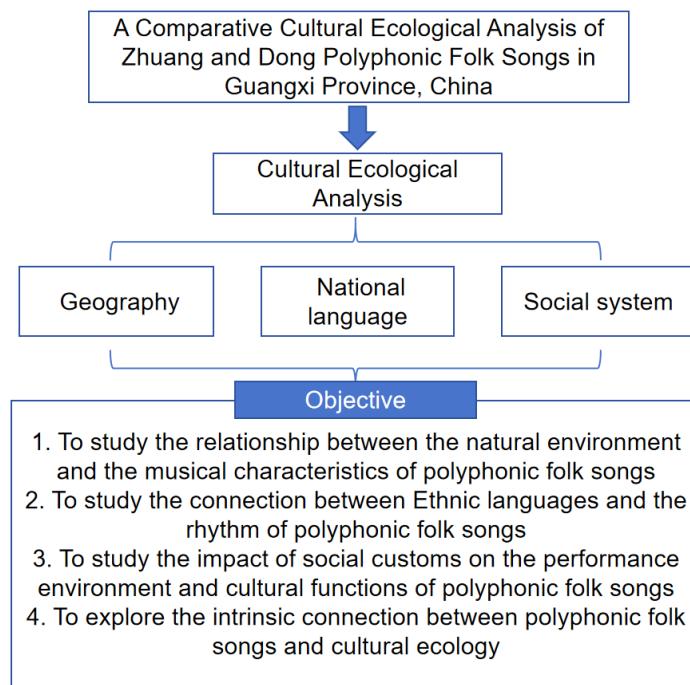


Figure 1 Conceptual Framework

Methodology

1. Literature research method: combing through the veins of previous research.
2. Field research method: to obtain first-hand information.
3. Case study method: comparing two ethnic groups.

Results

Research Objective 1: To study the relationship between the natural environment and the musical characteristics of polyphonic folk songs

Finding 1: The geographical environment shapes Zhuang culture: topography, climate, and resources shape the traditions of architecture, farming, and polyphonic folk songs

1.1 Introduction to the natural environment



The Zhuang are the largest ethnic minority group in Guangxi and are mainly distributed in the plains and river valleys of central, western, and northern Guangxi. The region has a unique geographical environment, dominated by karst landforms. Mountains and hills, and crisscrossing rivers form a complex ecosystem. To the northwest, it connects to the Yunnan-Guizhou Plateau, to the north, it traverses the Wuling Mountains, and in the centre, hills and arc-shaped mountain systems extend in an interlaced pattern. The water system covers the Panjiang, Hongshuihe, and Xijiang Rivers, which flow from north to south before emptying into the Pearl River. Influenced by the subtropical monsoon climate, the region experiences rainfall and heat at the same time, with an annual average precipitation of 1,500-2,000 mm and rich biodiversity.

Under the influence of this geographical environment, the Zhuang people have long made a living from agriculture, with rice cultivation culture at its core. The fertile river valleys and plains are suitable for rice cultivation, while terraced farming is relied on in the mountainous areas. The humid and hot climate conditions not only promoted the development of rice cultivation but also prompted the Zhuang people to adapt to local conditions in terms of architecture and settlement forms.

The spatial form of the Zhuang traditional settlements mainly presents two models: the stilt house and the courtyard-style architecture. Stilt house architecture is widely used in mountainous and semi-mountainous areas to prevent moisture and provide ventilation. Ganlan-style Architecture in Daventown, Napo County, has completely preserved the original form of Zhuang dwellings. The ground floor is elevated to raise the livestock and poultry, the middle floor is the living space, and the top floor is used for storage.

The Zhuang people's Ganlan-style Architecture is adapted to the humid and rainy environment of Guangxi. The roof has a large slope, which facilitates rapid drainage and reduces waterlogging, while also retaining flexible spatial functions. In the plains, enclosed courtyard buildings have developed. The Xincheng Mosi Tusi Building Complex is a typical example of the integration of Zhuang and Han cultures. It is built according to the topography of the land, following the axis-symmetrical layout of Central Plains architecture, while also incorporating local decorative elements such as the geometric patterns of Zhuang brocade. These architectural forms not only reflect the Zhuang people's wisdom in adapting to nature but also showcase the blending of Han culture and local culture.

1.2 The Influence of Natural Environment on Zhuang Polyphonic Folk Songs

The influence of the Zhuang people's natural environment on the form of their music is reflected in the singing method, melody, and singing style of Zhuang folk songs. The karst topography and dense river network create a natural echo effect, making Zhuang songs high-pitched and loud. In addition, because some areas are blocked by mountains, there is less sunshine, and the climate is relatively cold, damp, and humid, these natural conditions have affected the rhythm of life and cultural expression of the Zhuang people, and also made the rhythm and melody of polyphonic folk songs appear soothing and long.

The high-pitched, clear, and wide vocal range of the Zhuang polyphonic folk songs is because the mountains in the Zhuang region being high and the valleys are deep. When people worked and communicated in the mountains, they needed to raise their voices and prolong their tones to carry further. The unique Zhuang "two-part" and "multi-part" singing forms also developed under such vocal ranges. The different parts echo each other, rising and falling like the echo in a valley, creating a unique musical beauty.

At the same time, Zhuang polyphonic folk songs are also characterized by distinctive melodies in the different vocal parts. The high vocal part has a wide range and often jumps in fourths. It is highly ornamented, with each phrase usually containing 3-5 slides or trills, and is highly improvisational. The low vocal part is mainly based on progressions and serves to stabilize the key. An example is the Zhuang polyphonic folk song "Zhuang jia shan ge sai mi tang (Meaning: Life in the Zhuang home is like honey)" .



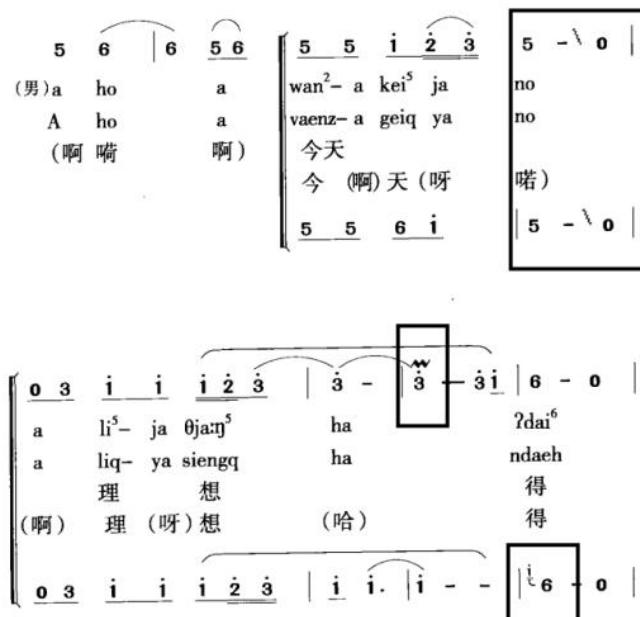


Figure 2 Excerpt from: “Zhuang jia shan ge sai mi tang (Meaning: Life in the Zhuang home is like honey)” Source: Author’s Synthesized

In this song, there are three ornamental notes in one phrase, and the high voice part is clearly defined, often with large jumps in pitch, which reflects the high and loud characteristics of the Zhuang polyphonic folk song. In addition, because the Zhuang people have long lived in the mountains and forests, in close contact with nature, they have developed a free-spirited, warm, and cheerful national character. This character is also reflected in folk song singing. Many Zhuang folk songs are characterized by improvisation and free expression. Singers can improvise lyrics and change the tune according to the situation and their mood, so that every performance is full of freshness and creativity. Therefore, in actual performances, singers will freely play with the embellishments, giving the song more style.

In summary, the Zhuang people's production methods, architectural forms, and musical culture have all been profoundly shaped by the Geographical environment. The natural environment not only determines the Zhuang people's livelihood patterns but also influences their settlement structure, architectural style, and cultural and artistic forms. Throughout their long development, the Zhuang people have created a production and lifestyle that adapts to the environment, based on local conditions, and on this foundation have formed a unique national culture. The evolution of Zhuang culture is a vivid manifestation of the interaction between man and nature, continuous adaptation, and innovation.

Finding 2: Geographical environment shapes the form of Dong settlements: the integration of architecture and ecology promotes the formation and inheritance of polyphonic folk songs.

2.1 Introduction to the natural environment

The Dong people are mainly distributed in the border area of the four provinces of Guizhou, Hunan, Guangxi, and Hubei, forming a geographical distribution pattern that resembles the Chinese character for “工”. The Dong people mostly live in subtropical hilly river valleys, relying on the three major river systems of the Yuanjiang, Diliu, and Qingshui rivers, forming a typical feature of “building villages along the mountains and living along the water”. This geographical environment has not only affected the spatial layout of Dong villages but has also profoundly shaped their architecture, music, and social organization.

In Guangxi, the Dong ethnic group mainly lives in the Sanjiang Dong Autonomous County in the north. The area is a low-to-medium mountain landscape, influenced by a subtropical monsoon climate.

with abundant annual rainfall and small annual temperature differences, providing good natural conditions for the formation of Dong villages. Most villages are located near mountains and rivers, with fields in front and green mountains behind, forming a typical landscape pattern. This ecological environment not only influenced the Dong's production methods but also provided a rich source of inspiration for their music culture.

The traditional Ganlan-style Architecture of the Dong people is a way of living that adapts to the humid climate of the mountainous regions in the south. The ground floor of the house is elevated to prevent damp and insects, while also improving ventilation and adapting to the rainy natural environment of the Dong villages. This form of architecture has been passed down from generation to generation. Even with the popularization of modern building materials, new houses built according to traditional techniques can still be seen in Dong villages, demonstrating the Dong people's commitment to traditional skills. Although wooden houses are vulnerable to wind and rain, and many old buildings are difficult to preserve in the long term, the Dong people have always passed down the skills of wooden architecture. Relying on abundant forest resources, they choose wood for building according to local conditions, while also incorporating wisdom such as fire prevention and corrosion resistance into building design. For example, the roof is constructed in a special way to reduce rainwater penetration, and the wood is treated with smoke to improve durability. This architectural wisdom not only ensures the comfort of the living environment but also reflects the Dong culture's deep understanding and respect for nature.

2.2 The Influence of Natural Environment on Dong Polyphonic Folk Songs

The polyphonic folk songs of the Dong people are deeply influenced by nature. Streams, forest sounds, and birdsong – these natural sounds shape the musical style of the Dong Grand Choir. The Dong people, who have lived in harmony with nature for a long time, have accumulated the ability to imitate natural sounds in their daily lives and have gradually structured them to form the rich harmonic system of the Dong Grand Choir. This gives the Dong Grand Choir its gentle, delicate, and naturally harmonious aesthetic characteristics. Many Dong folk songs directly imitate the sounds of nature. For example, in “Chan Zhi Ge (Song of the cicada)”, the sound of cicadas is imitated using the continuous sound “leeng”. In “Bu Gu Cui Chun (Cuckoo calls for spring)”, the sound of the cuckoo is imitated using “du gu”.

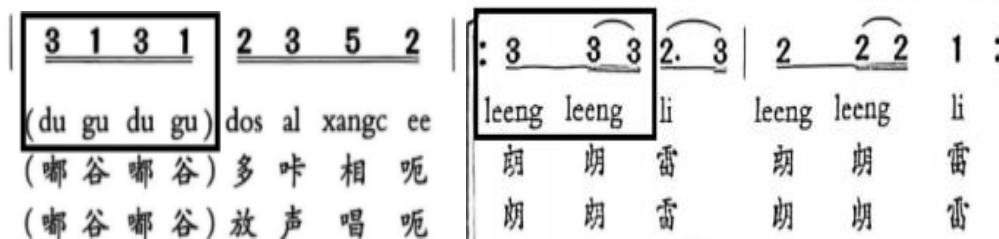


Figure 3 Imitation of Animal Tones

Source: Collection of Chinese Folk Songs (Guangxi Volume)

The Dong people have many such songs, imitating the sounds of nature through vocals or embellishments, making the melodies light and bouncy, full of vitality, symbolizing the revival of all things in spring, and expressing the wisdom of the Dong people in adapting to and living in harmony with nature. This ecological aural experience has been passed down from generation to generation and has eventually evolved into the Dong people's unique multi-part music system.

Research Objective 2: To study the connection between Ethnic languages and the rhythms of polyphonic folk songs

The Zhuang and Dong are both typical tonal languages, in which changes in the pitch of a sound can distinguish between different meanings. This function of distinguishing meaning by pitch has a direct

impact on the structure of intervals in music. For example, according to the Five-Level Tone Chart, a tone value of 55 is read high and flat, which in music corresponds to the main tone or a progression of the same pitch. A tone value of 31 is pronounced from a relatively high position and then lowered, creating a downward glissando of a minor third. In a melody, this would be paired with a downward melodic note, for example, sliding from E4 to C4.

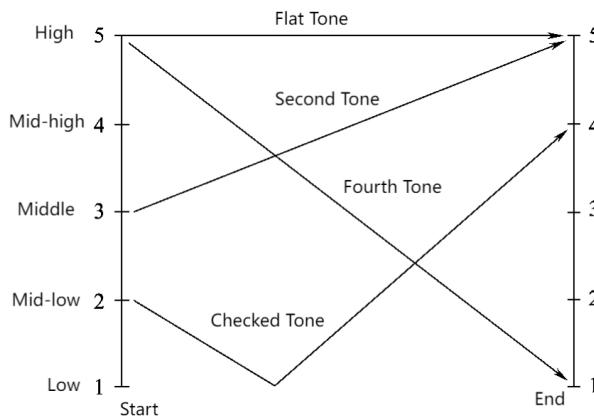


Figure 4 Five-Level Tone Chart
Source: Author's synthesized

Finding 1: Relationship between the Zhuang language and song rhythm

1.1 Introduction to the national language

Zhuang is a language of the Zhuang-Dai branch of the Zhuang-Dong group of the Sino-Tibetan language family, and can be divided into a southern and a northern dialect with 6-8 tones. The northern dialect has a great deal of internal consistency and a larger population than the southern dialect. There are phonological differences between the southern and northern dialects, as well as differences in vocabulary, but the grammar is basically the same. The distribution is as follows:

Table 1 Table of the division of the native language areas in the northern and southern parts of the Zhuang language

Division of the native language areas in the northern and southern parts of the Zhuang language	
Northern dialect of Zhuang	
Guibei dialect	Guangxi Longsheng, Sanjiang, Yongfu, Rong'an, Rongshui, Luocheng, Huanjiang, Hechi, Nandan, Tian'e, Donglan, Bama
Liujiang dialect	Guangxi Liujiang, Laibin, Yishan, Liucheng, Xincheng
Hongshuihe dialect	Guangxi Hexian, Yangshuo, Lipu, Luzhai, Guiping, Guixian, Wuxuan, Xiangzhou, Laibin, Shanglin, Xincheng, Du'an, Mashan
Yongbei dialect	Guangxi Yongning, Hengxian, Binyang, Wuming, Pingguo
Yujiang dialect	Tiandong, Tianyang, Baise, Guangxi
Guibian dialect	Fengshan, Tianlin, Longlin, Xilin, Lingyun, Leye, Guangnan
Qiu Bei dialect	Qiu Bei and Shi Zong, Yunnan
Southern dialect of Zhuang	
Nanning dialect	Guangxi Yongning, Longan, Fusui, Shangsi, Qinzhou, Fangcheng
Zuojiang dialect	Guangxi Tianying, Daxin, Chongzuo, Ningming, Longzhou
Dejing dialect	Guangxi Jingxi, Debao, Napo
Yanguang dialect	Guangnan, Yanshan, Maguan, Wenshan, Xichou, Masupo

**Division of the native language areas in the northern and southern parts of the Zhuang language**

Wenma dialect Yunnan Wenshan, Masupo, Maguan, Kaiyuan

Source: Li Yi (2024)

The national language is an important carrier of the polyphonic folk songs of the Zhuang, and it has had a profound influence on the lyrics composition and singing style of the folk songs. The lyrics of the folk songs are mostly in the Zhuang language, which enables the folk songs to more accurately express the thoughts, feelings, and life scenes of the Zhuang people.

2.2 The Influence of Ethnic Languages on Zhuang Polyphonic Folk Songs

The phonetic characteristics of the Zhuang language also influence the rhythm and intonation of the lyrics. The Zhuang language has a rich system of tones, which gives the singing of folk songs a unique rhythmic beauty. Singers use changes in tone to make the melodies even more beautiful and moving. In addition, the grammatical structure of the Zhuang language also has an impact on the sentence structure and organization of the lyrics, which results in a unique structure and expression in Zhuang polyphonic folk songs. For example, the lyrics of the Zhuang three-part folk song use a large number of Zhuang words with local characteristics, vividly depicting the local customs, working life, and love stories, and are full of a strong ethnic atmosphere.

Table 2 Tone Analysis Table of the Zhuang Language in the Song "Lan tian guang lang lang (the sky is blue and the landscape is vast)"

Tone Category	Tone Value	Example Word	Melodic Segment	Musical Expression
Tone 1	24	/fa ¹ /(Sky)	Ascending Glissando (C4→E4) followed by a Sustained Note	Simulating the Spread of a Bird's Wings
Tone 2	31	/din ² /(Red)	Descending Third Interval Leap (G4→E4)	Metaphor for the Colors of the Sunset
Tone 3	55	/lun ³ /(Rain)	Sustained Vibrato (A4)	Imitating Raindrops on Rice Leaves
Tone 4	42	/lun ⁴ /(Loong)	Ornamental Slide (F4→C4)	Representing the Image of a Deity
Tone 5	35	/la ⁵ /(gong)	Accentual Ascending Leap (D4→G4)	Building the Rhythm of a Labor Scene
Tone 6	33	/?da ⁶ /(Backstrap)	Stable Middle Pitch (E4 sustained for 4 beats)	Building the rhythm of a labor scene
Tone 7	55	/lap ⁷ /(Darkness)	Staccato Stab (B4)	Symbolizing the Night
Tone 8	35	/lak ⁸ /(Deep)	Rapid Group of Ornamentation (E4→G4→B4)	Metaphor for the Echoing Nature of the Valley

Source: Author's synthesized

During its long development, the Zhuang have formed their own language and culture. During the period without written records, the Zhuang people used oral language as an important tool for the Zhuang people to pass on their culture and exchange ideas. The history, legends, and stories of the Zhuang people were passed down through word of mouth in Zhuang, which provided a deep cultural foundation for the development of Zhuang polyphonic folk songs. The tone changes in Zhuang are closely integrated with the music melody, giving Zhuang polyphonic folk songs a distinctive linguistic characteristic in terms of melody. For example, the lyrics of Zhuang folk songs often use rhyme and parallelism, and the melody is adjusted according to the changes in the tone of the language.

Finding 2: The relationship between the Dong language and the rhythm of songs

2.1 Introduction to the national language

Dong is also part of the Zhuang-Dong language ethnic group of the Sino-Tibetan language family, but its tone system is more complex, usually having nine tones. Dong is also divided into two dialects





according to regional grammar and phonological similarities and differences: the southern and northern dialects, which can each be further divided into three local languages based on phonological characteristics. The specific distribution is as follows:

Table 3 Table for the division of the northern and southern parts of the Dong language into native-speaking areas

Southern dialects of the Dong language	
First native language	Longsheng, Sanjiang (Dudong), Guangxi, Rongjiang, Jinping, Guizhou, and Passage, Hunan
Second native language	Sanjiang (Heoli), Guangxi; Liping and Congjiang, Guizhou
tertiary vernacular	
	Rongshui, Guangxi, Zhenyuan, Guizhou
Northern dialects of the Dong language	
First native language	Guizhou Tianzhu (Shidong), Sansui, Jianhe
Second native language	Tianzhu (Juxi), Guizhou, Xinhuang, Hunan
tertiary vernacular	
	Jinping (Datong), Guizhou, Jing County, Hunan

Source: Li Yi (2024)

Tone changes in the Dong language have had a significant impact on the melody and harmony arrangements of polyphonic folk songs. Dong folk songs are known for their complex harmony structures and rich layering of sounds. The lyrics are often about nature, community life, and historical legends.

2.2 The Influence of Ethnic Languages on Dong Polyphonic Folk Songs

The characteristics of the Dong language have had a profound impact on the lyrics and melodies of the Dong polyphonic folk songs. In terms of lyrics, the lyrics of Dong polyphonic folk songs are mostly written in the vernacular of the Dong people. This simple and pure language has a strong life force and can accurately express the thoughts, feelings, and life scenes of the Dong people. At the same time, due to the rich tones of the Dong language, care must be taken during singing to match the rhyme and tone changes between words, which gives Dong polyphonic folk songs a unique rhythm and beauty when sung.

From a melodic point of view, the ups and downs of the Dong language tone and rhythm provide a natural basis for the melodic direction of Dong polyphonic folk songs. When singing, singers adjust the height, length, and strength of the melody according to the characteristics of Dong pronunciation, so that the melody and language merge perfectly, creating a unique musical style. For example, in some narrative grand choruses, the ups and downs of the melody are closely integrated with the narrative of the lyrics, vividly telling the historical stories and legends of the Dong people. The nine-tone system of the Dong language provides a fine pitch mold for Dong music. For example, in "Song of the Cicada," the word "liu²" (cicada) in the second tone (high-rising 35th tone) is expanded into a melodic line that jumps up by a fifth and then slides down (D4→A4), which not only simulates the physical sound frequency of the cicada's wings, but also recreates the Dong people's ecological knowledge through the tension of the intervals.

Table 4 Tone Analysis Table of the Dong Language in the Song" Chan Zhi Ge (Song of the Cicada)"

Tone Category	Tone Value	Example Word	Melodic Segment	Musical Expression
Tone 1	55	/sa:ŋ ¹ /(Sound)	Starting Long Note by the Lead Voice (A4 sustained for 3 beats)	Establishing the Tonal Center, Imitating Cicada Song
Tone 2	35	/liu ² /(Cicada)	Ascending Fifth Interval Leap (D4→A4) followed by a Slide Down	Imitating the Vibrating Sound of Cicada Wings
Tone 3	323	/na:m ³ /(South)	Stepwise Triad (E4→G4→B4)	Depicting the Expansion of Geographic Space





Tone Category	Tone Value	Example Word	Melodic Segment	Musical Expression
Tone 4	31	/tʰin⁴/(Listen)	Descending Minor Third (C4→A3)	Creating Pauses for Listening and Breathing
Tone 5	53	/ka.u⁵/(Call)	Rapid Group of Ornamentation (B4→F4→D4)	Simulating the Instantaneous Burst of Cicada Song
Tone 6	33	/təu⁶/(Tree)	Sustained Note E4	Building the Sense of Space in the Forest
Tone 7	55	/sip⁷/(Suck)	Staccato Stab (G4, Dotted Eighth Note)	Imitating the Physiological Rhythm of Cicadas Sucking Tree Sap
Tone 8	35	/lap⁸/(Leaves)	Glissando Up (C4→E4) followed by a Rest	Representing the Moment of Sudden Leaf Vibration
	33	/kut⁹/(Root)	Weak Downbeat Sixteenth Note (D4)	Metaphor for the Underground Pulses of Plant Roots

Source: Author's synthesized

The complexity of the Dong language tones forces singers to develop special breathing control when singing “Tone Contour Based on the Syllable”. Sometimes, one word may correspond to multiple pitches. The essence is to convert the duration differences in the language tones into the time value allocation in music, so that the melody follows the rules of the Dong language tones while also being musically rich.

Research Objective 3: To study the influence of social conventions on the performance context and cultural functions of polyphonic folk songs

Finding 1: Zhuang polyphonic folk songs carried the functions of cultural transmission and community cohesion in traditional societies, and were deeply influenced by historical social systems such as tribal alliances and the tribal chief system.

1.1 Introduction to the social system

In traditional Zhuang society, the village and the family were the basic units, and the village elders played an important role in community affairs. Zhuang polyphonic folk songs were widely spread in village activities such as weddings, sacrifices, and festivals, not only for entertainment, but also for maintaining community solidarity and passing on history and culture.

During the pre-Qin period, Zhuang ancestors mainly lived in matrilineal clan communities, and their economic basis was hunting and gathering. As society developed and after entering the Bronze Age, the social structure became more complex, with the emergence of the “jun” and “jiang” classes, and the social structure of the Zhuang gradually took shape. During this period, Zhuang folk songs were not only used in productive labor but also performed political, military, and romantic functions. In particular, the early tradition of duets was closely related to social needs such as marriage and tribal alliances, reflecting the mutual influence of social structure and folk songs.

During the Qin and Han dynasties, as Lingnan was incorporated into the central government, the social structure of the Zhuang people changed, and Han culture gradually penetrated. The Zhuang people began to borrow Chinese characters, forming the ancient Zhuangzi or square Zhuangzi. During this process, the content and form of the Zhuang's polyphonic folk songs also gradually developed. In particular, with the feudalization of the East and the integration of the Central Plains culture, folk songs absorbed more Central Plains elements, while the West maintained its original style. The form and theme of folk songs were therefore influenced by social structure.

During the Ming and Qing dynasties, the system of tribal chiefs dominated Zhuang society. Tribal chiefs were not only political rulers, but also protectors of culture. Folk songs became the focus of social,





sacrificial, and festive activities. Polyphonic singing became an important vehicle for cultural identity, demonstrating the influence of collective social structure on folk songs. The emphasis placed on culture by tribal chiefs promoted the inheritance and development of folk songs, such as organizing Song Festivals, which enabled folk songs to be widely disseminated. Folk songs became a symbol of social interaction and national unity.

From the late Qing Dynasty to the Republic of China, Western religions and capitalist economies influenced the Zhuang region, changing the social structure. Some folk songs were influenced by Western music, and new harmony forms appeared. However, on the whole, folk songs still maintained a strong ethnic character, especially those created during the resistance struggle, which became a symbol of ethnic identity and the struggle for unity.

After the founding of the People's Republic of China in 1949, the Zhuang nationality was officially recognized, and the Guangxi Zhuang Autonomous Region was established, marking the beginning of regional national autonomy. The social structure of the Zhuang nationality was safeguarded and developed, and Zhuang polyphonic folk songs ushered in a period of prosperity. They became the core of cultural identity and played an important role in the new socio-political environment.

1.2 The Influence of the Social System on Zhuang Polyphonic Folk Songs

The influence of the social system on the Zhuang polyphonic folk song is reflected in many ways. Under the traditional social system, folk songs played an important role in the lives of the Zhuang people and were an important way for people to socialize, entertain themselves, and pass on their culture. For example, during Song Festivals, young men and women would sing to each other to find a partner, and to show off their talents and wisdom. Folk songs were also an integral part of various festivals and life ceremonies, and people would sing to celebrate festivals, express their blessings, and express their grief. At the same time, changes in social systems have also affected the way folk songs are passed down and their content. During the period of the tribal chief system, the transmission of folk songs mainly relied on oral transmission and family inheritance. The content of the songs was mostly related to the history, legends, production, and life of the Zhuang people. However, in modern society, with the popularization of education and the diversification of cultural dissemination methods, the way folk songs are passed down has also become more diverse. School education and the promotion of cultural institutions have all become important ways of passing down folk songs. In addition, the development of modern society has also made the content of folk songs more diverse, incorporating more modern elements that reflect the changes in the lives of the Zhuang people and their perceptions of the times.

Finding 2: The changes in the Dong social system and the close-knit social relationships among acquaintances have promoted the development of polyphonic folk songs, which reflect collectivist values and social trust mechanisms.

2.1 Introduction to the social system

The Dong people do not have an independent writing system, and their history and cultural heritage are mainly passed down through singing. As a carrier of intangible cultural heritage, the Dong Grand Choir records the history of the ethnic group, conveys morals, teaches production knowledge, maintains social etiquette, and performs other functions. As history progressed, the Dong polyphonic folk song gradually evolved, and its functions continued to diversify.

Before the Tang Dynasty, Dong polyphonic folk songs were still in their infancy. They were mainly based on a hunting and gathering economy, and collective labor became a social characteristic. During this period, the prototype of the Dong Grand Choir, the "ye song," was born. It had the characteristic of improvised shouting and was often used for labor and sacrifice. The songs were mainly monophonic, and the rhythm changed with collective labor. They were constructed by repeating the meaningless lyrics

"ye" and "hey ho." In terms of political systems, the Dong people once had the "Kuan" organization, which was a form of regional rural commune with various functions such as military alliances, political alliances, and social management. The "Kuan" organization standardized the behavior and social order of the Dong people by formulating and enforcing agreements. The poetic form





of “Kuan” also promoted the development of the Dong Grand Choir, allowing the economic system and folk songs to permeate each other and gradually form a multi-part chorus.

During the Tang and Song dynasties, as feudalism took hold, the Dong's polyphonic folk songs began to take shape. The Dong people began to live together in groups, gradually forming village communities, which led to the emergence of the “dos yeeh” choral form. At this time, dance was added to the songs, making the singing style even more lively. The number of participants increased, and instrumental accompaniments such as the *lusheng* appeared. The performance style began to be standardized, forming a performance pattern with men and women in separate rows, in a circular formation.

During the Ming and Qing dynasties, the Dong polyphonic folk song entered a stage of professional development, with more diverse combinations of vocal parts, such as the emergence of singing styles such as male-female counterpoint and children's voices leading the way. At the same time, the song structure became more complex, with the emergence of a full narrative Dong Grand Choir. The performance also became more sacred, and important ceremonies were performed in the drum tower.

After the founding of New China, cultural protection policies promoted the transformation of the Dong ethnic group's polyphonic folk songs, which gradually evolved from being passed down within the community to being showcased at ethnic cultural events, extending their functions. At the same time, professional musicians collaborated with traditional song masters to improve the creation and inheritance mechanisms, and used digital technology to achieve cross-cultural communication, so that the Dong polyphonic folk songs have gradually become part of humanity's common cultural heritage.

2.2 The Influence of the Social System on Dong Polyphonic Folk Songs

In the Dong people's primitive social life and collective work, primitive forms of music such as the “ye” song gradually emerged in order to coordinate the rhythm of work and express emotions. The *ye* song is a form of group singing, usually performed at rituals and work occasions. It has a simple melody and rhythm, and is the prototype of the Dong people's polyphonic folk songs. With the emergence of the “section” organization, the Dong people used to sing to pass on and publicize the “section” agreements during the collective activities of the “section”, which further promoted the development of the Dong polyphonic folk song. During the activities of the “section”, the Dong people gradually enriched the chorus form and the cooperation between the parts became more tacit, which perfected the art form of the polyphonic folk song.

Finding 3: The social activities of the Zhuang and Dong peoples revolve around the farming cycle.

3.1 Introduction to the social activities of the Zhuang and Dong ethnic groups

The social activities of the Zhuang and Dong peoples are closely linked to the farming cycle. From spring to winter, Folk cultural activities are carried out throughout the year, reflecting their respect for the rhythms of nature and their dependence on agricultural production.

For the Zhuang people, spring is the season for sowing seeds and praying for rain. People pray for rain by sacrificing frogs and beating bronze drums, which marks the beginning of spring farming. The *Bauqloxdoh* Grand Ceremony on the 19th day of the second lunar month conveys respect for the ancestors of agriculture and marks the start of the busy farming season, while the *Song* Festival on the third day of the third lunar month combines land worship with the passing on of farming knowledge. In the summer, when the Zhuang people's crops are growing, Folk cultural activities focus on “protection” and gratitude. For example, the *Cattle Soul* Festival and the *She* Festival are both celebrations to thank the oxen for their hard work and emphasise the importance of the community working together to protect agricultural production. Autumn is the season of harvest, and Zhuang folk cultural activities are mostly full of gratitude. During the *Ghost* Festival, every household offers new rice to their ancestors to thank them for the harvest, while worshiping the rice god is a way to pay respect to the god and show reverence for nature's gifts. Winter is a slack season for farming, so festivals tend to focus on taking stock and praying for blessings. The *Spring* Festival is the most important festival of the year, when Zhuang people offer food to their ancestors and hold lively celebrations, symbolizing the warding off of disasters and the





anticipation of the new year.

The Dong people also have a ritual character in their farming activities. In spring, Dong villages hold the Kaiyangmen ceremony to worship the land god and pray for fertile land and successful agriculture. When the fish fry are released into the rice fields, the Dong people chant ancient songs to pray for the protection of the water god and the symbiosis of rice and fish. This ritual not only shows respect for nature but also reflects ecological wisdom. In the summer, the Dong have the custom of “closing the rice fields”. After the rice planting is finished, outsiders are forbidden to enter the rice fields, as it is believed that this will disturb the rice spirit. This taboo ensures the order and sustainability of agricultural production through sanctification. In the autumn, the Dong welcome the New Rice Festival, when every household offers sacrifices to their ancestors to give thanks and celebrate the harvest. The two singers and dancers in front of the drum tower have become a combination of sacrifice and community activities. In winter, the Dong New Year Festival symbolizes the conclusion and restart of the farming cycle. Ancestor worship rituals and activities, such as young men and women singing duets to choose mates, incorporate the stored wisdom of the harvest season and the survival strategies of the people. At the same time, the epic chants of the Sama Festival reaffirm the contractual relationship between “people-gods-land” and inject spiritual momentum into the new farming cycle.

In general, the folk cultural activities of the Zhuang and Dong nationalities revolve closely around the farming cycle, from the spring sowing prayers, summer farming protection, autumn thanksgiving celebrations, to the winter summary and blessings. Farming and social life are deeply intertwined, and folk cultural activities are both an understanding of the laws of nature and a cultural heritage of agricultural production and community unity. They demonstrate the wisdom of farming civilization and a reverence for nature.

3.2 The function of polyphonic folk songs in this context

The polyphonic folk songs of the Zhuang and Dong not only have a close connection with social activities, but also profoundly reflect the similarities between the two cultures in terms of collectivism, social collaboration, and cultural inheritance. In the traditions of these two peoples, folk songs are an important link in social interactions and an expression of their beliefs and collective lives.

For the Zhuang people, the emergence of polyphonic folk songs is closely related to collective labor. Zhuang singing activities have a strong collective spirit, which is fully reflected in traditional Folk cultural activities. The transmission of Zhuang folk songs is passed down through the generations, usually from family elders to children, forming a cultural transmission system within families and communities. Especially during the traditional festival of “Ge Wei”, collective singing is not only a wish for a better life, but also a way for the Zhuang people to convey their ethnic memories, emotions, and awe of nature through singing. The collective singing at the Song Festival demonstrates the cohesiveness of the Zhuang community and the importance attached to collectivism. These singing activities, whether on ridges, hillsides, or in valleys, are an important part of people's lives.

The polyphonic folk songs of the Dong people have a strong social function. The Dong “Yue Ye” song festival is a typical form of social interaction, usually expressed as collective friendship-making between villages. Through singing in the Dong Grand Choir, young men and women meet and fall in love. This is not only a form of entertainment, but also an expression of social interaction and cultural identity. Dong folk songs play an important role in collective activities, especially those that take place across villages. Through singing, the Dong people build social networks and strengthen ties between ethnic groups. Every festival and event is inseparable from the Grand Choir. The Dong Grand Choir singing scene is rich and diverse, from sacrifices, weddings, and funerals to social activities, all of which are full of the spirit of cooperation and interaction.

The polyphonic folk songs of the Dong and Zhuang are not just a form of entertainment or art; they play multiple roles in the social activities of these ethnic groups. They are a symbol of cooperation, a vehicle for cultural transmission, and an expression of ethnic identity and social cohesion. Through singing, the Zhuang and Dong peoples not only pass on agricultural knowledge and seasonal wisdom but





also strengthen the spirit of mutual assistance and cooperation in their communities, making these folk songs an indispensable cultural symbol in their social lives.

In summary, the polyphonic folk songs of the Zhuang and Dong peoples play an important role in their social activities. From collective labor to social interaction, from religious ceremonies to cultural inheritance, folk songs are not only an expression of their emotions and culture, but also a reflection of their social structure and community spirit. Through these singing activities, the Zhuang and Dong peoples demonstrate their deep understanding of and respect for nature, tradition, and collectivism.

Research Objective 4: To explore the intrinsic connection between polyphonic folk songs and cultural ecology

Finding 1: The dynamic symbiotic relationship between polyphonic folk songs and cultural ecology

1.1 The dynamics of polyphonic folk songs in modern society

This part documents the practice and changes of polyphonic folk songs in modern society through a combination of field observations and interviews. The researchers selected two cases from the Zhuang and Dong ethnic groups for analysis. The Zhuang case shows how modern communication technology has affected traditional mountain songs, with platforms such as WeChat groups becoming new spaces for exchange. The Dong case shows how, in a stable village society, polyphonic folk songs continue to be passed down through traditional rituals and customs, and are integrated into the education system to maintain their function of cultural transmission. These two cases represent the adaptation strategies of folk songs in modern society: on the one hand, the communication changes brought about by new media, and on the other hand, the collective inheritance in traditional villages.

1.2 Zhuang case: WeChat groups for singing duets

Through field research, it was found that Zhuang folk songs have now adapted to modern communication tools, with WeChat groups becoming a new platform for duets. In WeChat groups, Zhuang people sing online duets via mobile phones, covering topics such as love, life stories, history, and culture. Despite the online interaction, the rhythm and structure of traditional folk songs are retained, and participants sing through instant voice recordings, displaying a multi-voice singing style.

In the interview, the singers mentioned that they maintain harmony through face-to-face singing or singing in a circle, and in the WeChat group, they maintain harmonious singing through eye contact and improvised songwriting. Online singing competitions not only promote communication between Zhuang people in different regions but also serve to unite people and address social issues under certain circumstances.

1.3 Dong case: The inheritance of Da Ge

The Dong Grand Choir has been passed down in a highly collectivized village society. Every village has a choir, and villagers start learning songs from an early age, with the skills being passed down by "song masters". The transmission of the Dong Grand Choir is highly collective and regulated. Villagers gather together to sing during festivals, forming a close cultural community.

The social environment of the Dong people has promoted a high degree of trust and cohesion among the residents. The Dong Grand Choir has continued to develop through collective transmission within families and villages, and this form of transmission is now beginning to be combined with school education. Research has found that the Dong Grand Choir not only carries Ethnic history and culture, but also plays a role in providing spiritual comfort in education, and has a particularly positive impact on left-behind children.

1.4 Adaptability of polyphonic folk songs

Field surveys and interviews with the Zhuang and Dong ethnic groups show the adaptability and development of polyphonic folk songs in modern society. The Zhuang ethnic group continues the culture of mountain songs through platforms such as WeChat groups, while the Dong ethnic group maintains the collectivity and normativity of the Dong Grand Choir in traditional villages. These two ways of transmission demonstrate the diverse development paths of folk songs in modern society, while also reflecting the dynamic symbiotic relationship between folk songs and cultural ecology.





Finding 2: The relationship between adaptability and dynamic adjustment

2.1 Transformation of cultural functions: from daily life to multiple applications

Traditional folk songs are rooted in daily life. They are not only a tool for social interaction, but also an important vehicle for expressing emotions and passing on history. With the development of the times, the application of folk songs has expanded to the fields of intangible cultural heritage protection, cultural promotion, and tourist art performances. For example, the Zhuang polyphonic folk song has been adapted for modern stage performances, and the Dong Grand Choir's "Song of the Cicadas" is used as background music for scenic area promotions. The transmission of folk songs has expanded from traditional life practices to a wider field of cultural communication.

2.2 Changes in transmission methods: from oral transmission to multi-channel dissemination

Traditionally, folk songs were transmitted orally, with the village "song king" or "song master" as the core transmitter. With social change, the rise of short video platforms has made the transmission of folk songs more convenient, and many young people learn about folk songs through social media. Activities such as the "Folk Song Challenge" have broadened the channels for the transmission of folk songs. At the same time, the rise of professional performance groups has made folk song performances more diverse, and local cultural departments and institutions are also actively promoting the protection and promotion of folk songs. The traditional transmission methods of folk songs and modern communication models complement each other, jointly promoting the inheritance and development of folk songs.

2.3 Adapting the singing environment: incorporating modern technology

The polyphonic folk songs of the Zhuang and Dong peoples have undergone some adjustments in the modern communication environment. For example, the major second interval in Zhuang two-part folk songs has been adjusted to a third in some works to suit broader aesthetic needs. The polyphonic structure of the Dong Grand Choir has been simplified in stage performances to make it more malleable. At the same time, the singing scene has also changed, from traditional natural fields such as fields and drum towers to stages, concert halls, and digital media spaces. Modern sound technology has enhanced the stage effects, and the dissemination of short videos has allowed traditional performances of long folk songs to be presented through the best clips, adapting to the viewing habits of modern audiences.

2.4 Adaptation of inheritance and development: diversified promotion system

With the advancement of communication technology, the influence of Zhuang and Dong folk songs has increased worldwide. In academic teaching, the notation and fixed repertoire of folk songs have gradually become more popular, and the modes of creation and learning of folk songs are also constantly being adjusted. Folk songs have gained more display platforms in large-scale cultural festivals, and at the same time, the promotion of tourism culture has also promoted the connection of folk songs with a wider range of people. All these changes not only provide opportunities for the promotion of folk songs, but also promote the development of folk songs in a new environment.

Discussion

This study explores the cultural ecology of Zhuang and Dong polyphonic folk songs, analyzing their relationship with the natural environment, language, and social structure. The main findings include: Geographical environment significantly affects folk song style, with Zhuang folk songs showing regional differences and Dong folk songs being more uniform; language has a different impact on musical characteristics, with Zhuang music reflecting tonal characteristics and Dong placing an emphasis on harmonic coordination; social structure affects musical performance, with Zhuang people favoring individual communication and Dong people focusing on collectivism and hierarchy.

The research results support Steward's (1955) cultural ecology concept and emphasize the important role of language in musical adaptation. Despite the different geographical environments of the two groups, the similarity of tonal patterns indicates that a shared linguistic heritage has influenced musical culture, suggesting that cultural factors play a profound role in musical evolution. Nettl's (2015) model of musical





change is extended to reveal the interplay of ecological factors. The mountainous environment of northern Guangxi has enhanced the Zhuang's high-voice vocal technique, while the valley environment of the Dong has contributed to more complex harmonic structures.

These findings highlight the key role of the natural environment, language, and social structure in music evolution. Consistent with previous research, the geographical environment had a profound influence on the diversity of Zhuang folk songs, while Dong folk songs were closely related to community organization. The influence of the Dong language on music was more evident in tonal and harmonic fusion than in strict tonal patterns.

This study enriches the theoretical framework of the relationship between music and the environment from a cultural ecology perspective, demonstrating the complex role of cultural, social, and natural environments in shaping traditional music. The study also found that Zhuang folk songs express individual interactions with the natural environment, while Dong folk songs express community culture through collective singing. These differences stem from geographical isolation, social structure, and natural responses.

Although this study provides important insights into the cultural ecology of Zhuang and Dong folk songs, methodological limitations mean that the music practices of some regions and individuals were not fully covered, and the impact of modernization on traditional music was not thoroughly investigated. Future research should further explore these factors to gain a more comprehensive understanding of the process of cultural adaptation.

Conclusion

This study explores the cultural ecology of Zhuang and Dong polyphonic folk songs, analyzing the influence of the natural environment, language, and social structure on the two types of folk songs. Despite the Zhuang and Dong peoples sharing a similar climate and common linguistic roots, the study found that they developed unique musical adaptations based on their respective environmental and social needs. Zhuang polyphony placed a greater emphasis on call-and-response patterns adapted to the mountainous terrain, while the Dong developed complex harmonic structures in valley settlements and communal gathering places. These results suggest that cultural ecology factors shaped the two musical expressions through the interplay of environment, language, and social structure.

The study reveals similarities and differences in the cultural adaptations of Zhuang and Dong folk songs. Both are strongly influenced by the natural environment and social structure, but the echo pattern of Zhuang music is more adapted to the mountainous terrain, while the harmonic structure of Dong music has been developed through collective activities and gathering places. These differences reflect the different responses of the two ethnic groups in geographical isolation and cultural evolution, indicating the key role of cultural ecology factors in the evolution of music.

This study extends cultural ecology's understanding of music adaptation theory, particularly how language, natural environment, and social structure interact to shape musical traditions. It reveals the close connection between music and the ecological environment and emphasizes the practical significance of cultural protection. By analyzing the music traditions of the Zhuang and Dong ethnic groups, the study emphasizes the importance of protecting the cultural ecological context and reminds us that the interaction between the natural environment and social structure should be considered in the process of cultural protection in order to ensure the sustainable transmission of traditional music.

This study not only provides new perspectives for ethnomusicology but also addresses the challenges of globalization and modernization on traditional cultures. The research shows that despite the pressures of cultural change, the music traditions of the Zhuang and Dong peoples have demonstrated remarkable resilience, a characteristic that stems from their adaptive advantages embedded in their unique cultural ecologies. The study shows that the embeddedness of cultural ecology has enabled these traditions to survive changes over the centuries and provides valuable lessons for cultural preservation.





Recommendation

It is recommended that the modern application of polyphonic folk songs be expanded from a cultural ecology perspective. Based on respecting the traditional style of polyphonic folk songs, more practical application paths should be explored to adapt them to the needs of modern society. First, support can be given to collaborations between professional musicians and folk artists to adapt polyphonic folk songs into musical works that meet modern aesthetics, such as film and television soundtracks, stage play soundtracks, or innovative tracks that fuse pop and electronic music, to increase their dissemination and market recognition. Second, communication methods should be optimized to encourage local cultural institutions, universities, and the media to promote folk songs using short videos, documentaries, online concerts, and other formats to enhance public awareness and interest. At the same time, folk songs can be promoted into the music education system, promoted in school music courses, chorus teaching, and social training institutions, and the interest of young people in folk songs can be stimulated through chorus competitions, workshops, and other methods to cultivate talent for the inheritance. Finally, folk song performances with immersive experiences can be created in conjunction with local cultural tourism, such as intangible cultural heritage music festivals and folk song-themed tourist routes, so that the modern application of folk songs can truly integrate into contemporary social life.

It is recommended that specific strategies for cultural preservation be developed based on regional characteristics. Given the influence of geographical features on the traditional vocal music techniques of the Zhuang people, preservation efforts should target specific micro-regions rather than adopt a universal approach across Guangxi. For example, in the mountainous Hechi City, the tradition of high-pitched singing has developed based on acoustic conditions, and conservation plans should prioritize outdoor performance environments to maintain the ecological relationship between the landscape and sound projection. Conversely, the protection of the Dong Grand Choir in Sanjiang County should focus on maintaining the architectural acoustics of the traditional drum tower to enhance the complex harmonies unique to this tradition. County-level cultural departments should conduct acoustic surveys of traditional performance spaces to ensure that restoration work protects these important sound environments.

It is recommended that protection mechanisms be improved and modern ways of passing on traditions be explored. Faced with the challenges brought about by urbanization and tourism development, scientific and reasonable protection mechanisms should be established to ensure the sustainable inheritance of polyphonic folk songs. On the one hand, a balance needs to be struck between “staged performances” and “original contexts” to explore ways to maintain the authenticity of the culture while also expanding its influence. On the other hand, the government and relevant institutions should strengthen policy support, set up special funds, and promote the collection, collation, research, and innovation of folk songs. At the same time, it is necessary to strengthen the protection and support for folk artists, improve their social status and economic treatment, and encourage active inheritance. Polyphonic folk song inheritance bases can also be established to provide a platform for learning and exchange. By holding folk song festivals, concerts, competitions, and other activities, a social atmosphere conducive to the inheritance of folk songs can be created.

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