

# From Tradition to Modernity: Research on the digital transformation of intangible cultural heritage of ethnic festivals with small populations in the process of Chinese-style modernisation

Hui Jiang<sup>1\*</sup>

<sup>1</sup>*School of Design, Guangxi Normal University, China*

\*Corresponding author: Hui Jiang

## Abstract

With the opening of a new chapter in socialist modernisation at the Third Plenary Session of the 11th Central Committee of the Communist Party of China in 1978, especially since the 18th National Congress of the Communist Party of China, it has become a great measure in the process of Chinese-style modernisation to emphasise the promotion of the creative transformation and innovative development of China's excellent traditional culture. Most of the national intangible cultural heritage of ethnic festivals with small populations are located in the border areas, and the profound cultural connotation and national spirit can reflect the core characteristics and value essence of Chinese modernisation, but there is an obvious gap between the tradition of festivals and the modernity of society. Based on the theoretical achievements of the digital transformation of the intangible cultural heritage of ethnic festivals with a small population in the process of Chinese-style modernisation, this paper takes the Gelao people's rice festival as the main research object, and summarises the cultural connotation from its origin, rituals and activities, so as to enhance cultural understanding. Using digital animation with new quality productivity to empower the intangible cultural heritage of ethnic festivals with small populations, promoting cultural consciousness from the methods and countermeasures of digital transformation of reproducibility and virtuality, finding breakthroughs in the transformation of intangible cultural heritage of ethnic festivals with small populations, telling Chinese stories well, enhancing cultural identity and ethnic integration, and accelerating the promotion of Chinese-style modernisation with modern civilisation and spiritual strength.

## Keywords

Chinese-style modernisation; ethnic groups with small populations; festive intangible cultural heritage; digital transformation; The Gelao people are on the rice festival

**Suggested citation:** Jiang, H. (2025). From Tradition to Modernity: Research on the digital transformation of intangible cultural heritage of ethnic festivals with small populations in the process of Chinese-style modernisation. *Journal of Contemporary Art Criticism*, 1(2), 8–18. <https://doi.org/10.71113/JCAC.v1i2.325>

## Introduction

General Secretary Xi Jinping pointed out in the report of the 20th National Congress of the Communist Party of China: "With the core values of socialism as the guide, we must develop an advanced socialist culture, promote revolutionary culture, inherit the excellent traditional culture of China, meet the growing spiritual and cultural needs of the people, consolidate the common ideological foundation for the unity and struggle of the entire party and all ethnic groups in the country, and continuously enhance the cultural soft power of the country and the influence of Chinese culture." This is a major initiative that has been persistently implemented since the 18th National Congress, and the modernisation with Chinese characteristics cannot be separated from the nourishment of excellent traditional culture of China. In June 2023, General Secretary Xi Jinping delivered an important speech at a symposium on cultural inheritance and development, where he provided a comprehensive, systematic and in-

depth exposition of a series of major theoretical and practical issues concerning the inheritance and development of excellent traditional Chinese culture from a strategic perspective of overall party and national development. "Only by thoroughly understanding the history of Chinese civilisation can we more effectively promote the creative transformation and innovative development of excellent traditional culture of China, and more powerfully advance the cultural construction of socialism with Chinese characteristics and build a modern civilization of the Chinese nation." "Chinese excellent traditional culture encompasses many important elements that collectively shape the distinct characteristics of Chinese civilisation." Modernisation with Chinese characteristics is a modernisation that coordinates material and spiritual civilisations; material wealth and spiritual richness are the fundamental requirements of socialist modernisation. Actively exploring the excellent traditional culture of ethnic minorities with smaller populations is conducive to achieving the comprehensive development of modernisation with Chinese characteristics.

Among the 56 ethnic groups in China, there are 28 ethnic groups with a population of less than 300,000, that is, ethnic groups with small populations, and the national intangible cultural heritage of ethnic festivals with small populations is a precious wealth of China's national culture, reflecting the relatively scarce cultural connotation, rich emotions and value essence of Chinese excellent traditional culture. Its cultural form, connotation and spirit are of great importance to Chinese culture and national unity, and it occupies a place in the research of many disciplines such as ethnology, anthropology, art, music and dance, and is the spiritual wealth of China's excellent traditional culture. The inheritance and promotion of ethnic culture, the key protection and development of national intangible cultural heritage and representative projects of ethnic minorities with small populations is also an important part of the "13th Five-Year Plan for Promoting the Development of Ethnic Areas and Ethnic Minorities with Small Populations".

In the process of Chinese-style modernisation, the intangible cultural heritage of ethnic groups with small populations is not only a characteristic resource, but also a spiritual driving force in the process of Chinese-style modernisation. It is necessary to make full use of the new media, new technologies and new methods in the 5G era to bring traditional festivals back to the public eye, gain widespread attention, enhance participation, and truly implement the plans for promoting the development of ethnic minority areas and ethnic groups with small populations, and rejuvenating the border areas and enriching the people during the 14th Five-Year Plan period. Placing the festival intangible cultural heritage of ethnic groups with small populations in a more prominent strategic position is conducive to narrowing the gap with the digital development of festival intangible cultural heritage of other ethnic groups.

## **The theoretical achievements of the digital transformation of the intangible cultural heritage of ethnic festivals with small populations in the process of Chinese-style modernisation are the foundation for innovation and transformation**

Only by placing the digital transformation and dissemination of traditional festivals of ethnic minorities with small populations in the process of Chinese-style modernisation, and sorting out the research achievements of the protection and inheritance of the intangible cultural heritage of traditional festivals of ethnic minorities, the digital transformation and development of traditional culture of ethnic groups with small populations, and the development of traditional culture of ethnic groups with small populations, and analysing the weak problems, can we better solve the problem of digital transformation of intangible cultural heritage of ethnic festivals of ethnic groups with small populations in the process of Chinese-style modernisation.

### ***Protection and inheritance of the intangible cultural heritage of ethnic minority festivals***

Domestic scholars suggest that the inheritance and development of the traditional culture of ethnic groups with small populations should be the focus of humanities and social science research and talent training projects, and that multimedia resource systems should be built, such as the use of Oroqen intangible cultural heritage education, multimedia and exhibition halls, and the inheritance of ecological zones. The inheritance of festival culture can be innovated and developed in the form, content and creative elements of festivals from the perspective of media and news, and carried out by giving full play to the role of policies and the Internet, such as the Maonan Dividing Dragon Festival to enhance the tourism brand by playing the leading role of the government, creating a digital platform for the needs of intangible cultural heritage education users, and establishing a cyberspace with the theory of memetic evolution. China, Japan and South Korea have already had incentive policies for the protection of traditional folk culture, and the Gangneung Dragon Boat Festival in South Korea has been institutionalized and celebrated to achieve profitability and effective dissemination.

### ***Digital transformation and dissemination of traditional ethnic cultures with small populations.***

The cultural information resources of ethnic groups with small populations are digitised through website construction and database construction, such as the cultural resources of the Brown ethnic group need to be digitally collected and realised by comprehensively adopting digital technology and three-dimensional digital technology; The dissemination of Yugur ethnic culture starts from the "visualised" Yugur customs programme to the lively and lovely Yugur children's emojis, giving full play to the participation of modern media and playing a role in reproducing and protecting the existing cultural relics.

### ***Research on the inheritance and development of intangible cultural heritage of ethnic festivals with small populations***

Through the government-led, enterprise-involved, and cultural heritage inheritors, the inheritance of the Gelao Yifan Festival is inherited from the aspects of image preservation, the cultivation of inheritors, and the expansion of communication models. The survey found that the skills of the duxiane in the Jing Ha Festival were not developed, and cultural creativity should be increased. The Dulong Kaqwawa Festival can interact with new media such as videos, interviews and Weibo; The inheritance of the De'ang Flower Watering Festival can be synchronized with social education and school education.

### ***Research on Chinese modernisation and the development of traditional culture***

The excellent film and television works of the creative transformation and innovative development of the excellent traditional Chinese culture are regarded as the implementation of the "two combinations", and as a resource and logo, the excellent traditional Chinese cultural genes and their expressions in the new era of film and television creation are analysed. The research of the above scholars has lofty intentions, and has promoted the conscious efforts of systematisation and theorisation of the research on the digital transformation of traditional ethnic minority cultures, which is quite theoretical. Scholars at home and abroad have proposed the use of the Internet, database construction, three-dimensional technology, etc. to protect the digital protection of such cultures, but there are many theoretical analyses of inter-ethnic political integration, less practical combing, more common discussions, and little research on endangered festivals. Scholars have expounded on the inheritance and development of the Yifan Festival of the Gelao Nationality, the Kaqwah Festival of the Dulong Nationality, the Ha Festival of the Jing Nationality and the Watering Flower Festival of the De'ang Nationality, which solves the problem of introverted development of the festival itself, but the research on digital transformation and communication is weak. There are very few studies on the relationship between Chinese-style modernisation and the development of traditional culture, and there is no research on ethnic festivals with small populations in the process of Chinese-style modernisation. In the era of big data with the gradual deepening of 5G, giving priority to the development of ethnic intangible cultural heritage of ethnic groups with small populations will help narrow the gap with the social environment and contribute to the development of Chinese-style modernisation. Among the 56 ethnic groups in China, there are 28 ethnic groups with a population of less than 300,000, that is, ethnic groups with small populations, and the national intangible cultural heritage of ethnic festivals with small populations is a precious wealth of China's national culture, reflecting the relatively scarce cultural connotation, rich emotions and value essence of Chinese excellent traditional culture. Its cultural form, connotation and spirit are of great importance to Chinese culture and national unity, and it occupies a place in the research of many disciplines such as ethnology, anthropology, art, music and dance, and is the spiritual wealth of China's excellent traditional culture. The inheritance and promotion of ethnic culture, the key protection and development of national intangible cultural heritage and representative projects of ethnic minorities with small populations is also an important part of the "13th Five-Year Plan for Promoting the Development of Ethnic Areas and Ethnic Minorities with Small Populations". In the process of Chinese-style modernisation, the intangible cultural heritage of ethnic groups with small populations is not only a characteristic resource, but also a spiritual driving force in the process of Chinese-style modernisation. It is necessary to make full use of the new media, new technologies and new methods in the 5G era to bring traditional festivals back to the public eye, gain widespread attention, enhance participation, and truly implement the plans for promoting the development of ethnic minority areas and ethnic groups with small populations, and rejuvenating the border areas and enriching the people during the 14th Five-Year Plan period. Placing the festival intangible cultural heritage of ethnic groups with small populations in a more prominent strategic position is conducive to narrowing the gap with the digital development of festival intangible cultural heritage of other ethnic groups.

### **The intangible cultural heritage of ethnic festivals with small populations is the connotation and spiritual wealth of the historical development of Chinese modernisation**

In 1978, the Third Plenary Session of the 11th CPC Central Committee opened a new chapter in socialist modernisation, and in 1979, Comrade Deng Xiaoping, then vice premier, once proposed: "Now we should carry out construction in accordance with China's conditions and embark on a Chinese-style road to modernisation." In 1981, the Sixth Plenary Session of the 11th Central Committee of the Communist Party of China unanimously adopted the "Resolution on Several Historical Issues of the Party since the Founding of the People's Republic of China" drafted by Deng Xiaoping, proposing to gradually build a highly democratic socialist system, and socialism must have a high degree of spiritual civilisation; In 1987, the 13th National Congress of the Communist Party of China put forward the development strategy of socialist modernisation with the "trinity" of prosperity, democracy and civilisation. In 2007, the 17th National Congress of the Communist Party of China (CPC) expanded the goal of construction to the "four-in-one" of prosperity, democracy, civilisation and harmony, and explored a modern socialist path suitable for China's national conditions. In 2012, the 18th National Congress of the Communist Party of China put forward the goal of becoming a prosperous, strong, democratic, civilised, harmonious and beautiful "five-in-one" modern socialist power. In 2021, at the celebration of the 100th anniversary of the founding of the Communist Party of China, General Secretary Xi Jinping said: "We have adhered to and developed socialism with Chinese characteristics, promoted the coordinated development of material, political, spiritual, social and ecological civilisations, created a new path of Chinese modernisation, and created a new form of human civilisation.<sup>1</sup>" The historical process of Chinese-style modernisation has opened up unprecedented future development opportunities for China's excellent traditional culture, and the excellent traditional culture of all ethnic groups in China has also provided the value wealth of the common spiritual home of the Chinese nation and the spiritual nourishment of unity and harmony for Chinese-style modernisation.

In the process of Chinese-style modernisation, the national intangible cultural heritage of ethnic festivals with small populations has gained unprecedented attention and development opportunities. For example, there are more than 10 festivals and intangible cultural heritages, such as the Tajik Water Diversion Festival and the Sowing Festival in the northwest region, the Basque Festival of the Russian nationality, the Yifan Festival and the Jing Ha Festival of the Gelao nationality in the southern region, the Serbin Festival of the Evenki nationality and the Gulunmu Festival of the Oroqen nationality in the northern region, and the Nadun Festival of the Tu nationality in the Qinghai-Tibet region, which were included in the first, second and third batches of national intangible cultural heritage list in 2006, 2008 and 2011. Although each has its own characteristics, the cultural connotation is inseparable from the gratitude to the ancestors, the blessing of farming, the reverence for nature, the support of national unity, and the direction of a better life.

In the 60s and 70s, archaeological research found the remains of a human skeleton from the Stone Age in the Dushan Retort Rock in the south of Guilin City, which is called the Retort Rock Man and is the ancestor of the Gelao people. In 1956, the State Council officially recognised the Gelao ethnic group. The Gelao Yifan Festival was gradually produced when the ancient Luoyue ethnic group was divided into the ethnic community of 'Ling' and 'Mu Lao', and has a history of at least about 500 years. <sup>2</sup> Guangxi Luocheng Gelao Autonomous County Sijiao Township New Village in the Qing Dynasty Tongzhi period of the 'Xie Ancestral Monument' recorded: 'Every year of the ugly year, at the end of the second day of the beginning of winter, the assembly of Wu Yi rice. <sup>3</sup>The Gelao people are mainly distributed in Guangxi, Guizhou, Yunnan and other provinces, and more than 90% of them live in Luocheng County, Guangxi, with a total population of about 210,000, which is one of the less populous ethnic groups in China. The Yifan Festival of the Gelao Nationality is the most traditional and unique festival, and it is a representative festival intangible cultural heritage in southern China. In May 2006, it was approved by the State Council to be included in the first batch of national intangible cultural heritage list.

### ***The main content and cultural connotation of the Gelao Yifan Festival***

Festivals are specific social phenomena and cultural activities formed by people in long-term production, life and other practices; these activities are often closely related to touching or beautiful legends, linked to mysterious sacrificial ceremonies, and inseparable from concepts, environment, psychology and other factors. Cultural connotation is the emotional product that exists between festival legends, rituals and activities.

#### ***Originated from the cult of heroes***

<sup>1</sup> Speech at the celebration of the 100th anniversary of the founding of the Communist Party of China. <http://cpc.people.com.cn/n1/2021/0702/c64094-32146864.html>.

<sup>2</sup> TONG Yujia, WANG Kuizheng. Exploration of the cultural connotation of 'Yifan Festival' of the Gelao people[J]. Journal of Wuhan Textile University. 2012.

<sup>3</sup> Luo Rize, Guo Zhu, Guo Wei. Chronicles of the customs of the Gelao people[M]. Beijing: Minzu University of China Press, 1993.

There are several legends about the Gelao people's Yifan Festival: first, the ancestor of the Gelao people was imprisoned for "doing something wrong", and was released by those surnamed Liang and Wu. The second legend is that the Gelao people encountered a foreign invasion during the Song Dynasty, and the two surnamed Liang and Wu led the villagers to resist bravely but sadly died. In order to commemorate the achievements of the father and daughter, and to express gratitude for their merits, the Gelao people in villages beat gongs, drums, and sing songs gathered together to create a festival that returns the wishes of their ancestors, which carries the connotation of thanksgiving to ancestors and hero worship, and embodies the familial and patriotic sentiments of the martyrs who fear neither danger nor obstacles, as well as the spirit of benevolence and gratitude of the Chinese sons and daughters. It is an important part of China's traditional culture and is also a rare and precious cultural resource.

### *A prayer that originates from farming*

The Gelao people originated from agriculture and primitive beliefs in the rice festival, and planted rice, corn, sugarcane and other crops in the area, hoping for good weather and abundant grains. It is not difficult to see that people's specific thoughts and emotions about festivals reflect the fundamental aspirations of the ethnic people, and contain cultural connotations such as being prepared for danger in times of peace, reverence for nature, and harmony between nature and man. Passing on the concept of harmony between man and nature for future generations, it has created today's beautiful Gelao Mountain Township, and practised the truth that "lucid waters and lush mountains are invaluable assets".<sup>4</sup>

### *Reverence from faith*

The formation of the Gelao ritual has its historical roots, which is a spontaneous religion that has gradually developed after the baptism of the three major religions of "Confucianism, Buddhism and Taoism" and the primitive national beliefs of the Gelao people, and has become the basic way for the Gelao people to express their beliefs. A brief analysis of the historical reasons for the formation of the ritual of "Yifan Festival". The Lao Yi Fan Festival is mainly popular in Dongmen Town, Sijiao Township, Luocheng Lao Autonomous County, Guangxi Province, where Luocheng Dongmen Town will celebrate the festival on the day of the beginning of winter in the leap year of the lunar calendar, held once every five years, while the surnames Xie and Wu in Sijiao Township celebrate once every three or four years, with other surnames following a similar pattern, held for one to three days each time. The traditional rice festival is held in the ancestral hall or the head of the clan, where the door of the ancestral hall is decorated with red, yellow, green, and blue coloured paper inscribed with the words "Fengshen", "Jifu", "Yifan" and other couplet phrases placed on the lintel, and in front of the hall, pine branches are tied to form three doors. The walls on both sides are adorned with 36 statues of gods, and the hall features a one-meter-high incense altar that is used to burn incense, light candles, and place offerings. Additionally, chickens, ducks, fish, pigs, wine, glutinous rice cakes, seasonal food, and agricultural delicacies such as star anise and sand ginger are also provided. According to the ritual of the Rice Festival, it consists of seven procedures, including opening the altar, inviting the saints, ordering animals, persuading the saints, singing Niu Ge, joining the army, and sending the saints. Before the sacrifice, the portrait of the gods is hung on the wall of the hall, the masks are placed on the altar table, and glutinous rice ears tied with ribbons are hung on the wall. The two dancers and singers perform, one singing the scriptures that invite the gods to worship, while the other, dressed in red robes, dances to honour the deities, which is both sacred and solemn. This reflects the belief that the people do not forget the historical etiquette, revere the ancient civilisation, worship the gods, and protect the blessings.

### *Walk in the reproduction of joyful songs*

After the ritual of the Yi Fan Festival, the tribesmen drink chicken blood wine to ask for the protection of the gods, lion dance and dragon, and perform the right colour tune. The young people went to the side of the mountain to "walk the slope", especially the social activities of men and women, and the girls sang in response to the invitation song after hearing the young man, and sang the love song when the two were happy. Celebrate all night and carve these sweet potatoes and taro baptised by the blessing ceremony into models of buffalo and cattle and glutinous rice and grains to take home and offer them to their shrines, praying for prosperity, peace and harmony among the people. To sum up, the content and cultural connotation of the festival intangible cultural heritage reflect "the sum of the collective consciousness of common destiny, common interests, common culture and common

---

<sup>4</sup> Luo Rize, Guo Zhu, Guo Wei. *Chronicles of the customs of the Gelao people*[M]. Beijing: Minzu University of China Press, 1993.

political life."<sup>5</sup> It is the key element of national understanding and identity, and it is the result of people's attitude and identity towards their own nation and the Chinese national community in social practice, which forms an indispensable part of the sense of community of the Chinese nation, and is the characteristic embodiment of the harmonious coexistence of material civilisation and spiritual civilisation and man and nature in Chinese modernisation.

### ***The endangered status quo and opportunities of the times of the Gelao people according to the rice festival***

From the perspective of the internal causes of festivals, young people with small populations and more ethnic groups are attracted by the general environment of social integration, and most of them work outside the home, and their participation in festivals is declining year by year. The Gelao people have a limited number of inheritors according to the rice festival, and the young inheritors lack experience in the main affairs. From the perspective of the external factors of the endangerment of festivals, the performance nature of the Gelao people according to the rice festival at this stage is greater than the actual needs of the people, mainly due to the rapid development of society, the continuous improvement of people's economic level, the high happiness index, and the reduction of the prayer value in the festival. Growing indifference to the festivals of their own people; The society does not pay enough attention to the intangible cultural heritage of ethnic groups with small populations and festivals, and the transformation and dissemination of cultural innovation is insufficient. Due to historical, natural and geographical reasons, the small population of ethnic groups has weak innovation and development capabilities, and the current endangered state of festival intangible cultural heritage and the iteration of social development make it no longer realistic for the festival to return to the original state of true tradition, and the written record lacks vividness and intuitiveness. The loss of festival intangible cultural heritage and its incompatibility with modern society need to be solved urgently, but it has important value in the construction of ecological culture and spiritual civilization.

In the process of Chinese-style modernisation, people's growing demand for spiritual civilisation has brought about the revitalisation of the cultural industry, which will inevitably lead to the digital transformation of the cultural industry, placing the festival intangible cultural heritage of ethnic groups with small populations before other ethnic groups, and narrowing the development gap in order to achieve the comprehensive revitalisation of China's multi-ethnic culture, science and technology, and economy. The advent of the 5G information intelligence era, the interconnection of network media, the iterative update of digital technology, and the innovation of digital art forms have brought new opportunities to the legends, rituals and related festival activities of the festival intangible cultural heritage of ethnic groups with small populations, provided an opportunity for the understanding and recognition of festival intangible cultural heritage, promoted the exchanges and integration of various ethnic groups, and facilitated the steady and far-reaching development of Chinese-style modernisation.

## **Exploring the digital transformation methods of intangible cultural heritage of ethnic festivals with small populations in the process of Chinese-style modernisation is a speculation between tradition and modernity**

### ***Reproducible digital transformation***

Reproducible digital transformation is to present the objectively existing festival content through digital technology, including rules, presentations and specific activity content, transparent and intuitive disclosure and display, with less difference from reality, less intervention and obstruction, that is, real records. It enables it to understand the festival intangible cultural heritage more intuitively on the Internet, various terminals, museums, etc.

### ***Static reproduction of the festival programme***

There are a series of rituals in the Gelao Yifan Festival, which can be better recorded and presented in the form of video recording or object transmission. Digital photography has the characteristics of strong appeal, instant shooting, easy editing, preservation and dissemination, etc., and the static reproduction can capture the image of the "Si Gong" in the Gelao Rice Festival, and reproduce the image of the national intangible cultural heritage inheritor, which not only preserves the characteristics of Si Gong's clothing, posture and movement, but also prepares for the training of a new generation of inheritors; For the shooting records of the sacrifices in the festival, the production process, placement, type, colour, form, etc. can be realistically reproduced, and the theme of the sacrifice can be set

---

<sup>5</sup> Yang Yuqi. The social psychological connotation, measurement conception and empirical approach of the sense of community of the Chinese nation[J].Journal of Yunnan University for Nationalities(Philosophy and Social Science).2022.

to become the horizontal parallel shooting form of the festival, intuitively showing a certain link in the festival activities; The use of lenses and the choice of angle can determine the vividness of image reproduction, present the complete festival process, and display and disseminate it through exhibitions, online platforms, media, etc.

### ***Dynamic reproduction of the content of the festival***

The documentary has rich audio-visual language, diverse shots, strong sound appeal and narrative function, which can reproduce all the activities of the Gelao people according to the rice festival and have more room for expression. The beliefs, aesthetics, values and other cultural connotations of the Gelao people with a small population can be reproduced and transformed through the change of cameras, the rendering of music, and the use of technical techniques such as simultaneous sound, ambient sound, and narration. For example, through the movement of the camera, the short-focal length wide-angle dragon dance panorama and the telephoto close-up or close-up can be cross-edited to form a two-stage lens to make the picture reproduction more vivid and active. From the selection of materials to the production of the grass dragon, the individual movements of the grass dragon dance to the collective cooperation, the process and meaning of the burning of the grass dragon, etc., it is necessary to have multiple viewpoints and multiple shots to make the image reproduction more specific and detailed. Dynamic reproduction is more immersive than static reproduction because of the addition of sound effects, so that the festival is more immersive in the reproduction process.

### ***Festive reproducibility digital transformation product communication***

After digital transformation, the Gelao people have formed products with a promotional nature, which can be broadcast in fixed public places such as communities, hospitals, stores, entertainment and leisure areas, as well as interactive network media terminals and 5G base stations for bus and subway promotion. Using digital technology and network technology, the Internet, local area networks, etc. are transmitted to computers, mobile phones and other terminals, and published and disseminated through network portals, media websites, and a variety of self-media platforms, forming a communication of all to all.

### ***Virtual digital transformation***

Virtual digital transformation refers to the use of digital technology to imitate physical objects, scenes, actions or design imagination and creativity according to relevant documents or relevant written records, and to simulate or recreate digital expression art through digital technology, especially for the interpretation and expression of intangible cultural heritage legends related to ethnic festivals and festivals with small populations, which can bring twice the result with half the effort.

### ***Animation, film and television fiction of festival-related legends***

Many traditional festivals have different versions of legends, which are the source and original intention of a festival, but they cannot be recorded through video shooting. After fully understanding and analysing the festival, you can also refine the cultural connotation and integrate it into the script, formulate the structure or chapter, and draw the digital picture books and comics with story lines in the storyboard. On this basis, digital animation can also be produced, the shape needs to conform to the national characteristics, and the story does not deviate from the theme of the legend, especially the transformation of scenes, the exaggeration of actions and the processing of special effects, which can better highlight the mystery of legends such as the white horse girl saving the ancestor of the beau. The shooting of film and television short films can also express legends, and it is necessary to plan the acting skills of the actors, the preparation of costumes and props, the construction of the studio, post-production, etc., and can also be integrated into animation, so that the festival legends, festival ceremonies and festival activities are integrated and virtual.

### ***Interactive virtual of the festival process***

Whether it is the legend or activity process of the Yifan Festival of the Gelao people, the use of interactive software technology to make the festival static pictures, text introductions, audios, and videos into detailed flow charts, state transition diagrams, and storyboards according to the Yifan Festival activity process, can guide the audience to have an in-depth understanding and can interact with the experience. In addition, the use of virtual reality technology and augmented reality interaction, computer simulation to restore the sacrifice environment of the Yifan Festival, the use of head-mounted displays, tracking systems, mobile computing and other components can not only obtain three-dimensional effects, but also at the same time in hearing, touch and force perception and other aspects, in the song and dance, and interact with multiple activities of the Yifan Festival, so that the audience is immersed.

***The virtual transformation of festivals and the communication of goods***

After the digital transformation of the Gelao people in accordance with the rice festival, the products obtained from computers to mobile phones, from projectors to head-mounted displays across different devices, not only facilitate the dissemination of mobile terminals, but also establish brand awareness, create more valuable goods, and reach into public life. Anime or promotional videos of such products will be uploaded to a variety of media or intangible cultural heritage museums to enhance their explicit cultural value, closely link with agriculture, poverty alleviation, tourism, education, and scientific research, and mobilise more hidden values. On the other hand, the works of animation, film and television virtual transformation of the Gelao people based on the legends of the Rice Festival are derived and redesigned, integrated into the daily necessities of the public or stationery and educational supplies, etc., to create a cultural and creative brand, production and marketing, through offline and online platforms can expand the scope of communication, gain more attention, and make communication a booster of transformation.

**Fourth, exploring the digital transformation countermeasures of the intangible cultural heritage of ethnic festivals with small populations in the process of Chinese-style modernisation is a test of deepening practice**

Through the exploration of the digital transformation and dissemination of the Gelao Yifan Festival, it provides a reference and basis for the digital transformation and dissemination of the modern protection and dissemination of the intangible cultural heritage of ethnic festivals of ethnic groups with small populations in China.

***Build a theoretical framework and sort out the basis for transformation.***

Based on the structural theory of folklore, this paper focuses on the representative national intangible cultural heritage of the ethnic groups with small populations, such as the Yifan Festival of the Gelao Nationality, the Kaqzath Festival of the Dulong Nationality, and the Ha Festival of the Jing Nationality, to clarify the general laws and structural systems of the traditional festivals of ethnic groups with small populations. Based on the guiding significance of Marxist production theory to the practical activities of human spiritual production, in order to make up for the shortcomings of the development of ethnic areas with small populations, the modern significance of traditional festivals as a specific form of spiritual production is discussed. In order to solve the practical demands of the loss of traditional festivals of ethnic groups with small populations due to the failure to integrate with modern society, the nature and laws of festival intangible cultural heritage in Guangxi, Yunnan, Mongolia and other provinces and regions were investigated, such as sacrificial, productive, commemorative, and entertainment, and the corresponding cultural connotations and spirits of rice, sacrifice, and marine cultures were analysed and extracted, so as to realise the essential transformation and dissemination of festival intangible cultural heritage, and effectively solve the ecological crisis faced by festival intangible cultural heritage.

***Construct an empowerment-driven model for ethnic festivals and intangible cultural heritage of ethnic groups with small populations.***

With the deepening of 5G intelligent information technology, the establishment of complete supporting facilities can better play the role of intelligence. Using top-level design-driven and internally self-positive-driven, through government-led, cultivating rural sages and other measures, industrial integration, IP operation and digital museum systems are implemented in a coordinated manner. Driven by digital construction, the legends, content and forms of typical festivals and intangible cultural heritage are analysed and summarised, and empirical materials that can be transformed into digital creativity such as static, dynamic, reproducible and virtual. Through the spillover effect of information technology on culture, we will carry out research on the preservation of reproducibility such as documentaries, as well as research on the transformation of virtuality such as animation and comics, and use CG, VR and other technologies to realise the digital creative production of culture. From the aspects of cultural creativity, tourism, marketing, etc., effectively amplify the explicit value of traditional festivals and the reality of offline communication; The inclusive effect released by multiple platforms and digital technologies of the 5G network is used to spread and output, and the potential value of national self-confidence and external publicity is enhanced.

***Summarise the role of the digital transformation of intangible cultural heritage of ethnic festivals with small populations.***

This paper compares and analyses the experience of the results of digital transformation in maximising the value of the festival itself, the enlightenment to the transformation of other festivals, and the role of national

cultural integration and identity. Investigate the increase in public attention, participation and experience of the results of digital transformation and communication, and investigate the role of digital villages, digital museums and exchanges and cooperation.

To sum up, to explore the digital transformation of the intangible cultural heritage of ethnic groups with small populations in the process of Chinese-style modernisation, it is to shorten the distance between ethnic groups with small populations and modern society from the perspective of the national strategic development position of ethnic groups with small populations and the environment of the 5G era. Make full use of modern digital technology and network media to let ethnic groups with small populations such as the Gelao people see their own advantages, strengthen cultural self-confidence, and enhance cultural consciousness; Clarify the value of intangible cultural heritage of ethnic festivals with small populations in the process of Chinese-style modernisation. Solve the deadlock of ethnic groups with small populations and other ethnic groups, and realise the digital inheritance and sustainable development of national culture and intangible cultural heritage. In short, the use of new digital forms that give the essence of Chinese traditional culture to tell Chinese stories is conducive to a better understanding of the uniqueness, inclusiveness, innovation and unity of Chinese civilisation, so as to further infiltrate the sense of community of the Chinese nation with the excellent traditional Chinese culture, enhance cultural identity and ethnic integration, deepen Chinese-style modernisation, and comprehensively promote the great rejuvenation of the Chinese nation.

**Funding:** This paper is one of the research results of the 2021 National Social Science Foundation of China, "Research on the Transformation and Dissemination Effect of Digital Animation of Ethnic Festivals and Intangible Cultural Heritage in the 5G Era" (21BMZ036).

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** There is no new data associated with this article.

**Conflicts of Interest:** The authors declare no conflicts of interest.

## References

- Zhang Bin. Media Observation, 2023, (08): 28-35. DOI: 10.19480/j.cnki.cmgc.2023.08.003.
- Qiu Gengtian. Grasping the Quadruple Dimension of Chinese-style Modernization [J]. Theoretical Horizon, 2023, (06): 44-49. DOI: 10.19632/j.cnki.11-3953/a.2023.06.007.
- Yang Yuqi. Journal of Yunnan University for Nationalities (Philosophy and Social Science), 2022, 39(05): 5-13. DOI: 10.13727/j.cnki.53-1191/c.20220905.001.
- Wang Zhenzhong, Yao Shengliang. On the Constituent Elements of Chinese National Cohesion [J]. Ethnic Studies, 2022, (03): 1-17 138.
- Tong Yujia, Wang Kuizheng. Analysis of the Cultural Connotation of the "Yifan Festival" of the Qianlao People [J]. Journal of Wuhan Textile University, 2012, 25(01): 80-82.
- Luo Rize, Guo Zhu, Guo Wei. Qianlao Customs [M]. Beijing: Central University for Nationalities Press, 1993.
- Zhang Yanmin, Xie Weiwei. Research on the Idea and Function of Moral Education of the Lao Ethnic Group in the Rice Festival [J]. Ethnic Education Research, 2019, 30(04): 94-99. DOI: 10.15946/j.cnki.1001-7178.2019.04.013.
- Li Jinyun, Geng Xin. Research on the Inheritance of Traditional Culture of Ethnic Groups with Small Populations: A Case Study of Xinsheng Oroqen Ethnic Township in Heihe City, Heilongjiang Province [J]. Journal of South Central University for Nationalities (Humanities and Social Sciences Edition), 2017, 37(02): 56-60.
- Jiang Riqing. Discussion on the Development of Traditional Festivals and Cultural Tourism of Ethnic Minorities with Small Populations: A Case Study of the Maonan Ethnic Festival in Huanjiang, Guangxi [J]. Agricultural Economics, 2016, (10): 49-51.

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of ATRI and/or the editor(s). ATRI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.