

# *Research on the Dissemination Strategy of Ginkgo Culture in Anlu with Digital Technology*

Lingyi Wu\*

*Art School, Hubei University, Wuhan, Hubei, China*

*\*Corresponding author*

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**Abstract:** Ginkgo culture is an important part of Chinese ecological and ideological culture. The Qianchong Ginkgo Community in Anlu City, Hubei Province, is one of China's only two remaining natural state ginkgo communities. With the advancement of digital animation, virtual reality, and other digital technologies, the dissemination of ginkgo culture through digital technology, as well as the realization of the digital collection, storage, and reproduction of ginkgo resources, can effectively solve the real problems of its dissemination in a single way, as well as the lagging innovation construction. Simultaneously, it contributes to the audience's cognition and perception of ginkgo culture, which is an effective way to protect and develop ginkgo culture.

## **1. Introduction**

The progress of culture and civilization can be used to gauge how prosperous a nation or a people is. Culture is also the core element of tourism development, and vigorously promoting the culture of regional characteristics can help promote the development of local tourism. Ginkgo is an ancient tree species unique to China, and for thousands of years, the cultural phenomenon of worshipping ginkgo has been formed among the Chinese people. Located in the northeastern part of Hubei Province, Anlu is the "second hometown" of Li Bai, the great poet of the Tang Dynasty, the "hometown of cartoons" named by the Ministry of Culture, and also has the reputation of "the hometown of ginkgoes in China" [1]. The ancient ginkgo community of Qianchong in Anlu is one of only two remaining natural state ginkgo communities in China, and its rich ancient ginkgo resources have formed a distinct local ginkgo culture that has also become an important cultural resource in Anlu [2]. With the maturity and development of digital technologies such as digital animation, virtual reality, etc., the use of digital technology to disseminate characteristic cultural resources and realize the digital collection, processing, display, and dissemination of cultural resources is an effective path to protect and develop characteristic cultural resources. Taking ginkgo cultural resources as the driving force and vigorously developing the ginkgo cultural industry with the help of digital technology is conducive to fully exploiting the advantages of Anlu's tourism resources and making significant contributions to the development of the local economy in Anlu.

## **2. The Connotation of Digital Technology**

By collecting, storing, processing, displaying, and disseminating traditional information, digital technology transforms it into digital information, which involves computer graphics, virtual reality, augmented reality, digital animation, and other technologies. In the field of cultural resource conservation, digital technology converts various cultural resources and cultural heritage into digital form, which can make these cultural resources permanently preserved and achieve the purpose of cultural resources reproduction and utilization. On the one hand, digital acquisition and storage technology provides protection and technical support for the protection and dissemination of cultural resources; On the other hand, digital technology also expands the space for the dissemination of cultural resources and provides a more extensive sharing platform [3]. As a result, the use of digital technology in the field of cultural resources is a major concern shared by many cutting-edge researchers. Digital technology also aids in the preservation of cultural resources and heritage, as well as the dissemination of cultural resources.

## **3. The Connotation of Ginkgo Culture**

Ginkgo originated a long time ago, and currently, there are only naturally growing plants in China. Ginkgo culture is an important part of our ecological culture, and it has a strong influence in China, as well as being a valuable spiritual treasure of our people. Ginkgo is not only related to literature and art, customs and folklore but also shows many cultural connotations in health and beauty, diet and residence [4]. Ginkgo culture also reflects a high value of tourism development.

### **3.1. Ginkgo and Literature and Art**

Ginkgo literature exists in China, as do many folk legends, ballads, and proverbs about the plant. Ginkgo has been known and praised by the people of China for a long time, and literati have left many poems, songs, and prose novels with ginkgo as the subject matter from ancient times to the present. In addition, as a precious tree species in China, ginkgo appeared in various kinds of paintings early [5]. Many calligraphers and painters have taken ginkgo as their theme, leaving behind many artistic treasures, the majority of which are calligraphic works by famous artists of today. These works shine brightly in the long river of literature and art in China.

### **3.2. Ginkgo and Food and Health Culture**

Ginkgo, with its beautiful round shape and delicious taste, has edible and medicinal values and a history of several thousand years of inheritance in China as a health food. China began to study the health products of Ginkgo biloba extract in the early 1990s. Recent medical clinical studies have shown that the preparations of Ginkgo and its leaves have obvious therapeutic effects on the cardiovascular system, cerebral nervous system, respiratory system, and antibacterial inhibition [4].

### **3.3. Ginkgo and Eco-dwelling Culture**

Ginkgo is one of the four major ornamental tree species (pine, cypress, acacia, and ginkgo) in China and is an ideal landscape tree species, with high ornamental value, and cultural value for ecological preservation [6]. People in many regions also have the habit of planting trees in front of their houses to clean the air and provide shade, and they can use the wood to make musical instruments and furniture, as well as increase their economic income. Ginkgo has a high economic return as a valuable timber species.

## 4. Current Situation and Issues in the Development of Ginkgo Culture in Anlu City

The ancient ginkgo belt of Qianchong is one of the cultural resources with Anlu characteristics. The ancient ginkgo belt of Qianchong is located west of Anlu in the town of Wang Yizhen, at the western foot of Dahong Mountain, at the intersection of the counties and cities of Jingshan, Suizhou, and Anlu [4]. There are 36 ancient ginkgo communities and 48 fixed ginkgo trees, with 1,468 being over 500 years old and 4,683 being over 100 years old [7]. The ancient ginkgo trees in Qianchong not only come in a variety of varieties and ages, but they also come in a variety of tree shapes, such as husband and wife trees, male and female trees, and mother and child trees, all of which have great ornamental value and interest. Among them, the "Ginkgo King" has a crown that measures more than 380 square meters and a trunk that must be surrounded by five people, producing more than 500 kilograms of ginkgo fruit annually [1]. In addition, the ginkgo trees planted by Li Bai, the great Tang Dynasty poet who lived in Anlu for more than ten years, have given Anlu's ginkgo culture a legendary color and enriched the connotation of cultural tourism in Anlu. The CCTV "Home from Afar" program team visited Qianchong village in 2012 to film a program introducing the local ginkgo tourism resources of Qianchong in Anlu and spreading the local characteristics and culture. The program gained a lot of traction after it was broadcast. Every year, the best time to see ginkgo is in October. According to statistics, 360,000 tourists visited Qianchong after the National Day that year because of its reputation as a scenic spot [7].

Anlu's ginkgo culture has several characteristics. For starters, there are local folk stories and legends about ginkgo that express the local people's love and deep affection for ginkgo. Second, in everyday life, people have developed a close relationship with ginkgo, such as the local specialties: ginkgo carp soup, which is beneficial to health and wellness [2].

The Anlu Ancient Ginkgo National Forest Park in Hubei, which includes the Qianchong Scenic Area and the Bai Zhaoshan Scenic Area, was listed and established in 2009. The Chinese Forestry Society successfully held the "First Chinese Ginkgo Festival" in Anlu the same year. Furthermore, Anlu City seized ginkgo characteristics, established ginkgo bases, and actively developed a ginkgo series of health products. As a result, the five-in-one development pattern of ginkgo processing, ginkgo seedlings, ginkgo technical services, ginkgo tourism, and ginkgo trade is formed.

Despite the fact that the government and relevant departments in Anlu City have made significant efforts to promote ginkgo culture and achieved certain goals, people still do not have a thorough understanding of Anlu's distinctive ginkgo culture. With the advancement of science and technology, digital technology has opened up new avenues for the dissemination and promotion of Anlu ginkgo culture. It will undoubtedly spread Anlu's ginkgo culture throughout the world with the help of modern digital technology.

## 5. Digital Dissemination Strategy of Ginkgo Culture in Anlu

### 5.1. Using Digital Animation Technology to Disseminate Ginkgo Culture in Anlu

The use of computers to assist or replace traditional animation production tools in the production process is referred to as digital animation, and the assistance and replacement of such tools change the traditional animation production process. In general, the science propaganda film promoting ginkgo culture contains a lot of academic explanations that will appear slightly esoteric and boring, and it is difficult to pique the audience's, particularly the youth group's, interest in the related knowledge [8]. However, digital technology-generated animation is a relatively simple and enjoyable way of communication. The original monotonous and boring knowledge will be vividly reproduced through the form of animation, which is easy to leave a positive and deep impression on the audience and is suitable for audience groups of all ages. Furthermore, the digital animation film

has the characteristics of being simple to save, simple to copy, simple to spread, and simple to play across multiple platforms. It enables audiences to obtain relevant knowledge at any time and from any location, which is beneficial to the promotion of Ginkgo culture.

### **5.2. Using Virtual Reality Technology to Disseminate Ginkgo Culture in Anlu**

Virtual reality technology refers to a technology that uses computers to generate a virtual world that can impose visual, auditory, and tactile sensations on participants and allows them to observe and operate interactively. Virtual reality technology has three fundamental characteristics, known as the "3i" characteristics [9], which stand for Immersion, Interaction, and Imagination. With virtual reality technology, participants are immersed in the virtual space, feel like they are a part of it, and actively participate in the virtual world.

The beautiful ginkgo landscape of the Ancient Ginkgo National Forest Park in Qianchong, Anlu City, can be reproduced using virtual reality technology, allowing more visitors who cannot visit the site to see the ginkgo. It also allows foreign tourists who have never seen ginkgo trees to appreciate the beauty of our country's features. This has the potential to economically and efficiently spread Anlu's ginkgo culture.

### **5.3. Using Immersive Naked-eye 3D Technology to Disseminate Ginkgo Culture in Anlu**

Naked-eye 3D technology is the use of human two eyes with parallax characteristics to obtain a realistic three-dimensional image with space and depth of the scene without the use of any auxiliary equipment. 3D is the abbreviation of three-dimensional, that is, three-dimensional graphics. The advantage of the naked eye 3D is to get rid of the glasses, but there are still many shortcomings in terms of resolution, viewing angle, and viewing distance.

We are able to bring visitors an immersive experience through the construction of an immersive naked eye 3D exhibition hall, achieving the goal of educational communication with fun. Instead of the traditional method of unilateral knowledge indoctrination, this approach can fully mobilize the initiative of visitors, effectively spreading the Ginkgo culture.

## **6. Conclusion**

Culture is the bloodline of the nation and the spiritual home of the people. Ginkgo is an ancient tree species unique to China and has the reputation of being the national tree. Ginkgo and its culture are an important part of China's culture. Anlu City in Hubei Province has the largest ancient ginkgo community in Central China. In the information age, digital technology plays a key role in the dissemination of ginkgo culture in Anlu. Through digital technology, the ginkgo culture of Anlu can be disseminated in an all-round, panoramic, and three-dimensional manner, and the educational significance and economic value of the ginkgo culture of Anlu can be thoroughly explored and integrated with the cultural tourism industry so that the ginkgo culture can be widely disseminated and promoted.

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