



Reference for the Digital Protection of Sports Intangible Culture Heritage in the United States and Japan

Jun Wu

Institute of Physical Education, Anhui Normal University, Wuhu, Anhui, China

Abstract: The intangible cultural heritage of sports is an important part of Chinese culture, but with the development of the times, China's intangible cultural heritage of sports is facing problems such as insufficient digital protection policy and regulations, weak digital awareness of the public, and insufficient publicity leading to the loss of public emotions. The power of technology is constantly changing, the charm of culture is more and more profound, and the integration of technology and culture has given birth to the digital cultural industry. "Digital protection" has also become an important development direction in the cultural heritage field. It is imperative to accelerate the process of digital protection of China's sports intangible cultural heritage, reflect and learn from the excellent foreign experience. The United States, Japan and other countries are generally leading the world. The United States has achieved the goal of collecting, preserving and inheriting American historical and cultural heritage through the "National Digital Library" plan, while Japan has achieved fruitful results mainly by adopting intangible cultural heritage legislation and establishing data resource libraries. We should absorb foreign excellent experience and expand the path of digital protection of China's sports intangible cultural heritage.

Keywords: intangible cultural heritage of sports, digital protection, cultural digitization

1. Introduction

Culture serves as the soul and cornerstone of human society, as well as the spiritual bond that unites a nation and its people. Currently, the rapid development of digital technologies has deeply integrated into every aspect of social production and daily life, transforming and reshaping traditional modes of human existence while driving comprehensive social transformation[1]. The Opinions on Promoting the Implementation of the National Cultural Digitalization Strategy issued by the Chinese government in 2022 outlines specific development plans for the cultural digitalization sector, presenting significant opportunities for the digital evolution of Chinese culture[2]. China's diverse sports intangible cultural heritage [3](sports ICH), as an essential component of Chinese culture, demonstrates profound cultural traditions through its characteristics of inheritance, regional characteristics, living essence, and physical embodiment, representing the depth and breadth of China's distinctive cultural heritage. However, the impact of modernization has long marginalized sports ICH, making its survival and transmission increasingly difficult in modern society and exposing it to risks of being forgotten and disappearing[4]. Concurrently, the commercialization of some sports ICH practices has eroded their original purity and traditional essence, reducing their preservation to utilitarian purposes that contradict their fundamental preservation objectives. Accelerated urbanization has further diminished the traditional cultural habitats of these heritages, while urban-rural disparities pose challenges to the transmission and protection of traditional culture in urban environments[5]. Such preservation status starkly contradicts the requirements of the "cultural digitalization" strategy, potentially leading to the damage or even extinction of centuries-old sports ICH traditions, while also hindering global promotion and cultural exchange of the Chinese cultural values embedded within them.

With the continuous development, application, and maturation of digital technologies, traditional culture has been infused with new vitality, while digital innovation has opened up fresh possibilities for the preservation of sports intangible cultural heritage (sports ICH). Emerging approaches such as digital archives and databases, virtual exhibitions and dissemination, and digital conservation and restoration have enabled sports ICH to be showcased to the public in innovative and diverse forms. Notably, while the concept of "sports intangible cultural heritage" does not explicitly exist in foreign contexts due to significant cultural differences, many developed countries, such as the United States and Japan, have conducted earlier research on intangible cultural heritage (ICH) and accumulated rich experience in its digital preservation. This paper explores relevant international cases from these countries, aiming to provide practical insights and theoretical references for advancing the digital protection of China's sports ICH.

2. Practices of Digital Preservation of Intangible Cultural Heritage in the United States

The development vision outlined in China's "cultural digitalization" strategy has enabled the construction of a national cultural big data system and the formation of a Chinese cultural database. In contrast, the United States has already taken a pioneering role in this field.

As early as 1976, the United States formally enacted the American Folklife Preservation Act, a dedicated legislation for cultural heritage protection, marking the government's commitment to preserving folklife and cultural heritage. This act emphasizes the public educational role of folklife materials and encourages archives to utilize and adapt their collections to serve broader communities and academic research. The legislation established the American Folklife Center (AFC) under the Library of Congress, mandating its mission to safeguard and showcase American folklife culture. It also incorporated the Archive of American Folk Song, founded in 1928 to preserve and exhibit folk culture, renaming it the Folklife Cultural Archives[6]. With advancements in internet technology, information science, data storage and retrieval, hypermedia, human-computer interaction, artificial intelligence, and other fields of computer science, the Library of Congress began exploring new approaches to cultural heritage preservation. Between 1990 and 1994, the Library launched an experimental digitization project focused on digitizing historical documents, images, and rare collections dating back to the 15th century that chronicle American history and culture. These materials were distributed via CD-ROMs to 44 schools, colleges, universities, and public libraries to evaluate their usage by librarians, educators, students, and the public. The initiative received positive feedback, particularly from secondary school teachers and students, who demonstrated strong enthusiasm for the digital resources. However, CD-based dissemination proved inefficient and costly. During this period, the emergence of the internet revolutionized access to information, eliminating the spatial and temporal constraints of traditional media[7]. Seizing this transformative opportunity, the Library of Congress officially launched the National Digital Library Program (NDLP) on October 13, 1994. By 1995, following a five-year pilot phase, the NDLP began digitizing portions of the Library's archives documenting American cultural heritage. To recreate its collections of books, films, manuscripts, and audio recordings, the Library developed a range of digital formats, including bitonal document images, grayscale and color images, digital video and audio, and searchable text. To enhance accessibility, the project also introduced descriptive elements such as bibliographic records, contextual introductions, and full-text indexing for specific content types [7]. The NDLP team identified ten critical challenges for building large-scale, functional digital libraries, such as improving analog-to-digital conversion technologies and designing search tools to compensate for incomplete cataloging or metadata. As emphasized by the Library, "a physical library is not merely a catalog of books on shelves, nor is a digital library just a database." Since the 21st century, the Library of Congress has intensified efforts to digitize intangible cultural heritage resources, achieving remarkable milestones. It has completed the digitization of millions of historical documents, offering free public access to vast thematic repositories spanning American history, art and architecture, literature and poetry, sports and recreation, war and military history, as well as original-format recordings, photographs, maps, and artworks.

3. Practices of Digital Preservation of Intangible Cultural Heritage in Japan

In academia, Japan stands as the first country to legislate the protection of "intangible cultural heritage." Whether through the 1950 Law for the Protection of Cultural Properties, the implementation of the Asia-Pacific Intangible Cultural Heritage Database, or the post-pandemic-era Basic Act on the Formation of a Digital Society, Japan has offered valuable lessons to the world in advancing the digital preservation of intangible cultural heritage.

In the late 1990s, rapid advancements in computer and telecommunications technologies triggered transformative shifts in global economic and social landscapes. At the time, however, Japan lagged behind in its information technology (IT) policies. To address this, the Japanese government resolved to position itself as a world leader in IT by implementing an "IT Nation" strategy. In 2000, aiming to adapt to structural socioeconomic changes driven by information and communication technologies (ICT) and to foster a hyper-connected digital society, Japan enacted the Basic Act on the Formation of a Highly Advanced Information and Telecommunications Network Society (hereinafter referred to as the IT Basic Act)[8]. The IT Basic Act seeks to ensure that all citizens can freely and securely access, share, and disseminate diverse global information and knowledge. Furthermore, it mandates the establishment of the Headquarters for the Promotion of a Highly Advanced Information and Telecommunications Network Society to coordinate and advance policy implementation. Through these measures, the Japanese government aimed to build a cutting-edge digital society, enhance citizens' quality of life, and strengthen the nation's global competitiveness[9].

Japan has adopted legislative measures to provide legal guarantees for the digital transformation of its intangible cultural heritage. In April 1971, UNESCO announced the establishment of the Asia/Pacific Cultural Centre for UNESCO (ACCU)

in Tokyo, aiming to promote cultural exchange and cooperation among Asia-Pacific nations while advancing the protection and development of cultural diversity. Guided by this mission, ACCU actively supports and drives the safeguarding and transmission of intangible cultural heritage (ICH) across the region. At the 35th session of the UNESCO General Conference in 2009, a proposal to establish the International Research Centre for Intangible Cultural Heritage in the Asia-Pacific Region (IRCI) in Japan was approved. Designated as a UNESCO Category 2 Centre, IRCI was officially launched in October 2011[10]. Supported by the Japanese Agency for Cultural Affairs' Intangible Cultural Heritage Partnership Program, IRCI collaborates with research institutions, national archives, libraries, museums, and other relevant bodies across the Asia-Pacific region to digitize ICH-related activities and projects. These efforts are consolidated into digital research outputs—including documents, videos, and audio materials—which serve not only as references for ICH researchers but also as resources for experts and students in fields such as law, anthropology, folklore, sociology, and archaeology[11].

The emergence of digital technologies represents not merely an advancement in safeguarding measures for intangible cultural heritage (ICH) but also an integral component of its enduring vitality. As a witness to human history, ICH inherently carries distinct regional and decentralized characteristics, which pose significant challenges in data collection[12]. To address this, countries such as the United States and Japan have adopted legislative frameworks combined with multi-stakeholder collaboration, ensuring the most comprehensive and accurate aggregation of data resources. These resources span diverse disciplines—including anthropology, history, and archaeology—and encompass various cultural expressions such as traditional dance, theater, and folk performing arts. They are documented in multiple formats, such as text, audio, and visual media, forming a vast and multifaceted repository[13]. This approach has created favorable conditions for cultural preservation and regional development while offering valuable insights for China's digital safeguarding of sports-related ICH, particularly in addressing challenges of scale, diversity, and interdisciplinary integration[14].

4. Lessons from the U.S. and Japan's Digital Safeguarding of Intangible Cultural Heritage for China

On August 16, 2022, the General Office of the Central Committee of the Communist Party of China and the State Council jointly issued the 14th Five-Year Plan for Cultural Development (hereafter referred to as the Plan)[15]. The Plan emphasizes the need to enhance the vitality of cultural endeavors and industries, improve public cultural service systems, modernize cultural industry frameworks, strengthen omnimedia communication networks, and refine mechanisms for the preservation, inheritance, and utilization of cultural heritage[16]. It further highlights the imperative to boost innovation and creativity in the cultural sector. As a cultural powerhouse, China has made notable progress in digitally safeguarding its sports-related intangible cultural heritage (ICH)[17]. Endangered traditional skills, for instance, have been preserved through digital means such as images and videos in museums and exhibition halls nationwide[18]. However, due to late initiation and insufficient experience, China's digital preservation of sports ICH still faces three major challenges: Inadequate Policy Framework: Weak legal and regulatory systems for digital preservation; Low Public Digital Awareness: Continued reliance on oral transmission and physical documentation over digital methodologies; Deficiencies in Digital Application and Promotion: Insufficient public engagement and emotional connection due to limited technological integration and outreach efforts. Against this backdrop, it is imperative to explore how digital technologies can be strategically and effectively leveraged to advance the safeguarding of sports ICH, grounded in China's unique socio-cultural context and developmental realities.

5. Epilogue: Toward a Digital Renaissance of Cultural Heritage

Under the Cultural Digitalization Strategy, China is poised to achieve the grand vision of panoramic preservation and universal sharing of its cultural legacy through digital innovation. As a pivotal component of the nation's broader digital transformation agenda, the "Culture + Technology" initiative holds profound significance. Sports-related intangible cultural heritage (ICH), embodying the genetic code and spiritual essence of the Chinese nation, remains integral to this endeavor. Yet, bridging the gap from merely "preserving" to dynamically "revitalizing" these traditions demands sustained efforts. While digital technologies have empowered the safeguarding of sports ICH—yielding remarkable progress in documentation, archiving, and transmission—they also present new challenges. As an ancient Chinese proverb reflects, "The past has witnessed splendid achievements; the future beckons with greater aspirations." By thoughtfully assimilating international best practices from nations like the United States and Japan, while remaining grounded in China's unique cultural context, we can forge a path of "harmonious synergy"—strategically integrating digital tools to fuel the innovative evolution of sports ICH. Let us embrace technological advancements not as replacements for tradition, but as catalysts for its enduring vitality in the digital age.

References

- [1] People's Daily Online. Digital Technologies Drive the Inheritance and Innovation of China's Outstanding Traditional Culture [EB/OL]. (2022-11-08). https://www.gov.cn/zhengce/2022-05/22/content_5691759.htm.
- [2] The State Council of the People's Republic of China. General Offices of the CPC Central Committee and the State Council Issue the "Opinions on Advancing the Implementation of the National Cultural Digitalization Strategy" [EB/OL]. (2022-05-22). https://www.gov.cn/zhengce/2022-05/22/content_5691759.htm.
- [3] CHEN Xiaorong. Sports Intangible Cultural Heritage: Concept, Characteristics, Functions, and Classification [J]. *Journal of Sports Science*, 2022, 42(4): 14-21.
- [4] ZHANG Jiwei. Research on the Protection and Inheritance of Sports Intangible Cultural Heritage in Anhui Province [D]. Huaibei Normal University, 2022.
- [5] WANG Hongshen, HAN Yuji, LIANG Qinchao, et al. From "Dislocation" to "Adaptation": Dilemmas and Solutions for Inheritors of China's Sports Intangible Cultural Heritage [J]. *Journal of Sports Science*, 2023, 43(2): 33-41.
- [6] LI Na, LIU Tongbiao. Practices and Experiences of Folkloric Archiving at the American Folklife Center (AFC) [J]. *Cultural Heritage*, 2016, (6): 96-102.
- [7] LIBRARY OF CONGRESS. National Digital Library Program [EB/OL]. <https://memory.loc.gov/ammem/dli2/html/lndlp.html>.
- [8] CHEN Yiwei. A Critical Review of Japan's "Basic Act on the Formation of a Digital Society" [J]. *Shanghai Law Research*, 2022, 8(2): 480-501.
- [9] ZHANG Zhixian. Reflections on Intangible Cultural Heritage Transmission through School Education [J]. *Theater and Film Monthly*, 2008, (6): 119-121.
- [10] Office of the Central Leading Group for Cultural System Reform and Development. Press Q&A on the "14th Five-Year Plan for Cultural Development" [J]. *Great Society*, 2022, (8): 9-11.
- [11] ZHAO Fuxue, CHENG Chuanyin, GAO Jike, et al. Digital Preservation of Scattered Ethnic Minority Sports Cultural Information Resources under the "Belt and Road" Initiative [J]. *Journal of Wuhan Sports University*, 2017, 51(1): 5-11.
- [12] YAO Guozhang, LIU Zengyan. International Practices in Digital Preservation and Transmission of Intangible Cultural Heritage: Lessons for China [J]. *Southeast Culture*, 2022, (6): 179-185.
- [13] People's Daily Online. Advancing the National Cultural Digitalization Strategy [EB/OL]. (2022-05-23). <http://politics.people.com.cn/n1/2022/0523/c1001-32427267.html>.
- [14] YAO Liquan, ZHENG Yini. Innovative Pathways for Digital Preservation of Intangible Cultural Heritage in Ethnic Regions [J]. *China Publishing Journal*, 2024, (3): 38-42.
- [15] LIU Jiayi. Digital Empowerment for the Innovative Development of Paper-Cutting Culture [J]. *New Chu Culture*, 2023, (19): 49-53.
- [16] The State Council of the People's Republic of China. General Offices of the CPC Central Committee and the State Council Issue the "Overall Plan for the Construction of Digital China" [EB/OL]. (2023-02-27). https://www.gov.cn/zhengce/2023-02/27/content_5743484.htm.
- [17] The State Council of the People's Republic of China. General Offices of the CPC Central Committee and the State Council Issue the "Opinions on Implementing the Project to Inherit and Develop China's Outstanding Traditional Culture" [EB/OL]. (2017-01-25). https://www.gov.cn/zhengce/2017-01/25/content_5163472.htm.
- [18] ZHANG Huanhuan. Research on Developing "Curriculum Cultural Resources" for Cultivating Awareness of the Chinese National Community in High School Ideological and Political Education [D]. Southwest University, 2023.