

Digital Dissemination Exploration of Ethnic Literary Works

Liu Junyan

South-Central Minzu University, Wuhan, Hubei, 430079, China

Keywords: Ethnic literature; digital dissemination; innovative practices

Abstract: This article explores the innovative practices and effect evaluation of digital dissemination of ethnic literary works. The research covers various aspects, including multimedia presentation, virtual reality technology application, artificial intelligence assistance, and social media strategies. The article also analyzes the indicator system for evaluating dissemination effects, data analysis methods, and social impact assessment. These innovative practices not only enhance the dissemination effects of ethnic literature but also open up new avenues for cultural heritage. Through digital means, ethnic literature has gained new vitality in modern society.

1. Introduction

Ethnic literature is an essential part of cultural heritage, carrying rich historical and cultural connotations. In the digital era, how to effectively disseminate ethnic literary works has become a crucial issue. This study focuses on the innovative practices of digital dissemination of ethnic literary works, exploring new methods such as multimedia presentation, virtual reality technology, and artificial intelligence. Meanwhile, the article also delves into the evaluation system for dissemination effects, providing new ideas for the future inheritance and development of ethnic literature.

2. Strategies and Methods for Digital Dissemination of Ethnic Literary Works

2.1 Selection and Construction of Digital Platforms

Digital platforms are crucial carriers for the dissemination of ethnic literary works, and their selection and construction directly impact the dissemination effects. When selecting platforms, it is necessary to consider the target audience's usage habits, the platform's functional characteristics, and its compatibility with ethnic literature features. Mainstream social media platforms can quickly reach a broad audience, while specialized literary websites facilitate in-depth reading and exchange. When constructing a dedicated ethnic literature digital platform, it is essential to focus on user experience design, providing multilingual interfaces and intelligent recommendation functions, and balancing work display and interactive exchange. The platform should have good scalability and compatibility to adapt to technological development and user demand changes^[1]. Additionally, it is crucial to emphasize data security and copyright protection, establishing a comprehensive work management mechanism. By integrating multiple resources, a comprehensive platform that combines display,

reading, research, and exchange can be built, providing a solid foundation for the digital dissemination of ethnic literary works. During the platform design process, it is also necessary to consider mobile adaptation to ensure users have a good reading experience on different devices. Furthermore, the platform can introduce artificial intelligence technologies, such as natural language processing and machine learning, to provide personalized content recommendations and reading analysis services, enhancing user stickiness.

2.2 Digital Processing Technology for Ethnic Literary Works

The digital processing of ethnic literary works is a critical link in achieving effective dissemination. This process involves multiple technologies, including text scanning, image processing, and character recognition. For paper-based literature, high-precision scanning devices and image enhancement technologies are required to improve clarity. Optical character recognition (OCR) technology is used to convert images into editable text, which is then manually proofread to ensure accuracy. For oral literature, speech recognition technology is utilized to achieve text transcription. When processing minority languages, specialized recognition algorithms and font libraries need to be developed. During the digitalization process, the original appearance of the work should be preserved, and metadata annotations should be added to facilitate retrieval and classification. For works with unique forms, such as long poems and epics, digital presentation methods tailored to their structural features should be designed. Additionally, multimedia integration should be considered, combining text, audio, and video to fully showcase the artistic charm of the works. In the digital processing process, particular attention should be paid to protecting the copyright of the works, using digital watermarks and other technologies to prevent unauthorized copying and dissemination^[2]. A standardized digital workflow should be established to ensure consistent processing quality for different types of works.

2.3 Cross-Cultural Transmission Strategies

The cross-cultural transmission of ethnic literary works faces challenges such as language and cultural background differences, requiring targeted strategies. The primary task is high-quality multilingual translation, which must accurately convey the original content while preserving its cultural characteristics and artistic style. Artificial intelligence-assisted translation technology can be used to improve efficiency, but key steps still require human control. In presenting content, cultural background explanations should be provided, such as adding annotations and cultural dictionaries, to help readers from different cultural backgrounds understand the works. Themed cross-cultural exchange activities, such as online book clubs and author interviews, can be organized to promote dialogue between different cultures. Data analysis technology can be used to understand readers' preferences and feedback from different regions, and transmission strategies can be adjusted accordingly. Cooperation with international literary platforms and institutions can expand the international influence of the works. At the same time, it is essential to cultivate cross-cultural transmission talents, improve their language skills and cultural sensitivity, and provide talent support for the international transmission of ethnic literature. In cross-cultural transmission, the method of "cultural mutual translation" can be explored, which involves finding common ground between different cultures and establishing cultural bridges to make the works more easily accepted and understood by readers from other cultures^[3]. Additionally, social media and online communities can be leveraged to encourage readers to share their cross-cultural reading experiences, creating a sense of community resonance.

2.4 Audience Participation and Interaction Mechanisms

Building effective audience participation and interaction mechanisms is an important means of enhancing the transmission effect of ethnic literary works. Diversified interaction functions, such as reader comments, work discussion areas, and creative sharing, can be designed to encourage readers to participate deeply in work interpretation and re-creation. Online reading communities can be developed to allow readers to annotate and share their thoughts, forming a group reading experience. Game elements, such as literary knowledge competitions and role-playing, can be introduced to increase reading interest. Big data technology can be used to analyze reader behavior and provide personalized reading recommendations. Online literary salons, author meet-and-greets, and other activities can be held to promote direct communication between authors and readers. Readers can be encouraged to participate in the digitalization process of the works, such as crowdsourced translation and cultural background supplementation, to enhance their sense of participation and belonging^[4]. A reader feedback mechanism can be established to collect and respond to user opinions in a timely manner, continuously optimizing platform functions and content. Through diverse participation and interaction mechanisms, readers' enthusiasm for reading can be stimulated, and a loyal group of ethnic literature enthusiasts can be cultivated. Furthermore, a reader creation garden can be established to encourage readers to engage in creative writing based on their reading of ethnic literary works, forming a healthy literary ecosystem. Virtual reality (VR) and augmented reality (AR) technologies can also be used to provide readers with immersive literary experiences, allowing them to more deeply feel the ethnic cultural environment depicted in the works.

3. Innovative Practices in Digital Dissemination of Ethnic Literary Works

3.1 Multimedia Presentation Methods

Multimedia presentation methods have injected new vitality into the digital dissemination of ethnic literary works. By integrating text, images, audio, and video, the expressive power of the works has been greatly enhanced. Text content can be accompanied by exquisite illustrations, allowing readers to more intuitively experience the scenes and characters depicted in the works. The addition of audio elements, such as background music and recitation audio, can create a specific atmosphere and enhance the emotional impact of the works. Video forms can transform static text into dynamic visual experiences, such as micro-films and animated shorts, making the works more attractive. Interactive charts and infographics can be used to display complex plots or cultural background knowledge, helping readers better understand the works. Furthermore, interactive e-books can be developed, allowing readers to choose different presentation methods during the reading process, such as switching background music or viewing related images, increasing the fun and participation of reading^[5]. Multimedia presentation not only attracts more readers, especially young readers, but also more comprehensively showcases the cultural connotations and artistic values of ethnic literary works, allowing readers to deeply experience the charm of the works through visual and auditory interactions.

3.2 Application of Virtual Reality (VR) and Augmented Reality (AR) Technologies

The application of Virtual Reality (VR) and Augmented Reality (AR) technologies has opened up new dimensions for the digital dissemination of ethnic literary works. VR technology can create immersive reading environments, allowing readers to feel as if they are in the scenes depicted in the works. For example, important scenes in epic works can be modeled in 3D, and readers can wear VR devices to walk through the virtual world, closely experiencing the ethnic cultural elements depicted

in the works. AR technology can superimpose virtual information on the real world, adding interactivity to traditional reading methods. Readers can use smartphones or AR glasses to view supplementary information related to the works, such as character relationship diagrams or geographical location annotations, while reading paper books. This technology can also be used to recreate literary scenes, allowing readers to see the scenes or characters described in the works through AR applications in the real environment. VR and AR technologies not only enhance the reading experience but also help readers better understand and remember the content of the works. Through these technologies, abstract concepts and cultural elements in ethnic literary works can be concretized, making cross-cultural transmission more intuitive and effective^[6]. At the same time, these technologies also provide new possibilities for literary education, and interactive literary teaching tools can be developed to improve learning outcomes.

3.3 Application of Artificial Intelligence in Ethnic Literary Dissemination

Artificial intelligence technology plays an increasingly important role in the digital dissemination of ethnic literary works. Natural language processing technology can be used for text analysis, automatically extracting themes, emotional tendencies, and keywords from the works, providing readers with a quick way to understand the content of the works. Machine learning algorithms can provide personalized reading recommendations based on users' reading history and preferences, helping readers discover more ethnic literary works of interest. Intelligent translation systems can assist in the translation of works into multiple languages, although they cannot completely replace human translation, they can greatly improve translation efficiency. Artificial intelligence can also be used for creative assistance, such as automatically generating summaries, outlines, and even attempting to create short content in the style of specific authors. In terms of interaction, intelligent chatbots can act as virtual reading guides, answering readers' questions about the works and providing background knowledge explanations. Additionally, artificial intelligence technology can be used for copyright protection, detecting online infringement through intelligent algorithms^[7]. Speech synthesis technology can convert text into realistic speech, supporting the production of audiobooks. Through these applications, artificial intelligence not only improves the efficiency and accuracy of ethnic literary dissemination but also provides readers with a richer and more intelligent reading experience.

3.4 Social Media Dissemination Strategies

Social media has become an important channel for the digital dissemination of ethnic literary works, and its unique transmission characteristics provide new possibilities for promoting the works. Platforms such as Weibo and WeChat can be used to publish excerpts, author interviews, and other short and concise content, attracting users' attention. By designing creative topic tags, users can be encouraged to participate in discussions and share, forming a topic transmission effect. Video platforms such as Douyin and Bilibili can be used to create short videos introducing the background of the works, interpreting classic excerpts, or inviting internet celebrities to read the works, attracting young readers in a relaxed and entertaining way. Online reading clubs, author meet-and-greets, and other activities can be organized on social media to enhance interaction between readers and the works and authors. Social media's data analysis function can be used to understand users' reactions to different types of content, adjusting transmission strategies in a timely manner. Readers can be encouraged to create and share derivative content related to the works, such as fan fiction and cosplay, expanding the influence of the works. Collaboration with well-known bloggers and literary critics can be used to expand the transmission range of the works through their influence. Themed activities can be planned on social media during holidays or special commemorative days, combining ethnic

literature with contemporary culture and social hotspots, increasing the relevance of the works to the times^[8]. Through these strategies, social media not only becomes an important platform for the dissemination of ethnic literary works but also cultivates new reading groups, promoting the inheritance and development of ethnic literature in the digital age.

4. Evaluation of the Effectiveness of Digital Dissemination of Ethnic Literary Works

4.1 Evaluation Index System for Dissemination Effectiveness

Constructing a scientific and reasonable evaluation index system for dissemination effectiveness is crucial to measuring the success of digital dissemination of ethnic literary works. This system should cover both quantitative and qualitative dimensions, considering both the breadth and depth of dissemination. In terms of quantitative indicators, it can include metrics such as page views, downloads, shares, and comments, which can intuitively reflect the popularity and reach of the works. Qualitative indicators can include metrics such as user engagement time, complete reading rate, and repeat reading rate, which can reflect the depth of readers' engagement with the works. Additionally, cross-cultural dissemination indicators such as comparisons of reading volumes across different language versions and international reader participation can be set to evaluate the cross-cultural impact of the works. User growth rate and activity level are also important indicators, reflecting the platform's sustained attractiveness. Interaction indicators such as comment quality and discussion heat can measure the depth of reader participation. Sentiment analysis technology can be introduced to evaluate readers' emotional inclination towards the works^[9]. Dissemination effectiveness evaluation should also consider the citation of works in academic research, reflecting their academic value. By establishing a multi-dimensional and comprehensive evaluation index system, the actual effectiveness of digital dissemination of ethnic literary works can be fully and accurately grasped, providing a basis for adjusting and optimizing subsequent dissemination strategies.

4.2 Data Analysis and User Feedback

Data analysis and user feedback are important methods for evaluating the effectiveness of digital dissemination of ethnic literary works. Through big data analysis technology, user behavior data can be deeply mined to understand readers' reading habits, preferences, and needs. For example, analysis of user reading time distribution, popular search keywords, and page click paths can be used to optimize content display and recommendation strategies. User profiling technology can help identify different types of reader groups, providing a basis for precise marketing and personalized services. A/B testing can be used to compare the effectiveness of different versions of content or functions, guiding product iteration. User feedback can be collected through various channels, including online surveys, comment analysis, and social media monitoring. These feedback can provide qualitative information, revealing detailed problems and suggestions for improvement in user experience^[10]. Sentiment analysis technology can be used to automatically process large amounts of text feedback, identifying users' emotional inclination towards the works or platform. Additionally, focus group discussions or in-depth interviews can be organized to deeply understand users' reading experiences and needs. Real-time data monitoring systems can help timely discover problems in the dissemination process, such as content dissemination bottlenecks and user loss nodes. By combining data analysis with user feedback, the effectiveness of dissemination can be comprehensively evaluated, and continuous optimization of dissemination strategies can be supported.

4.3 Social Impact Assessment

Social impact assessment is an important dimension of evaluating the effectiveness of digital

dissemination of ethnic literary works, focusing on the broad impact of the works on social culture, education, and other fields. In terms of cultural heritage, the contribution of the works to enhancing public awareness and understanding of ethnic culture can be evaluated, such as through questionnaire surveys to understand changes in readers' recognition of specific ethnic cultural elements. In terms of cross-cultural exchange, the acceptance of the works among readers from different cultural backgrounds and their role in promoting cultural dialogue and understanding can be analyzed. Educational impact can be measured by the inclusion of the works in educational systems, such as the number of works included in teaching syllabi and their frequency of use in classrooms. The ability to guide social topics is also an important indicator, and the heat of social discussions triggered by the works can be statistically analyzed, including the number of media reports and discussions on social platforms. The impact of the works on creators should not be ignored, and whether they have inspired more related creations and promoted the development of ethnic literature can be evaluated. Additionally, the driving effect of the works on related industries such as tourism and cultural creation can be considered. Long-term tracking surveys can help understand the subtle influence of the works on readers' values and behaviors. Through multi-angle and multi-dimensional social impact assessment, the actual effect of digital dissemination of ethnic literary works in promoting cultural heritage, social progress, and other aspects can be comprehensively grasped, providing an important reference for future dissemination strategy formulation.

5. Conclusion

The digital dissemination of ethnic literary works is a fusion of cultural heritage and technological innovation. Through multimedia presentation, virtual reality technology, and artificial intelligence applications, the works reach readers in a brand-new form. Social media strategies expand the dissemination range, while a scientific evaluation system ensures that the dissemination effect is controllable and measurable. This process not only protects and promotes ethnic cultural heritage but also promotes cross-cultural exchange. In the future, with the development of technology, the digital dissemination of ethnic literary works will continue to innovate, bringing readers a richer literary experience.

Acknowledgement

Philosophy and Social Science Foundation of China Research on Chinese Cultural Identity and the Construction of the Chinese National Community (22&ZD208).

References

- [1] Wu X. *Influence of Network New Media on the Digital Dissemination of Chinese Literature*[J].*E3S Web of Conferences*, 2021.
- [2] Liu Huanli. *Research on the Protection and Communication of Chinese Ethnic Minority Folk Literature* [J]. *Journal of Qiqihar University: Philosophy and Social Sciences Edition*, 2023(3):10-13.
- [3] Liu Bing, Chai Hua, Bao Xuemin. *Research on the Contemporary Development Strategies of Ethnic Minority Literature in Heilongjiang in the Era of Media Convergence* [J]. *Journal of Heihe University*, 2022, 13(1):119-121.
- [4] He Y, Liu J, Wang J. *Translation Model and Dissemination of Contemporary Chinese Ethnic Literar Works Into the World: An Analysis on English Translation of The Last Quarter of the Moon by American Translator Bruce Humes*[J].*Theory and Practice in Language Studies*, 2022.
- [5] Mikoajczyk K. *Digital well-being of managers in the hybrid workplace* [J].*International Journal of Contemporary Management*, 2024, 60(1):138-153.
- [6] Shim H, Oh K T, O'Malley C, et al. *Heritage values, digital storytelling, and heritage communication: the exploration of cultural heritage sites in virtual environments* [J].*Digital creativity*, 2024(2):35.
- [7] Wu Y, Jiang Q, Liang H, et al. *What Drives Users to Adopt a Digital Museum? A Case of Virtual Exhibition Hall of National Costume Museum* [J].*SAGE Open*, 2022, 12(1):729-736.
- [8] Kim MU. *A Survey on Digital Twin in Aerospace in the New Space Era* [J].*2022 13th International Conference on Information and Communication Technology Convergence (ICTC)*, 2022:1735-1737.

- [9] Donovan G, Hall N, Ling J, et al. Influencing medication taking behaviors using automated two-way digital communication: A narrative synthesis systematic review informed by the Behavior Change Wheel[J]. *British journal of health psychology*, 2022, 27(3):861-890.
- [10] Caputo F, Fiano F, Riso T, et al. Digital platforms and international performance of Italian SMEs: an exploitation-based overview[J]. *International Marketing Review*, 2022, 39(3):568-585.