

Communication Effect and Optimization Strategy of Red Culture Short Videos in Anhui University Libraries

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Abstract: At a time when digital technology is deeply reconstructing the cultural communication ecology, short videos, with their unique media attributes, have become an important carrier for university libraries to activate red cultural resources and communicate with young people. Based on the red cultural communication practice of Anhui university libraries, this paper systematically sorts out the multi-coordination mechanism of communication subjects, the regional characteristic paths of content production, and the differentiated operation mode of communication channels based on the media richness theory and the communication effect hierarchy model. By constructing a four-dimensional evaluation framework including communication power, influence, education power, and recognition, combined with qualitative research and quantitative analysis, it reveals the deep problems existing in the current communication practice, such as the solidification of content production paradigm, insufficient technology empowerment efficiency, and single user participation mechanism. The study proposes that it is necessary to reconstruct the communication strategy from the dimensions of cultural symbol transformation, technology and humanities integration, and the construction of a participatory communication system, so as to achieve the deep transformation of red culture from physical space presentation to spiritual value internalization, and provide theoretical references and practical paths for the red cultural communication of university libraries in the new era.

Keywords: Anhui University Libraries, Red Culture Communication, Short Video, Media Convergence.

1. Introduction: The Contemporary Context of Red Culture Dissemination in University Libraries in the Era of Short Videos

As an important part of the red cultural map of the Yangtze River Delta, Anhui has more than 3,400 red cultural relics with the Dabie Mountain revolutionary old base as its core, forming a red cultural spectrum represented by the Dabie Mountain spirit of "firm belief, overall situation in mind, unity and courage to take the lead." As a dual field for knowledge dissemination and value shaping, university libraries shoulder the important mission of transforming regional red resources into educational resources. According to the 53rd "Statistical Report on the Development of China's Internet", as of June 2024, the scale of short video users in my country will reach 1.24 billion, of which users aged 18-24 account for 37.2%, showing a significant "Generation Z" aggregation feature. This shift in communication scenarios has prompted university libraries to break through traditional document service models and explore new ways to spread red culture using short videos as a medium. However, in current practice, there is a common phenomenon of "focusing on form innovation and neglecting value construction" and "focusing on technology application and neglecting emotional resonance". It is urgent to clarify the dissemination logic of red cultural short videos from a theoretical level and construct an effect improvement strategy that conforms to the cognitive laws of young people.

2. The Dissemination Practice of Red Culture Short Videos in Anhui University Libraries

2.1. Multiple Coordination and Role Positioning of Communication Subjects

The libraries of Anhui universities have formed a "trinity" main framework in the production of red cultural short videos: as the core organizer, the library relies on its resource integration advantages to lead content planning. For example, the Library of the University of Science and Technology of China has established a "Red Classics Digital Resource Library" to transform revolutionary documents such as "New Youth" and "Guide" into visual narrative materials; the Propaganda Department of the Party Committee of the University and the School of Marxism constitute the value control layer. When producing the "Intellectuals in the Battle of Crossing the Yangtze River" series of videos, the Anhui University Library invited party history experts to serve as academic consultants to ensure the accuracy of historical narratives; the student creative team serves as the communication adaptation layer, realizing cultural decoding from a youth perspective. The "Zhelu Youth" team of Anhui Normal University used vlog format to shoot "Red Marks on Campus", naturally implanting red school history with scenes such as night talks in the dormitory and strolls on the playground. The video has a completion rate of 78% on WeChat Video Account, which is significantly higher than the average of similar content. This coordination mechanism among subjects not only ensures the authority of the content, but also enhances the affinity of communication.

2.2. Regionalization and Innovation of Content Production

In-depth excavation of regional red resources constitutes the core logic of content production. In terms of the revitalization of red classics, the library of Anhui Agricultural University selected documents such as "Letters of Martyr Fang Yunchi" and "Diary of Shen Zixiu" from its collection, and showed the patriotism of revolutionary ancestors through the dual narrative of "classic restoration site + letter scene interpretation". Among them, the short video "An Unsent Family Letter" won the second prize of the "National University Library Short Video Competition"; in the reproduction of historical scenes, the library of Hefei University of Technology and the School of Architecture and Art used 3D modeling technology to restore the marching route of Liu Deng's army's thousand-mile leap into Dabie Mountains in 1947, combined with satellite maps to mark current red attractions, forming a time-space dialogue of "historical coordinates + real field"; in the interpretation of the spiritual spectrum, the library of Anhui Medical University juxtaposed the deeds of the New Fourth Army's "white-coated warriors" with the stories of the medical team of the affiliated hospital of the school during the anti-epidemic period, and realized the contemporary translation of the red spirit through the special topic of "the benevolence of doctors across time and space". The content format has evolved from the early "pictures and text + narration" primary model to a variety of types such as situational sketches, animated micro-films, and interactive documentaries.

2.3. Platform Adaptation and Ecological Construction of Communication Channels

The differences in user attributes of different short video platforms have given rise to segmented communication strategies: the Douyin platform focuses on lightweight communication and topic fission. The topic of the "Red Knowledge Challenge" initiated by the Library of Anhui University of Technology has set up interesting tasks such as "30-second quick answer to the revolutionary history of Dabie Mountain" and "dialect version of red slogan dubbing", attracting students from 27 universities across the province to participate, and the topic has been played 15 million times; the B station platform focuses on in-depth content and community operations. The library of the University of Science and Technology of China has opened a column "Two Bombs and One Star Heroes in Anhui". Through the combination of long and short videos, a communication chain from knowledge popularization to emotional resonance and then to value recognition has been formed. The average monthly interaction times of core users reached 15 times; WeChat video accounts rely on campus communication networks and social fission. The library of Anhui University of Finance and Economics has embedded the "Red Huishang Story" series of videos into the welcome system and course ideological and political platform to achieve accurate reach during the freshman admission education stage. Data shows that the sharing rate of users on campus is 3.2 times that of users outside the campus. This multi-platform collaborative communication matrix has initially built a communication ecology of "strong penetration within the campus and wide radiation outside the campus".

3. Theoretical Construction and Empirical Findings of Communication Effectiveness Evaluation System

3.1. Theoretical Framework of the Four-dimensional Evaluation System

Based on McGuire's communication effect theory and KANO user demand model, this study constructs an evaluation framework with four dimensions:

Communication dimension : Focus on the efficiency of information dissemination, including platform coverage, content attractiveness, and communication momentum. Different from simple traffic indicators, it emphasizes the autonomous dissemination ability of content .

Influence dimension : measures the breadth of cultural influence, including academic influence, social influence, and industry influence.

Educational power dimension : Focus on the effectiveness of value transmission, and conduct comprehensive evaluation through knowledge acquisition test, emotional resonance index, and cognitive transformation degree.

Identification dimension : examines the depth of behavioral transformation, including attitude identification, emotional identification, and behavioral identification.

3.2. Core Findings of Empirical Research

Through a comparative study of three types of universities, namely the University of Science and Technology of China (research-oriented), Anhui University (teaching and research-oriented), and Anhui Vocational and Technical College (vocational-oriented), it was found that there are significant differences in the communication effects among different types of institutions: research-oriented universities rely on their disciplinary advantages to form the characteristics of "academic communication". The "Red Scientists" video series of USTC deeply integrates the spirit of "two bombs and one satellite" with the spirit of scientists by analyzing the party applications and scientific research notes of scientists such as Guo Yonghuai and Yan Jici, triggering strong resonance among knowledge-based audiences. The collection rate of the videos reached 45%, significantly higher than that of entertainment content. Teaching and research universities are good at situational narratives of regional culture and campus life. The "Red Memories in Longhe Campus" produced by Anhui University Library tells the stories of the Anti-Japanese War period buildings and underground party activities preserved on the campus, making the red landmarks on campus a " walking ideological and political course ". After the video was released, the number of campus visit reservations increased by 300% per week. Vocational colleges and universities show a "practice-oriented" communication feature. The library of Anhui Vocational and Technical College combines red culture with the spirit of craftsmanship to produce the "Party Pioneers among Intangible Cultural Heritage Inheritors" series, recording the inheritance of skills of Hui-style woodcarving inheritors in red-themed creations. The video's playback volume accounts for 72% of the short video platforms for vocational education.

However, the three types of universities generally have the phenomenon of "inverted communication power and recognition": videos with high playback volume do not necessarily bring high-value recognition. For example, a red

venue video shot by a certain university in the form of "Internet celebrity check-in" has been played more than 500,000 times, but the audience's recognition of the spiritual connotation it conveys is only 39%, exposing the imbalance between form innovation and content depth.

4. Analysis of Deep-seated Problems in Communication Practice

4.1. Paradigm Solidification of Content Production and the Dilemma of Modernity

At present, there is a "triple homogeneity" phenomenon in red culture short videos: theme homogeneity, the works focus on retelling historical events and introducing venues, and lack in-depth exploration of how red culture responds to modern issues; narrative homogeneity, most videos follow the three-part structure from historical background to event process to spiritual summary, and only 12% of the works in Anhui Province's university libraries use innovative techniques such as interactive narrative and multi-line narrative; symbol homogeneity, over-reliance on old photos, red songs and other visual and auditory symbols, insufficient transformation of youth subculture symbols, resulting in a communication gap where the communicator talks to himself and the recipient passively receives. This paradigm solidification is essentially a lack of cultural decoding ability, and has failed to transform the historical form of red culture into a symbol system that conforms to the cognitive logic of young people.

4.2. Imbalance between Instrumental Rationality and Value Rationality in Technology Application

Although university libraries have tried to use new technologies, there are obvious technical defects: in the application of AR and VR technologies, most of them remain at the visual presentation level of "roaming in virtual venues", lacking deep integration with the connotation of red culture. For example, the VR Crossing the Yangtze River Campaign Memorial Hall developed by a certain university only realizes scene restoration, and does not design deep experience functions such as historical choice interaction and spiritual value Q&A; AI technology applications are concentrated in production links such as intelligent editing and automatic dubbing, and lag behind in user insights, emotional computing and other fields; big data analysis is limited to traffic statistics, and the exploration of education-related dimensions such as "differences in red cognition among students of different majors" and "the correlation mechanism between online communication and offline practice" is insufficient. The superficial empowerment of technology reflects the tendency of technology for technology's sake, ignoring the deep coupling of digital technology and humanistic values.

4.3. Shallow Interactions and Lack of Deep Connections among Users

There are two major breaks in the existing interactive mechanism: one is the break between information reception and meaning production. Although 78% of accounts have set up comment areas, only 4% of user comments receive in-depth responses. For example, a student left a message "How to apply the red spirit to career planning", and the official reply was only "Learn from revolutionary predecessors", and

failed to provide a specific path; the second is the break between online communication and offline practice. Most libraries have not established a conversion channel for communication effects. For example, when releasing a red research recruitment video, they did not simultaneously open the registration entrance or set up exclusive discounts, resulting in a conversion rate of only 11% from watching videos to participating in activities. In addition, the cultivation of UGC content is insufficient. Among the red-themed short videos created by college students, only 23% were officially recommended by the library, and a virtuous cycle of professional production guiding user production has not been formed.

5. Three-dimensional Optimization Strategy to Improve Communication Effectiveness

5.1. Content Innovation: Building a Three-dimensional Narrative System

Content innovation needs to focus on building a three-dimensional narrative system of "historical logic-reality reflection-youth discourse" to promote the transformation of red culture from historical context to modern context. Specifically, it is necessary to deeply decode the modern genes of regional red culture and explore the elements in Anhui red culture that resonate with contemporary values.

In terms of narrative methods, we should innovate youth-friendly narrative grammar and actively learn from the expression habits of Internet culture. For example, the "Red Story Blind Box" format tried by the Anhui Art Institute Library hides clues and props in each video to guide users to guess historical events through barrage, which increases the completion rate by 60%; the "Red Classics Cold Knowledge" series launched by the University of Science and Technology of China Library starts with interesting questions such as "Why is the earth on the cover of "New Youth"? "Why did Chen Wangdao accidentally eat ink when translating "The Communist Manifesto?" It transforms serious history into knowledge and effectively narrows the distance with young audiences.

In addition, it is necessary to establish a "problem-oriented" content structure, and target social issues such as "lying flat" and "involution" that young people are generally concerned about. Videos such as "Struggle Management in the Revolutionary Era" and "Emotion Management in Red Letters" should be planned to provide value references across time and space through original documents such as letters and diaries from revolutionary predecessors.

5.2. Technological Empowerment: Promoting Innovation in the Integration of Technology and Humanities

The core of technology empowerment lies in promoting the deep integration of "digital technology + humanistic value" and building an intelligent and immersive communication ecology. At the scene development level, university libraries can work with the professional information technology team on campus to build the Anhui Red Culture Digital Platform to realize the three functions of "historical scene interaction", "spiritual spectrum visualization" and "personalized learning space"; users can restore the city street scene on the day of Hefei's liberation in 1949 through gestures and talk with

virtual NPCs; the system uses data visualization technology to present the formation of the Dabie Mountain spirit and its inheritance cases in different historical periods; generate exclusive red learning paths based on user browsing records, and recommend suitable short videos and extended reading materials.

In terms of building an intelligent ecosystem, we introduced emotional computing technology and set a real-time emotional feedback button on the video playback page. The backend then adjusted subsequent recommendation strategies accordingly. We developed an AI model for evaluating the effectiveness of red cultural communication. In addition to basic traffic data, we focused on analyzing the semantic emotions of comment content and changing trends in user retention time to provide accurate and intelligent suggestions for content optimization.

5.3. Participatory Communication: Cultivating a Communication Community

The key to participatory communication is to build a communication community for user co-creation and value co-construction, and stimulate the user's subjective initiative through layered mechanism design, UGC incubation and online and offline linkage. In terms of user participation mechanism, for "lurking" users, set low-threshold interactive tasks, such as exchanging library cultural and creative products with "likes, collections, and reposts" of red videos; for "active" users, invite them to participate in script co-creation, such as the "I Write Red Micro-Scripts" competition held by Anhui University Library, which received 127 student submissions, and excellent works were filmed and signed by professional teams; for "leader" users, set up a "Red Culture Communication Ambassador" team to participate in topic planning, offline explanations and other in-depth work, and form a benign ecology of user self-management.

In the construction of the UGC content incubation system, university libraries can set up a "College Student Red Culture Creation Fund" to provide support such as shooting equipment rental and post-production training; open a youth imaging column on the library's official website to regularly display student original works and recommend them to provincial media platforms; hold an annual red short video awards ceremony, include outstanding works in the library's permanent collection of digital resources, and enhance users' sense of creative achievement and cultural belonging.

In order to strengthen the resonance of online and offline values, it is necessary to design "short video +" integration activities, such as the "Red Huizhou Merchants' Story Short Video Creation Camp" held by the Library of Anhui University of Finance and Economics, which includes online topic selection meetings, offline company visits, and film screenings. The red cultural identity of participating students has increased by 42% compared to before the event; developing a "Red Culture Check-in Map", users can scan the QR code of the campus's red landmarks through the short video platform to watch exclusive stories and accumulate check-in points. The points can be exchanged for tickets to red theme lectures, realizing the effective transformation of communication effects from virtual space to physical scenes.

5.4. Resource Integration: Building a Three-dimensional Network

Resource integration needs to build a "three-dimensional, multi-dimensional" communication network through school-

local collaboration, inter-school linkage and cross-border integration. In terms of school-local resource symbiosis, university libraries should build a "red culture digital resource sharing platform" with the Anhui Provincial Department of Culture and Tourism to regularly obtain the latest information on revolutionary cultural relics and party history research results; establish cooperation with the Crossing the Yangtze River Campaign Memorial Hall, Jinzhai County Revolutionary Museum and other institutions to jointly produce a series of short videos on the "Anhui Revolutionary History in Cultural Relics". The memorial hall provides exclusive cultural relic materials, and the university is responsible for creative transformation. Both parties will simultaneously release them on their respective platforms to achieve a multiplier effect in the volume of communication.

In the collaborative innovation of inter-school communication, the "Anhui University Red Culture Short Video Alliance" was established under the leadership of the Anhui Provincial Colleges and Universities Library Working Committee, and implemented the three major plans of "topic planning collaboration", "technical resource collaboration" and "communication channel collaboration": dividing the red culture areas into northern Anhui (Huaihai Campaign), central Anhui (Crossing the Yangtze River Campaign), and southern Anhui (New Fourth Army), and each school claimed a distinctive theme to avoid duplication; establishing a cross-school account promotion mechanism to form a linkage effect of "one school hit, multiple schools spread", and enhancing the overall effectiveness of regional red culture communication.

In terms of cross-border integrated communication, university libraries can build a "Red Culture Integrated Media Laboratory" with local mainstream media, learn from the creative experience of programs such as Anhui Satellite TV's "Shine! Chinese Civilization" to improve the professional production level of short videos; cooperate with technology companies to develop new forms of red cultural communication, such as the "Red Voice Knowledge Base" assisted by iFlytek to provide multi-language and multi-dialect intelligent dubbing services for short videos; jointly launch cross-border products such as "short video + blind box" with cultural and creative enterprises, integrate red cultural elements into the daily life scenes of young people, and expand the social radiation and influence of red culture.

6. Conclusion

The optimization and upgrading of the dissemination of red culture short videos in Anhui university libraries is essentially a reconstruction of the dialogue paradigm between red culture and young people. Research shows that when the dissemination subject breaks through the role of "cultural porter" and becomes a "meaning co-creator", when technology application transcends the level of form empowerment and realizes value embedding, and when content production shifts from historical reproduction to reality reflection, red culture can truly produce emotional resonance and value recognition in the hearts of young people. Future research can further explore the application potential of new technologies in the dissemination of red culture, such as building a virtual red cultural community, developing immersive historical narrative games, etc. At the same time, it can strengthen the long-term tracking of the dissemination effect, and conduct in-depth research on the subtle influence of red short videos on the formation of youth values, so as to

provide more targeted solutions for ideological and political education in colleges and universities in the new era.

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