



The Mechanisms by which Digital Media Technology Promotes Efficient Information Exchange at Home and Abroad

Yaolan Wang

Digital Media Art Major, School of Art NUIST, 210044 Jiangsu, China
trouble91919@gmail.com

Abstract. With the rapid development of digital media technology, short videos, as an important information dissemination carrier, play a key role in the global information flow. However, due to technical barriers, cultural differences and different communication mechanisms, there is still a certain information gap between domestic and foreign audiences, which affects the efficiency and depth of cross-cultural exchanges. This article takes digital media art as the starting point, focusses on its application in network information application in network information dissemination, and explores how to build a mechanism to promote efficient information exchange between domestic and foreign audiences through the integration of technological innovation and artistic expression. This research adopts a combination of literature review and case analysis. First of all, this article summarises the impact path of digital media art on the dissemination of short videos; secondly, it analyses the expression of information asymmetry and its coping strategies through specific cases. The research results show that digital media art can effectively reduce the cultural discount in information dissemination and promote the two-way flow of information at home and abroad through the universality of visual symbols, the immersive experience of interactive design, and the accurate matching recommended by algorithms. The results of this study can provide theoretical reference and practical inspiration for optimising cross-cultural information dissemination strategies and narrowing the information gap.

Keywords: Digital Media Art, Online Information Dissemination, Domestic and Foreign Market Information Gap.

1 Introduction

This research focusses on the rapid development of short videos based on digital media technology, which occupy an important position in cross-border information dissemination. However, the information gap caused by cultural differences and different communication modes at home and abroad is still a prominent problem. This research is of

great significance to promote efficient information exchange between China and foreign countries, improve the effectiveness of cross-cultural communication, and give full play to the practical value of digital media art.

This research mainly focusses on three aspects: the role of digital media art innovation in expanding the cultural communication of short videos, the path of art empowerment in enhancing the value of content, and the way in which artistic expression breaks through cross-cultural barriers. This research adopts the literature analysis method to sort out and interpret relevant literature in the fields of digital media art, online information dissemination and cross-cultural communication. This method systematically reviews the existing research results and provides a stable theoretical basis for this paper. In addition, this study also conducted a case study, selecting representative short video works for comparative analysis to enhance the practical persuasiveness of the conclusion. The ultimate goal of this study is to reveal the potential mechanism of digital media art to promote efficient information exchange at home and abroad. In order to achieve this goal, this article starts from real problems, carries out background research, theoretical summary and case study, and explores feasible communication strategies and optimisation paths.

2 Background

The rapid development of Internet technology and the wide application of artificial intelligence have brought human society into the digital information society. By 2025, the number of global Internet users will exceed 5 billion, of which social media users will account for more than 80%. Platforms such as WeChat, Weibo, TikTok, Facebook and Twitter have broken down the barriers of traditional information dissemination methods such as newspapers, radio and television with their immediacy, interactivity and convenience.

In today's era of deep globalisation and rapid iteration of digital technology, short videos have long gone beyond the category of simple entertainment and become the most popular form of decentralised entertainment. In addition, through product sales, live broadcasts and other channels, short videos are gradually transforming into a highly dynamic new business model. At the same time, the popularisation of digital media technology has broken the time, space, language and channel limitations of traditional transnational information dissemination, and promoted domestic and foreign information exchange to a new stage of efficiency, convenience and inclusiveness. With the help of lightweight digital carriers, the cultural content, values and lifestyles of different countries and ethnic groups can be quickly spread in both directions. This lays a solid foundation for the gradual construction of a new knowledge mechanism, and also provides a dual opportunity for digital media art majors to meet the needs of the industry and promote international cultural exchanges. Against this background, digital media art majors can fully grasp the development opportunities brought by the wave of short videos. On the basis of their own professional foundation, they can expand and give full play to their professional characteristics and core advantages, optimise their professional positioning in a timely manner, update the talent training system, take the

initiative to meet the needs of international cultural exchanges of the times, and develop professional The exhibition is closely combined with transnational information dissemination and cross-cultural content creation. In fact, creating high-quality short videos is not a simple shooting and editing. It not only requires solid Internet expertise, but also cross-cultural perspective and creative expression ability to create both professional and attractive content, accurately capture the attention of global users, and achieve effective information dissemination.

The existing courses of digital media art major cover the key links of the whole process of short video production, from early shooting skills, mid-term editing optimisation to later content creation, visual presentation and creative design, each presentation and creative design, each course provides strong support for improving the quality of short video content. This is not only the core competitiveness of the major closely connected with the development of the short video industry, but also an important foundation for promoting efficient information exchange and cross-cultural communication at home and abroad. With professional knowledge, students can create short video content that resonates with international audiences and contains the connotation of Chinese culture, so as to promote Chinese culture overseas; they can also accurately interpret diverse international cultures, build a digital bridge for Chinese and foreign cultural exchanges, and ensure that digital media technology really promotes efficient international information flow. An important force for dynamic and deep cross-cultural integration.

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3 Case Analysis

The rapid development of globalisation and digital technology has made short videos transcend pure entertainment attributes and become an important carrier for cross-cultural communication of Chinese food culture. Its lightweight and highly interactive characteristics break the restrictions of geographical dissemination. As a key link between technology and culture, digital media art uses a variety of creative techniques to break down cross-cultural communication barriers, enhance the value of content, expand the form of communication, and inject new vitality into the world of Chinese food

culture. Based on actual cases, this article discusses the application path and effectiveness of digital media art in the dissemination of short video culture from three core dimensions.

3.1 Approaches to Breaking Through the Barriers of Cross-Cultural Communication in Short Videos

The main challenges facing cross-cultural communication include cultural differences, aesthetic barriers and language barriers. Digital media art can effectively overcome these obstacles and realise the "cross-culture context" dissemination of food culture through visual conversion and symbolic presentation. If only rely on simple photography or text description, due to cognitive bias, the folk customs and values contained in Chinese food culture are easily misunderstood and difficult to communicate effectively. However, digital art technology can make these cultural connotations more acceptable to global audiences [2]. In order to overcome the language barrier can abandon the dependence on text descriptions and combine visual subtitles and dynamic icons to transform core information into intuitive visual symbols. For example, Chinese food short videos on overseas platforms such as TikTok and Instagram use digital editing technology to disassemble the production process of dumplings, dumplings and other dishes. The concise and vivid subtitles mark the ingredients and steps, with warm tones and soft transitions, effectively alleviate the cultural gap, so that overseas audiences can appreciate the charm of Chinese cuisine without in-depth understanding of Chinese culture.

In the process of crossing cultural barriers, have adopted the method of "combining localisation and adaptation, and exploring commonality". On the one hand, through digital modelling and scene restoration technology, the folk culture behind the food is presented in a visual way. For example, when shooting hot pot short videos, it can use dynamic special effects to reproduce the scene of people eating around the stove on the streets of Sichuan and Chongqing, and add simple cultural labels to help the audience skilfully understand the cultural connotation. On the other hand, by exploring the common pursuit of "food" and "reunion" between China and foreign countries, and using unified visual language, can evoke emotional resonance and break down communication barriers.

3.2 Strengthen the Cultural Communication Value of Short Videos

The core of cross-cultural communication in short videos lies in the quality of content. Digital media art can promote the upgrading of food culture short videos from "surface display" to "cultural communication", strengthen the professionalism, emotional value and brand value of the content, and improve its persuasiveness. In terms of professional value, digital media art can accurately present cooking techniques. Chinese cooking skills are superb. It is difficult to capture details such as pastry carving and heat control with ordinary shooting methods, while technologies such as high-definition photography, slow-motion editing and close-up shots can magnify these details. For example, when showing the cooking skills of traditional Chinese restaurants, high-definition lenses can capture the chef's movements - stir-frying, cutting vegetables, etc. - combined with capture the chef's movements - stir-frying, cutting vegetables, etc. - combined with slow motion and colour correction, so that overseas audiences can clearly

appreciate the exquisite cooking skills, so as to realise the transnational dissemination of these skills [3]. In terms of emotional value, can use techniques such as narrative editing and sound effects to explore the humanistic story behind the food. For example, the short film "Chinese Food Enters the United Nations" uses montage editing to intertwine pictures of chefs preparing food, the reactions of representatives of various countries to taste delicious food, and anecdotes about food culture. With soothing background music and concise narration, it conveys the concept of "building friendship through cultural exchange with food as the medium" and enhances the attractiveness of the content. At the same time, through visual design, symbol creation and other skills, it will create food culture IP, unify the visual image, strengthen brand awareness, and improve the sustainability of communication.

3.3 Innovation and Expansion of the Form of Short Video Cultural Communication

Digital media art can break the traditional communication mode, expand the interactivity, immersion and diversified communication forms of short videos, expand the scope of communication, and promote the diversified development of international communication of food culture. In terms of interactive communication, digital special effects and interactive stickers are used to launch interactive challenges with the theme of food to encourage overseas audiences to shoot short videos of Chinese food and participate in online communication; answer audience questions through comment areas and live broadcasts, so that the audience can change from "bystanders" to "participants". In terms of immersive communication, combine VR and AR technology to create virtual food scenes. With the help of 360-degree panoramic photography and digital modeling, the audience can watch the food production process and regional customs from all angles to enhance the immersive experience.

In addition, it can also promote the diversification of communication forms, combine short videos with overseas social media platforms, food applications, Confucius Institute online courses, etc., optimise the content form according to the characteristics of the platform, and realise multi-channel communication; link with offline activities such as international food festivals and cooking competitions, and expand the film through live broadcasts and playback. Sound power, realise online and offline collaborative communication [4].

In a word, digital media art provides strong support for the international dissemination of Chinese food culture by breaking down cultural barriers, enhancing the value of content, and expanding the form of communication. With its innovative methods, it can make Chinese food culture more acceptable to the world, enhance the international influence of Chinese culture, and build a digital bridge for cultural exchanges between China and other countries.

4 Discussion

In today's fast-paced business world, the art world has undergone drastic and rapid changes. Artists have long gone beyond traditional roles and no longer only focus on artistic creation, but have become artistic entrepreneurs with solid artistic talent and

keen business acumen. In the digital age, the new media platform has become an important support for the international dissemination of Chinese culture. Building a new media platform and upgrading short videos is the key way to improve the international dissemination of Chinese culture [5].

The rise of digital media and social media has provided crucial support for artists to start a business and realise the cross-border dissemination of works. Platforms such as YouTube and Instagram have become important channels for artists to build online influence, connect with global audiences, and get rid of intermediaries. As one of the most influential forms of communication today, short videos rely heavily on the power of digital media art in cross-border exchanges, but they also face many practical challenges. It is necessary to explore targeted solutions to achieve efficient and active cross-cultural exchanges [6].

4.1 The Positive Role of Digital Media Art in the Cross-Border Exchange of Short Videos

The integration of digital media art has significantly reduced the threshold of cross-border communication of short videos, greatly enhanced the communication effect, and become an important bridge for communication between different cultural groups. Unlike the limitations of traditional art communication forms, digital media art, with its visualisation and popularisation creative skills, can transform complex cultural connotations and artistic concepts into intuitive and easy-to-understand visual content, breaking down cultural barriers between different countries and ethnic groups. The communication mode of Chinese culture has also changed from one-way export to multi-directional and collaborative cooperation. Social media and short video platforms have reshaped the communication channels and narrative logic, and promoted the evolution of the communication mode from information-driven to algorithm and emotion dual-driven mode. Cultural trust, translation differentiation and platform optimisation have become the keys to improving the effectiveness of communication, while cultural forms such as literature and music enhance the emotional resonance of cross-media communication. In the future, it should focus on the three dimensions of micro-mechanism verification, medium-view model optimisation and macro-system construction. This will help Chinese culture change from "passive acceptance of communication" to "actively shaping the agenda", enabling it to participate in the reconstruction of the global civilisation dialogue order, and providing an effective way for global civilisations to learn from each other [7].

For the cross-border dissemination of short videos, the core advantage of digital media art is to "reduce the cost of understanding" - through technologies such as editing optimisation, visual effects and symbolic presentation, overseas audiences can quickly grasp the core information of short videos and experience the charm of different cultures without complex text interpretation. International art exchange has aesthetic appeal. From the perspective of the U.S. government and its congressional allocations, the "art" used for overseas activities must always be judged by its publicity effect, and must not be judged by its artistic effect [8]. For example, artists can integrate local cultural elements into short videos through techniques such as digital painting and dynamic editing. This not only preserves the authenticity of culture, but also caters to the

aesthetic habits of the global audience, so that people from different cultural backgrounds can easily understand and resonate. This effectively enhances the dissemination scope and influence of short videos, helps artists quickly establish international reputation, so as to achieve double improvement in artistic and commercial value.

4.2 Problems in the Cross-Border Dissemination of Short Videos

Although digital media art injects vitality into cross-cultural communication through short videos, it still faces two outstanding problems in the actual communication process, which affect the quality and effect of cross-cultural communication. On the one hand, cultural misunderstandings occur frequently. Some creators overemphasise visual effects and ignore the accurate transmission of cultural connotations. While catering to the audience's aesthetic interest, documentary short videos also pay attention to another important factor in creating "experience reality": the intention of watching. Since watching content on digital media platforms is a personalised choice, the audience is always guided by their own life experience and emotional state, and their personal intentions constantly affect their actual experience [9]. Insufficient understanding of overseas culture may lead to cultural bias in the content of short videos, which is easy to cause misunderstanding of overseas audiences, and even cause cultural conflicts. For example, when presenting local cultural elements, if the presentation of digital art is too one-sided and fails to fully convey the cultural background, it may lead to misunderstanding by overseas audiences, thus violating the original intention of cross-cultural communication. On the other hand, the problem of over-reliance on digital technology is also increasingly prominent. Some creators fall into the trap of "technology first", over-piling special effects and pursuing formal innovation, but ignoring the quality and artistic connotation of the content itself. As a result, short videos lack soul and it is difficult to realise long-term dissemination. At the same time, this is also not conducive to the improvement of the core creative ability of artists. In the long run, it will affect the sustainable development of art entrepreneurs.

4.3 Specific Strategies for Cross-Border Communication of Short Videos

In order to solve the above problems, it should combine the characteristics of digital media art and work together at the creators and platform levels to formulate practical solutions and promote the positive development of cross-border exchanges of short videos. For creators, the core challenge is to balance visual appeal and cultural connotation. When using digital media art skills, it should not only pay attention to visual attraction and cater to the aesthetics of international audiences, but also deeply explore cultural connotations and accurately convey the core values of local culture. Digital media art enables creators to explore non-traditional narrative methods, so as to produce videos that can attract and stimulate the audience's interest, break through creative boundaries, and explore non-traditional short video creation ways [10].

At the same time, it is crucial to know overseas cultural customs and taboos in advance to avoid cultural bias. If necessary, cross-cultural elements can be integrated to promote understanding and tolerance between different cultures. For the distribution platform, the algorithm recommendation mechanism needs to be optimised. On the one hand, it should increase the support for high-quality content, and select short videos with both technical aesthetics and cultural depth for accurate distribution; on the other

hand, it should build a cultural interpretation module to provide a concise cultural background introduction for overseas audiences, help them better understand the content of short videos and reduce cultural misunderstandings, so as to Context short video communication creates a favourable environment.

In a word, digital media art provides important support and convenience for cross-border communication through short videos and reduce cultural misunderstandings, so as to Context short video communication creates a favourable environment. However, problems such as cultural misunderstanding and technical dependence still need to be solved. Only when creators adhere to the essence of content creation and optimise platform services can they give full play to the value of digital media art, make short videos an important carrier of cross-cultural communication, and realise the coordinated development of art and commerce.

5 Conclusion

The analysis of digital media art and cross-cultural communication of short videos shows that digital media art has played an important role in promoting efficient information exchange at home and abroad in terms of communication method innovation, content value enhancement and cultural barrier breakthrough. Therefore, it can be said that digital media art is an important means to bridge the information gap in domestic and foreign markets and promote the smooth dissemination of cross-cultural information. This research can provide reference for further exploration in the field of digital media art and cross-cultural communication, and provide practical ideas for improving the creation and dissemination mechanism of relevant content. It has certain theoretical and practical value for understanding how digital technology empowers cultural exchange. Future research can focus on the actual communication effect of digital media art in different cultural backgrounds, combine technological development and changes in audience needs, and explore the art expression path, communication mechanism and cultural integration in more depth.

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