Explore the Interaction of Artists, Audience and Social Context in the Digital Communication of Dunhuang Murals

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Abstract

The Belt and Road Initiative, as an innovative continuation of the ancient Silk Road, provides a possibility for the exchange and docking of cultural values of countries around the world. As a cultural name card of China, Dunhuang culture is not only an important source of cultural consciousness and self-confidence, but also the best medium for cultural exchange and dialogue between the East and the West. Digital communication has the advantages of fast speed, wide audience and vivid information presentation, which opens up a new path for the inheritance and protection of Dunhuang culture. The use of digital technology to present Dunhuang culture to the public in a new way, so that the audience and Dunhuang culture have "close contact", to achieve an interactive experience. Artists provide artistic regeneration carriers for the digital communication of Dunhuang murals, audiences bring broader and more core inheritance forces for the digital communication of Dunhuang murals, and social context expands a multi-level and multi-dimensional strong communication platform for the digital communication of Dunhuang murals. In the process of digital communication of Dunhuang murals, the society, as an important carrier of digital communication of Dunhuang murals, broadened the form of dialogue and communication between artists and audiences, and the relationship between artists and audiences continued to develop towards a diversified and changeable trend.

Keywords: *Dunhuang Mural, Digital Communication, The Artist, Audience, Society.*

INTRODUCTION

Since the middle and late 1980s, digital technology has gradually become the hotspot of The Times. Under the influence and drive of the more developed countries such as the United States and Japan in information technology, all countries are taking great strides towards the information society. The development of digital technology not only innovates the way of human information exchange, but also speeds up the efficiency of information transmission and shortens the distance between people. In the information society, the use of digital technology has become a stage feature of an era. In the era of big data, there are more and more contents of digital research on cultural heritage, and more and more research and display results on digital protection, inheritance, exchange and dissemination of cultural heritage (Zhu Quanwen, 2023). How to realize the deep integration and development of culture and science and technology has become one of the important directions of academic research and exploration. The opening of the digital process has provided important technical dividends for the transmission and inheritance of culture. The Internet has opened up the online world of network communication, and PC and mobile terminals have become the interfaces for network access. Platform-based digital media came into being. Portals, social media platforms, video media platforms, bullet-screen video websites and clients have provided a broad space for the production and dissemination of UGC,PGC and MGC. The use of digital technology to achieve the organic integration of "culture + science and technology", so as to promote the traditional culture to shine the example is rare. For example, Tencent and the Dunhuang Academy jointly launched the "Cloud tour Dunhuang App; The variety show "On the New, Forbidden City" jointly created by CCTV and the Palace Museum, and the dance show "Tang Palace Evening Banquet" launched by Henan Spring Festival Gala with 5G+AR technology fully reflect the excellent results of the integration of culture and science and technology (Zong Shaoge, Liu Zijian, 2019). With the penetration of digital technology, the form of cultural presentation and transmission has been reshaped.

Dunhuang murals were listed as world-class cultural heritage in 1987, and their large scale and exquisite skills

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are important components of Dunhuang art. Dunhuang murals cover a total area of more than 50 million square meters, including 522 grottoes such as Mogao Grottoes, West thousand Buddha Caves and Anxi Yulin Grottoes, which are the largest murals cluster in China and even in the world. Dunhuang murals occupy an important position in the world art history, it is a microcosm of an era, and it is the best way for us to understand the social features of this period. Dunhuang murals contain a large number of humanistic stories and classic Buddhist sutra culture, and their exquisite painting techniques reflect the crystallization of ancient painting art and wisdom, which is the record and dissemination of Chinese traditional culture, painting art and even spiritual culture. With the rapid development of science and technology, in the context of the development of digital technology, the ways and means of traditional culture transmission have become more diversified, and the inheritance and protection of Dunhuang culture have a new way. Whether it is the digital restoration of Dunhuang cultural relics, or the digital dissemination of Dunhuang murals, statues and other elements, it is an important part of Dunhuang cultural protection. Studying the digital dissemination of Dunhuang culture can better promote the inheritance and protection of China's traditional culture, improve the country's cultural soft power, enhance cultural self-confidence, and enable China and countries along the "Belt and Road" to enhance mutual cultural communication, mutual understanding and trust between countries, and promote the common development of all countries (Wu Jian, 2022). How to realize the secondary development and innovation of Dunhuang culture on the basis of ensuring the authenticity of Dunhuang culture content, in order to meet the connotation of The Times of constant change and development, and finally realize the public's understanding and recognition of the excellent traditional culture carried by Dunhuang culture, and then internalize it into spiritual support, and promote the construction of China's cultural power is worth thinking about. This paper makes an in-depth exploration and analysis of the digital communication of Dunhuang culture from the three aspects of artists, audiences and society, and puts forward relevant optimization suggestions to provide practical reference significance for the digital communication of Dunhuang cultural heritage in the future.

LITERATURE REVIEW

Artist: The Carrier of Artistic Regeneration in the Digital Dissemination of Dunhuang Murals

With the discovery of the Scriptures Cave documents, many artists began to come to Dunhuang in the 1930s to try to excavate various elements of Dunhuang mural art. There are a large number of decorative patterns in Dunhuang mural art, such as honeylonicera pattern, treasure flower pattern, phoenix bird pattern, fringe road, etc. These traditional decorative patterns are widely used in the art forms of design. The most common form of traditional symbols is to reconstruct the elements in the mural to produce new picture effects, or to use the colors in the mural to create new art. In addition, with the development of science and technology, more and more artists combine traditional mural elements with technology (such as digital imaging, new material technology, etc.), trying to collision the artistic appearance that more reflects the spirit of The Times.

Dunhuang Art Stage Regeneration

Because Dunhuang art has its own characteristics, it cannot copy its art law and mechanically inherit its art content or form. Therefore, the regeneration of Dunhuang art first needs innovation in art form, which mainly relies on the progress of modern information and digital technology, so that Dunhuang art has a variety of forms of regeneration carriers. With the successful transformation of two different art forms, from mural painting to dance, Dunhuang art began to gradually penetrate into multiple aspects of artistic creation, explore the transformation and generation of different art forms, and realize the regeneration of Dunhuang art. For example, the world-famous Dunhuang art stage regeneration work "Silk Road Flower Rain" is inspired by the murals of Mogao Grottoes in Dunhuang. At the end of 1979, this dance drama successfully premiered in Hong Kong and began to spread around the world, making Dunhuang art, which had been silent for thousands of years, come to the stage and become known. This is not only a typical representative of Dunhuang art's regeneration and great success, but also a core innovation in the form of Dunhuang art regeneration (Du Juan,Fang Jiali, 2022) .

In addition to the celebrity world's "Silk Road Flower Rain", there are "Big dream Dunhuang", "Thousand-hand Avalokitesvara", "Dunhuang Festival", "See Dunhuang again" and other works. Although the creation

speed of these plays based on Dunhuang art is not too fast, most of them cannot be stopped once they are performed, and many of them are still popular and enduring classic works. For example, the 2008 version of the large-scale classic dance drama "Silk Road Flower Rain" premiered at 8 p.m. on July 30, 2022 in the new Gansu client video number global network, which is the first online broadcast of "Silk Road Flower Rain" since its creation 43 years ago. Although it is impossible to watch this classic visual feast live, people's attention to Dunhuang art has not decreased under the epidemic, and the short two-hour broadcast has attracted more than 200,000 viewers to pay online viewing (Qian Xiaoyu, Gangqiang, 2021). The innovative transformation from mural form to dance form also reflects the good trend of the combination of artists and merchants in the regeneration of Dunhuang art.

From the stage of Dunhuang art scene to the "cloud" stage, it is another innovation of Dunhuang art expression relying on new media technology. Huang Huaipu believes that "if static Dunhuang art is displayed in a dynamic and intuitive way, Dunhuang art will truly become a popular art accepted by the common people, and Dunhuang art will gain more forms of regeneration, and the inner spiritual connotation of Dunhuang art will truly penetrate into the people." In the context of digital cultural experience becoming a new popular trend, the joint venture between Gansu Daily Newspaper Group, Gansu New Media Group, Gansu Performing Arts Group and Gansu Song and Dance Theater has created a precedent for the online display of classic plays, which not only breaks the inherent restrictions of live viewing on traditional performance platforms, but also creates a new ecological environment of literary performance combining new media with classic art. It enables audiences around the world to enjoy this high-quality visual cultural feast without being limited by time and space, which not only meets the requirements of the background of the epidemic era, but also carries out beneficial exploration on the innovative level of art forms (Shi Zhou, 2022). At the same time, it also aroused the audience's interest in Dunhuang art, and many viewers left messages, liked and commented during the viewing process.

Regeneration Of Dunhuang Art in Film and Television

The dynamic artistic expression is not only the stage, but also the film and television regeneration of Dunhuang art. The initial innovation and exploration of this art form originated in the 1980s with the appearance of the cartoon Deer of Nine Colors and the Clip Saves the Deer. It is a film and television creation with Dunhuang art as the theme and presents Dunhuang art through the combination of audio-visual language (Yu R J, Yin J. 2017). At present, the regeneration of Dunhuang art in film and television can be summarized into the following five forms :(1) documentary works. It mainly includes documentaries, landscape films and feature films created on the theme of Dunhuang art. The creation of documentary works pays attention to the historical value of Dunhuang art, pursues the "original flavor" of Dunhuang art in the creation process, and attempts to achieve the purpose and effect of recording Dunhuang art, displaying Dunhuang art and spreading Dunhuang art. (2) Animation. Animation creation is usually based on the Buddhist sutra stories on Dunhuang murals as inspiration or content processing and production, in a simple and easy to understand way to reproduce and recreate. Compared with other forms, art has the strongest appeal and affinity. The target audience of this form is mainly children. It is a form of film and television art most in line with children's psychology. It can enligh10 people of lower age to understand Dunhuang art, and it also has strong educational significance. (3) Feature films. Feature films include films, TV shows, network dramas and other dramatic film and television works with Dunhuang as the creation theme, element or background, mainly displaying Dunhuang art aesthetic culture, national spirit, religious implications and so on. (4) Variety show. Variety show is based on Dunhuang art as the theme combined with documentary and reality show shooting methods for scene or panoramic production and broadcast. Through a "young" perspective to interpret Dunhuang art, and from the outside to the inside of the learning and creation, so that Dunhuang art can be perceived and discussed in a deep way to reach users.(5) We media short video. Short we-media videos are videos about Dunhuang art that are edited and produced by individuals or teams and published on major video platforms on the Internet, such as B Station, Douyin, Kuaishou, etc.

From the cartoon "Deer of Nine Colors" to the original network panoramic humanistic exploration program "Dunhuang!", the film and television communication results of Dunhuang culture and art are increasingly abundant. "Flying Sky" and "Dunhuang Sutra Changing Painting" in the third season of "If National Treasure

Could Talk" broadcast by CCTV, accurately grasp the landscape and cultural connotation of Dunhuang cultural relics through the audio-visual expression art, and truly and vividly spread Dunhuang culture (Zhao Zhechao, Wang Xin. 2021). In 2020, iQiyi launched the program "Debut! Dunhuang" with Dunhuang culture as the theme, and the host Wang Han and young artists formed a "Dunhuang exploration group" to unlock Dunhuang puzzles. During the journey of exploration, guests of the program visited a number of celebrities and experts in the field of Dunhuang culture to explore the "mysteries" of Dunhuang culture. Such programs bring the mysterious and distant Dunhuang culture into public life and show the charm of Dunhuang culture and art.

The outbreak of COVID-19 in 2020 has brought barriers to offline cultural tourism, but it has also brought new ideas for the online dissemination of Dunhuang culture. The New Media Center of the Dunhuang Academy has launched a mini program of "Cloud Tour Dunhuang", which allows users to intuitively understand the charm of Dunhuang culture through historical stories and art stories. According to statistics, at the beginning of the launch of the mini-program "Cloud Tour Dunhuang", the cumulative page views exceeded 40 million, and the number of independent users exceeded 9 million (Jia Wei. 2021). In line with the development of the video-oriented society, "Cloud Tour Dunhuang Animation Drama" has developed an animated version of Buddhist cultural elements with the help of the Buddhist art resources contained in Dunhuang, dynamically combined and presented the cultural elements in the murals through the narrative techniques of modern films, virtualized and concretized the ideas and thoughts of the murals, and enabled the ancient murals to transform into animations and spread on the Internet.

The communication methods of "film and television" and "cloud travel" allow Dunhuang culture to get rid of the traditional static display mode in the past, and freely integrate into modern society, giving traditional culture a path to integrate into modern life through thousands of years, so that the audience's understanding of Dunhuang culture can go beyond spatial limitations and superficial cognition, go deep into the core of cultural stories, and experience the wisdom and heritage of Dunhuang culture.

Dunhuang Art IP

In the context of globalization, Dunhuang art has gradually generated a modern Dunhuang art system through various regenerative forms such as stage, film and television, literature, etc., which makes the regenerated Dunhuang art realize the development of industrialization. In the art stage of market economy regulation, the commercialization of Dunhuang regeneration art is becoming increasingly obvious. Today, "Dunhuang art" has become a loud cultural business card, generating many famous and well-known art brands at home and abroad, the brand effect is prominent, to a certain extent to meet the spiritual and cultural needs of the public, promote consumption, and achieve good commercial value.

The digital economy provides new opportunities for the narration of Dunhuang culture, and diversified creative cultural products make Dunhuang usher in the possibility of integrating with The Times. Dunhuang culture is rich in nationality and world, and contains rich historical value and contemporary significance. Its cultural core essence will help build high-quality IP. The combination of historical deposits and modern elements will vividly show the spiritual world contained in Dunhuang culture and give new vitality to traditional culture.

In 2017, Dunhuang Academy and Tencent launched cross-border cooperation. Under the concept of digital economy, the "Digital Silk Road" project meets the experience needs of users from different Internet circles through creative transformation methods such as cultural creation and games, and attracts more users to participate in the protection and inheritance of Dunhuang culture. Based on the IP elements of Dunhuang culture, such as the Dunhuang flying Sky, pipa and the song "Meet the Flying Sky," a game owned by Tencent creates the "Dunhuang Flying Sky" skin of hero Yang Yuhuan. This creative design cleverly integrates cultural elements into modern games, lowering the threshold for users to know and contact Dunhuang culture, and narrowing the distance between the public and Dunhuang culture. Data show that in less than an hour, hero Yang Yuhuan's flying skin has been used by 40 million people, and Dunhuang culture has begun to integrate into daily life (Liao Shijun, Wang Huihui, Yang Xuemei, 2021).

On the other hand, the typical manifestation of "digital cultural creation" is the "Dunhuang poem towel" mini-program. "Dunhuang Poem Towel" continues the concept of Dunhuang caisson to the silk scarf, and the eight

themed patterns created by the designer not only retain the heavy cultural heritage, but also cater to the contemporary aesthetic. In the interaction process, users can DIY their own Dunhuang silk scarves through this mini program to enhance their recognition and understanding of Dunhuang culture. Data show that within about a month of its launch, 3 million users have participated in using the "Dunhuang Poetry Towel" mini program, generating nearly 250,000 DIY literary and creative works (Zhao Shengliang. 2023).

The continuous development of digital technology has realized the linkage communication of "digital + traditional culture". In the process of telling Dunhuang culture, it is necessary to actively take the Dunhuang murals and other cultural elements as the theme, create cultural products that run through the Dunhuang clay sculptures, music and dance, paper cutting and other national cultural and art forms, create a cultural IP with Chinese characteristics and world influence with rich cultural symbols, and promote the modern telling of Dunhuang cultural stories.

Audience: The Core Inheritance Force in the Digital Dissemination of Dunhuang Murals

In the context of the development of digital technology, the ways and means of traditional cultural transmission are more diversified, and advanced digital technology makes cultural transmission more intuitive and convenient. From the perspective of "use and satisfaction" theory, influenced by the mass communication revolution, audiences do not receive information completely passively, but choose content and media according to their own specific needs. In the new media environment, the characteristics of audience-led communication are increasingly obvious. Audiences hope that mass communication can change the previous one-way communication mode and obtain the information they need through equal communication and interaction. Especially in the social environment where material needs are satisfied, people begin to pursue emotional enrichment. The digital communication of Dunhuang murals has changed the previous serious and profound communication style. On the basis of respecting the fragmented reading habits of the audience, it can understand the current media habits, reading preferences and language styles, and narrow the distance between Dunhuang culture and the general public with easy to understand communication methods.

Socialization of Issue Setting

In the process of mass communication of Dunhuang culture, it makes full use of hot topics on the Internet to carry out marketing, combines Dunhuang culture with the discourse style of modern society through diversified communication methods, and sets the agenda for socialization with the help of hot topics to narrow the distance with the audience and stimulate their interest in reading. For example, the official Weibo of "Dunhuang Museum Cultural Creation and Silk Road Hand Letter" made use of Wang Yibo's huge fan effect to customize Wang Yibo's exclusive skateboard engraved with Dunhuang murals, and then brought the topic into the Weibo hot search with Wang Yibo's own response. The topic of "Dunhuang flying sky", "Dunhuang Museum skateboard" and "Dunhuang murals" has quickly entered the public's vision, setting off the sales boom of cultural and creative goods with traditional culture as the theme; The combination of cultural inheritance and business model has been one of the means of communication in the field of museums. On the occasion of Tmall Double 11, Dunhuang Museum and Tmall flagship store released creative promotional activities of "Heaven, Dunhuang", designed innovative products with Dunhuang cultural characteristics to attract users to buy, and launched a series of preferential activities to increase user viscosity, so as to meet the emotional and use needs of some consumers; At the moment when the topic of "Versailles" triggered users' attention and discussion, the Dunhuang Academy released a wechat tweet titled "Buddha Versailles: A Buddhist youth is also a Versailles person." By introducing the story of the Prince of Versailles in Dunhuang frescoes, the story of Dunhuang frescoes is connected with modern life scenes in a concise and concise way, which is close to the lifestyle of contemporary people, thus attracting the public's interest in Dunhuang culture.

This series of topic setting breaks down Dunhuang culture into different content communication themes, so as to spread relevant culture from simple to deep, stimulate two-way interaction between social platforms and the scene with vivid and interesting topics, and promote the topic to trigger heat.

Popularization of Discourse Style

McLuhan proposed that "media is the extension of human consciousness". The communication characteristics

of mobile Internet make online users an extension of each other's consciousness, and they can cross the boundaries of space and communicate with users in different regions in any place. The past language carrier has been unable to adapt to the transformation of communication mode brought about by the change of new media. The rise of online mobile clients has extended the popular communication language style to more infinite possible areas.

Easy to understand media discourse plays an increasingly important role in interactive communication. Therefore, from the perspective of the audience, the main body of cultural communication begins to change the narrative style of serious and one-way communication in the past, and begins to use the communication channels of new media to communicate with the audience by using civilian expression, which reduces the audience's rejection of boring cultural content, improves the audience's cultural recognition, and creates a more sharing, participation and joint communication relationship.

For example, the animated drama in the mini-program "Cloud Tour Dunhuang" gives different storylines to five representative mural stories, and at the same time attracts the audience to participate in the dub of the animated drama through modern discourse. Among them, the animated drama "Who is the C position of the Band" released by People's Daily has attracted the attention of many users, bringing to life the static Acting Music Flying Sky mural, vividly restoring the smart picture of the bouncing pipa, and adding interesting explanations to make the whole content present a sense of contrast. For example, "Do you want to know about the Dunhuang Sky Troupe? Have you made a call for Dunhuang Tiantuan? Who do you think would be a better C in the group?" A series of anthropomorphic expressions have narrowed the distance with the audience and created opportunities for equal communication with users. As of December 2020, the Weibo topic of "Cloud tour Dunhuang animation drama" has generated 42.431 million + reads, nearly 40,000 discussions, and 12,000 + retweets. At the same time, Dunhuang Museum called itself "Little Huang Huang" in the live broadcast activities cooperated with the Douyin Cloud Tourism Bureau, and formed a unique communication style with the publicity title of "Dunhuang, unruly since ancient times", propagated Dunhuang cultural information through anthropomorphic self-positioning, established a good fan interaction mode, and created a communication space for the understanding and absorption of Dunhuang cultural content.

Storytelling Techniques

Story and discourse are the core issues of classical narratology. The story level focuses on what the content of the narrative is, mainly involving the whole framework including the core elements of "story characters", "story structure" and "content". Dunhuang culture, as the representative of China's excellent culture, contains numerous historical stories of multicultural integration behind this cultural symbol. How to optimize these stories to attract the attention of the public requires certain communication skills. In the fragmented information age, users have the ability of selective contact, understanding and memory in terms of media exposure and information selection. Katz and Greevich put forward that audiences choose and use media according to their different needs and have their own independence, which is not restricted by the communicator (Zhang Shu, Zhang Zixuan. 2022). Therefore, if the communication subject wants to attract the audience, it must improve the attraction and attention of the communication content to the audience.

For a long time, Dunhuang culture has been affected by factors such as unfathomable and difficult to understand, so the impression left to the public is often a serious, distant and mysterious stereotype, which greatly widens the distance between the audience and the audience and reduces their patience to contact Dunhuang culture (Zhao Liang. 2023). This requires Dunhuang culture to use digital technology to break the communication dilemma and realize the innovation of the communication mode. For example, on the basis of retaining the authenticity of the story, the documentary "Dunhuang" uses virtual characters as the main line to reproduce the real historical stories, and integrates vivid stories with knowledge and scientific innovation, so as to silently influence the cultural cognition of the audience. In addition, the animated drama produced by Dunhuang Academy and science and technology enterprises uses a popular way to vividly interpret the mural story spanning thousands of years through the combination of culture, art, technology and digital, so that users can gain the value recognition of Dunhuang culture by participating in the story dub and interaction, and stimulate their interest and love for the history and culture of the "Belt and Road". In addition, the Buddhist

theme in the third season of the documentary "If a national Treasure can Talk" selected the mural of the Dunhuang Mogao Grottoes, "Medicine Master's Changes", with the help of high-tech technology to let the characters on the mural speak, and talk with the audience in a unique way, the cultural relics were given life.

Society: A Strong Communication Platform in The Digital Communication of Dunhuang Murals

Advances in information technology will promote more complex social interactions led by The Network, the famous sociologist Manuel Custer, once proposed "the Rise of the network Society" (The Rise of the Network Society), "The information revolution," he argues, "has shifted from traditional mass media to horizontal communication network systems around the Internet and wireless communication, triggering multiple modes of communication around the root causes of the fundamental cultural transformation, because virtuality has become the fundamental dimension of our reality." In the Internet era, the seamless connection of the whole space and time, the boundary between virtual and real gradually disappears, and constantly integrates, which not only removes the space-time barrier that maintains the development of offline circles, but also guides the offline circles in real life to extend and expand online (Zheng J. 2023). At the same time, it breaks the distinction of offline society, meets the new social needs, and gradually forms richer and more diversified topic or interest circles, and constantly changes and reconstructs the newly established online circles and the extended offline circles. All these are established under the internal needs of people to carry out social communication, forming a variety of circles or communities. In the era of the Internet, "the context of social media is even more so, the interpersonal communication scene shifts from the real context to the virtual space, the circle spreads virtual reality and surpasses reality, and the sociality and role playing are combined." According to the closeness and distance of virtual or real social relationships, people will form communities with different sizes and relationship strengths, and influence each other and carry out secondary reconstruction under this pattern.

For the digital communication of Dunhuang murals, the biggest communication opportunity created by the socially-oriented social communication features is the powerful communication power of multiple levels and multiple dimensions. This is first reflected in the multi-level of the communication relationship, that is, the communication relationship of "strong connection" and "weak connection". The "strong connection" itself has a high intensity of communication and interaction, and under the conditions of the Internet, it has greatly broken through the original realistic conditions of the "circle" restrictions, and the community model is large and wide. In reality, from the point of view of social relations, the "friends" that really produce effective interaction are actually limited. According to the anthropologist Robin Dunbar, "there is a hard-wired upper limit (or 'strong connection') to the number of people who can be hard-connected, with the maximum number of social connections for an individual averaging about 150 people." On the contrary, the number of people in the current Internet "circle" has already exceeded this value several times. Take wechat friends as an example, in this typical "strong connection" social platform based on acquaintances, everyone's wechat friends are at least twice the maximum number of values, most of them are several times, and some can even be as high as thousands of people. It can be seen that such a large "strong relationship" connection scope, which is impossible to achieve in real life, has become possible in the Internet era. However, such a large-scale "circle" is only one person, and the transmission and receiving behavior of each person in the "strongly connected" circle is also connected with multiple circles, which is a state of mutual integration of "one person, many circles" and "many people, many circles", which makes the transmission of information in such a communication relationship like nuclear fission. The progressive fission presented by one circle is then transmitted to another circle for further fission, which can be visualized as a chain explosion caused by a lead, and ultimately form a big explosion of information dissemination effect, and the individuals crossing each other in different circles are this lead. Although the "strong connection" relationship in the Internet era does not ensure that every connection is strong and powerful, if the strong relationship drives the weak relationship in this level according to the strong and weak, it can still produce large-scale communication effects. At the same time, the instantaneous accessibility of the mobile Internet, anytime and anywhere communication advantages, will inevitably accelerate and amplify such communication power. In addition, although the "weak relationship" is the "interest group" gathering in the virtual network, the great power of the group and the fast propagation speed in the circle are still its major advantages. At the same time, this is partly due to the interest of the people gathered together,

both professionals and enthusiasts, the power of gathering together is their great enthusiasm for this industry, such enthusiasm and vitality of the power will be able to greatly spread and promote people's awareness and acceptance of this. For example, the nuclear fission explosion of "National Treasure" first benefited from the highly professional comments of these "interesting groups" in Douban, a gathering place of culture and green, and was recognized and accepted by other individuals in online communication, and began to enter the social platform wechat, which is connected by "strong relationship". This is the way to fission, detonate the circle of friends, resulting in such a phenomenal propagation effect. This is also the "weak connection" in such a complex communication ecology has produced the effect of mutual transformation (Zhang Wenqi, Du Juan, 2023). Therefore, "weak connection" and "strong connection" give Dunhuang murals multiple layers of digital communication, mutual transformation and interconnection in different circle dimensions, and only in the interaction of the two can a phenomenal mode of communication be produced. Excellent digital art works such as the comprehensive program of "National Treasure", the excellent film of "Monkey King", and the documentary of "If National Treasure Could Talk" all have great communication power in such multi-level and multi-dimensional communication form.

In any case, the communication power under these strong and weak relations is the disseminator and receiver of the content, not the producer of the content, and such communication power is also reflected in the content production of the disseminator and the audience, here the disseminator is both the identity of the disseminator and the audience, which is the multi-dimensional embodiment of community communication. The popularity of short videos and we-media shows that the general public can spread views and news through social platforms and become the central point of communication. At the same time, traditional media have also made use of people's instinctive needs for social attributes, opened public accounts by wechat and Weibo, etc., and assigned content to social relations, so that their content can be transmitted more quickly and smoothly in the social context to achieve the goal of efficient communication. At the same time, the content disseminated in social relations can also be automatically distributed in a multi-level and clearly differentiated environment, so that people in need can see the information they need. Such accurate target accessibility greatly reduces the inundate and low turnover rate of information in communication, and realizes an efficient and accurate communication mode. The digital communication of Dunhuang murals can be carried out accurately and efficiently under the multi-dimensional social communication mode in which the relationship among disseminators, producers and audiences is integrated with the power of short video and we-media. Finally, the empowerment of communication brought about by the Internet also implies that any non-media organizations and individuals can become communication subjects (Sun Hongyu, Wang Junfeng, 2022). This socially-oriented social communication stimulates the power of individual communication nodes in the social instinct of the masses. Regardless of the needs of individuals to express themselves and show themselves in social interaction, or the needs of general media to spread information and attract attention, under the role of "eyeball economy" and "human setup", the communication potential of each individual in this social context has been fully tapped. As a communication node, the lamp is lit by the dark line of social communication, and the communication forms a huge network form in the Internet era in the mode of community, and the network is still expanding (Tang JunHuang Yaping, 2022). It can be seen that the multi-level and multi-dimensional communication power brought by the socially-oriented community model is how big. At the end of 2017, a cultural and creative work of the Palace Museum, paper tape, swept the whole network and sold out of stock. It is naturally inseparable from the combination of paper tape and expensive lipstick in the media article, which is not only beautiful moxibustion, but also tells how to use tape; This kind of communication language is a language that really pays attention to the audience, which puts the traditional elements into practice. Spreading it can not only highlight the cultural and artistic taste, but also attract high attention. In this way, the communication attribute that meets the needs of users fully stimulates the individual nodes in the network structure, and the circle of friends is thus maxed out. And this article to the Forbidden City paper tape to bring explosive level of dissemination of soft text, it is from this set of disseminators, producers and receivers as one of the we-media, and in the multi-level and multi-dimensional community communication, social as the lead, the Internet exploded. Such strong communication power can be said to create excellent communication conditions for the digital communication of Dunhuang murals, and we must make deep and flexible use of it.

In the process of digital communication of Dunhuang murals, on the one hand, the power of the audience has been significantly improved. Compared with the strong traditional media that can only be accepted unilaterally in the past, the Internet provides a window for them to express their voices, but the disseminators are still in a strong dominant position. Social media based on wechat and Weibo provide interactive platforms for the digital dissemination of Dunhuang murals, and audiences can express their own views. For example, when Dunhuang micro-blog releases some digital art photography such as Dunhuang beauty, there will be a large number of comments, which is the feedback of the current audience, a little praise, but also have opinions, and so on. However, for many traditional cultural communication institutions, there is no platform to provide such feedback and interaction for the audience, and they do not pay enough attention to the status and voice of the audience. The communicators still occupy an absolute dominant position in the digital communication process of Dunhuang murals. Audiences and communicators have not reached a good balance in the Internet era. To some extent, most communicators have not realized the real communication value of audiences. On the other hand, artists and audiences can also transform each other. In many cases, the disseminators of Dunhuang murals are also the audience, especially in the current Internet era, when they are trying to spread Dunhuang culture, they are also receiving the influence of other types of traditional culture. At the same time, the audience is no longer just the audience receiving information. The popularity of social media makes them more willing to play the role of a communicator when they appreciate the high-quality digital art works of Dunhuang mural elements, and complete two or even more times of communication on social media.

CONCLUSION

The application of digital technology in Dunhuang culture promotes the process of digital dissemination of Dunhuang culture. Dunhuang culture provides audiences with diverse cultural information by virtue of the characteristics of different media, and at the same time provides attractive, participatory and inspiring cultural experience. It breaks the traditional one-way linear transmission mode of Dunhuang culture in the past, and makes the high and low Dunhuang cultural knowledge easier to be understood, accepted and remembered by people through the transformation of media technology.

In the digital dissemination of Dunhuang murals, the relationship between artists and audiences has been developing towards a multi-dimensional trend. In the digital age, artists become "amiable" and "blend in" with the audience. "Unfinished" works of art can only be truly completed with the participation of aesthetic subjects. Therefore, artists relax their rights, no longer perfectionism, resolutely hide behind the scenes, and become part of the works. The audience is no longer willing to stop and stare, and their desire to participate in art increases, even because their experience and cultural accomplishment affect the production of art in turn. Society, as an important carrier for the digital communication of Dunhuang murals, not only opens up the multi-media of communication, but also develops the interoperation-oriented new media art, broadens the "subject to subject" dialogue and communication form, and provides an interactive platform for the digital communication of Dunhuang murals.

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