



# The Influence of Algorithms on Art Communication Subjects and Channels

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**Abstract.** In the era of rapid development of the Internet, traditional means of art communication appear relatively limited, and the rapid development of digitalization also provides new ideas and skills for communication channels and technologies (Chen Yajie, 2021)<sup>[1]</sup>. New media is based on Internet technology, and its characteristics should also be derived from the Internet (Wen Xia, 2016)<sup>[2]</sup>. For art communication, how to make good use of Internet technology to upgrade communication channels, realize the diversification of communication methods and the accuracy of communication effectiveness has become a problem that must be considered in the current era. The emergence of new media technology has changed the communication mode and space of art communication. New media has realized the interaction of the audience and provided a better artistic experience (Zhou Xiaonan, Cai Chen Yulong, 2022)<sup>[3]</sup>. With the rapid development of new media, the mode of contemporary art communication has also changed, which has optimized the technical composition of art communication and enriched the ways of art communication.

**Keywords:** Algorithm, Algorithmic, Art communication, Art platform, Art channel

## 1 Introduction

It is generally believed that art communication refers to the whole process of transmitting art works and art information to recipients through certain material media and communication methods (Ni Wan, 2017)<sup>[4]</sup>. At present, the academic perspective on art communication or art appreciation is unitary, only considering the communication effectiveness of the communication subject in the communication process, and ignoring the communication process. Art itself is interactive, so art itself is also the communication process itself (Zeng Yaonong, 2007)<sup>[5]</sup>. In the development process of art communication, the communication and emotional ties between the communication subject and the audience also give birth to more thinking and understanding). The spiritual needs of users and the behavioral needs of emotional organs in art communication are defined as a cultural phenomenon. This cultural phenomenon has also begun to prove that in the process of art communication, the relationship between the communication subject and the audience is not binary opposition or the relationship

between the subject and the object, but has an equal status and is an interactive cultural phenomenon that can communicate directly (Li Xinren, 2005)<sup>[6]</sup>.

For art communication, different communication subjects have different communication effects. In the era of web2.0-web3.0, the communication subject has diversified communication characteristics. Different organizations, publishers, and even individuals can generate heated messages on the Internet. With the support of today's intelligent media algorithm, the communication effect of the communication subject is increased, the communication range is expanded, and the communication channel of art communication is deepened. For news communication, algorithm is to use algorithm technology to process user behavior and release information in the process of communication, and then mine the behavior habits and cultural background of communication objects to generate user portraits. By analyzing logic, we can better sort out, summarize and mine the obtained data, and form effective algorithm discourse in intelligent media algorithms. The most prominent impact of algorithms on art communication lies in the art communication subject and art communication channel. This paper will focus on analyzing the mining and impact of algorithms on art communication subject and communication channel.

## **2 Main Body**

### **2.1 Communication influence with communication organizations as the main body**

Media organizations generally refer to mass media organizations. The traditional media organizations refer to radio stations, television stations and so on. With the development of Internet and digital technology, traditional media organizations have begun to seek new changes. With the help of algorithmic digital technology and its own advantages in media development, it seeks innovation in the context of new media. In the digital era, information has become the core production resource, and the progress of algorithm technology has liberated the core productivity. From the bottom logic, although the algorithm is a clear calculation logic written by engineers for a specified project, it represents a complete set of fixed logic of computers when solving problems. It is far from enough to see today's new media communication from the traditional communication institutions. The arrival of the we media era has given more space for algorithms to give play to their charm and effectively improve the propagation rate and accuracy. Take the personalized recommendation product "Toutiao" as an example. In 2018, Toutiao today disclosed its algorithm principle to the industry. Its recommendation system is actually a function that needs to input variables in different dimensions and fits users' satisfaction. The first reference dimension is the content factor, which considers the feature extraction of different types of content; The second consideration is user characteristics, including a series of tags such as occupation, age, etc; The third reference dimension is the scene feature, which derives the difference of user information preferences according to the different scenes. And predict the model according to the three dimensions and judge whether the recommended content is suitable for users (Yu Guoming, Geng Xiaomeng, 2018)<sup>[7]</sup>. It is with this algorithm mechanism that

a large number of traditional media began to station in today's Toutiao one after another, using their commercial algorithms to spread the content to the audience to the greatest extent. In the independent algorithmic logic of commercial media, while promoting information dissemination, it also completes the adaptation of technology and humanistic logic, resulting in more discussions.

In the operation of commercial media, it has also become the main body of communication carrying communication information, providing an effective communication platform for the guidance and communication of information. In addition to traditional media, many art institutions have also begun to move into the algorithm platform. Take the National Grand Theatre as an example. Its official headline on today's Toutiao has attracted widespread attention. Toutiao has become the new article publishing end of the National Grand Theatre. Recruitment information, overseas visits, performance information and so on can be found on Toutiao. The newly opened performance calendar helps audiences to selectively enjoy different art programs, and broadens the channels of art development and art communication. Today's Toutiao belongs to the information search and recommendation engine of data mining, and the algorithm behind it is also very powerful. Using algorithm technology can better sort out the discrete art information on the network, while using "user portrait" technology to "big data" scan the communication object, so that the communication information can be more accurately recommended and drained.

The algorithm business platform has become an important channel for information dissemination in the new era. A large number of traditional media choose different algorithm platforms to settle in, so as to pursue more efficient information dissemination demands. Many powerful traditional media have also begun to develop digital information communication with the help of the high-speed train of new media, seeking the communication effectiveness and influence scope of their own platforms. Take pengpai news as an example, make use of data survey and business algorithm platform to make more "tagged" information widely disseminated. At the same time, under the control of the communication organization, the algorithm logic realizes the role of "information gatekeeper". Different clients enter today's Toutiao and other business platforms or their own algorithm platforms with the help of different algorithm systems and mechanisms to process information, screen and disseminate it again. Pengpai news client has its own independent business algorithm platform, which can better analyze the news data and reading habits of communication objects, and achieve more accurate drainage and promotion of communication information. There are also many traditional media that choose to cooperate with large-scale commercial algorithm platforms or algorithm institutions to actively build their own algorithm systems and realize the optimization of publicity logic and algorithm value. Take "people's Daily" as an example. In addition to its own paper media, it also has its own we media news app client. The people's daily app cooperates with the fourth paradigm to actively build and build an algorithm system, which not only changes the characteristics of the past recommendation algorithm in optimizing clicks and optimizing user durations, but also adds values to the algorithm, meeting personalized needs while reflecting value judgments, ensuring that content matches user needs, and achieving a new balance between individual needs and group values. The algorithm mechanism of two-way cooperation

ensures the quality of the communication content at the source, then depicts the user portrait according to the user's needs, and mines the information barrier, so as to make the recommended content meet the needs of the object, mine the causal relationship, and broaden the communication channel. In the process of people's Daily's dissemination of information, the party's media values are also reflected in the content values, and cooperation and win-win results create mainstream algorithms for new media and improve communication influence. In the "surging news client", the application of algorithms is also integrated into ethics, which reflects that algorithm recommendation is not only the guidance of commercial impulse, but also the value orientation and ethics. Algorithmic technology affects the public cognition and ideology shaping of communication objects. Algorithmic technology should also take full account of social public interests and social order, and cooperate to develop and optimize the platform, so as to create more value according to the algorithm. The addition of smart media apps makes news information more digital and news communication more convenient. With the addition of algorithm technology, the client will recommend the user's preferred news according to the user portrait of the communication object. The addition of the algorithm platform also promotes the high-speed dissemination and effective exchange of information. For art communication, the addition of the algorithm platform can better select the corresponding art information, and at the same time extend the corresponding homogeneous information for browsing and selection, so as to meet the aesthetic needs of the communication object.

For traditional art communication, there is no specific art platform to publicize and promote. It often requires the audience to immerse themselves in the art performance. The algorithm platform will push big data according to the "user portrait" to better meet the needs of art education and communication, so as to pave the way for continuous relevant art information, enable communication objects to show interest and strengthen interest, and enable the audience's communication channels to enter the continuous push process. Traditional songs and dances are mostly spread by means of broadcasting stations, television stations and other communication institutions. Algorithmic technology has increased "user stickiness" and enabled art lovers to gather. In the process of digital combing, the algorithm finds "traffic explosion points" and pushes information, transmits relevant information to interested communication objects, and spreads and expands "traffic explosion points" again. Take the underwater dance program Luoshen Fu of Henan TV station as an example. The program takes "underwater Luoshen" as the creative idea, and dances in the water in colorful clothes, presenting the profound cultural heritage of Henan Central Plains. In this dance program, dancers wear red, yellow and green costumes to perform artistically, dancing in the water like Fairies in the water. After being broadcasted by Henan satellite TV, the program "Luoshen Fu" was widely praised, which immediately triggered algorithm recommendation, short video account, Weibo we media forwarding, and became a popular "phenomenal communication product". Take the official microblog of Henan satellite TV as an example. Before and after the phenomenon level cultural evening was broadcast, the number of Weibo reads remained at 100000 +, and the number of interactions was nearly 1000 +. In 2021, when the Dragon Boat Festival colorful Luoshen amazing interpretation of underwater flying program was exhibited, the reading volume of

Weibo topics exceeded 130 million, and the broadcast volume exceeded 20 million. After discovering this art hot spot, the algorithm platform immediately covered the information on multiple platforms through Henan satellite TV, realized multiple rounds of communication and interpretation of main creators, displayed fragments of fragmented related content on multimedia platforms such as Tiktok, Weibo and Bilibili station, and realized full network coverage and user access.

In the process of information communication development in the digital era, television, radio and newspapers are no longer the only channels of information communication and publicity. Mastering the promotion and development of digital information, following the algorithm and mastering the flow trend have become a new opportunity for communication. For contemporary communication, we should either establish our own algorithm platform and build our own mobile client app, or choose to cooperate with existing mature commercial platforms such as Tiktok, Kwai, etc. in order to maximize the effectiveness of communication and improve our communication needs while gaining more audiences. For Luoshen Fu, it is precisely because of the blessing of the algorithm platform that the beauty of dance art has been widely promoted and effectively spread. Henan satellite TV, with the support of commercial platform algorithm technology, also makes communication institutions become the main body of art communication. Under the influence of multi information communication platform, the influence effect of art communication is also enhanced.

## **2.2 Communication impact with fans as the main body**

Fans group communication refers to the group communication in which two or more people, in order to achieve a common goal, are linked together in a certain way to carry out activities. Fan group communication is an important baseline for group survival and development. Art communication with fans as the main body can be seen as a cultural symbol, but also as a consumer group with special social significance and a new audience group that breaks through the traditional boundaries.

Fans is a homonym of the English name fans, which translates into Chinese to refer to fans. Its original meaning refers to the Star chaser or a group formed to worship a certain kind of specific people. As for journalism and communication, some scholars believe that "fans are a group of special receivers of mass culture, focusing on the celebrities they admire and knowing their information like the palm of their hand; they have certain continuous communication and group consciousness, and have fixed and regular emotional input." Fan groups play an important role in the process of art communication. The information transmission constructed by fan circles has similar ideology. The development of ideology becomes more compact with the change of media and environment, which directly affects the transmission of art information among fan groups.

According to statistics, taking Sina Weibo, a new media client, as an example, the top few with large fan groups are all stars and artists. For example, he Jiong, an artist, has more than 100 million Weibo fans. His Weibo forwarding and comments are huge and enough to become a source of information dissemination. Upon recommendation, the drama "secret love in the peach blossom garden" was sold very well at Wuzhen

Drama Festival, which formed the phenomenon of "one ticket is hard to get". The direct forwarding of he Jiong's Micro blog also directly broadened the channels and channels of drama communication. Therefore, the tagged user portrait used by the algorithm technology can better enable fans to consciously build a new identity in cyberspace, shape a brand-new self and corresponding interpersonal relationships, thus increasing user stickiness and building a fan cultural ecosystem, which is more beneficial to the voice of fan groups when they become the main body of communication.

In the process of fan group communication, the group will produce similar consciousness structure and logical thinking. The generation of this group consciousness accelerates the information flow between groups and the information transmission in the process of interaction. Fan group communication specifically refers to the flow and transmission of information within a certain range, with the characteristics of time-saving, efficient and accurate communication. As far as art communication is concerned, fan groups play the role of the main body of communication in the process of communication. Because their groups have the same point of consciousness structure, the effectiveness of communication is enhanced and the scope of communication is expanded, which reflects that fan groups have full artistic initiative in participating in the whole process of art communication.

Take the traditional Chinese language art crosstalk as an example. In its early development, it was performed offline through small teahouses and small theatres. In recent years, the development of crosstalk art has been accompanied by increasingly rich forms of entertainment, which has been controversial. The integration between fan culture and traditional art has also become a new key to "breaking the game" in the process of communication. Deyun society is one of the large crosstalk societies in China. In the process of seeking the development of crosstalk, it chose to embrace fans and traffic to seek new breakthroughs in the development of crosstalk. The self created names of "Deyun team" and "Deyun girl" have become the more widely circulated codes of cross talk of Deyun society. Fans, as one of the earliest users and promoters of new media technology, have a high voice in the field of fan culture communication created by them. Take the official Sina Weibo of Deyun news agency as an example, it has about 4.8 million fans. It is observed that in the weekly table of crosstalk performances of Deyun society updated on Weibo, most of the comments are directed at the crosstalk performers themselves, not the content of the crosstalk performances. It can be inferred from this that fans are more concerned about the dissemination of art communicators than the dissemination of art communication content when buying tickets to watch crosstalk art. The influence of fan groups as communication subjects on the communication process is obvious.

In the whole process of cultural creation, fans will participate in the interaction of crosstalk performance, and become the disseminators of secondary creation by means of video, audio, graphic and graphic forwarding and publicity. While maintaining user stickiness, it also greatly improves user participation. It is precisely because of the promotion and influence of fan culture that more young people begin to know and understand crosstalk. While loving crosstalk, it also promotes the wide spread of crosstalk art. The algorithmic business platform provides more complete user portraits and labels for communication objects. It uses algorithmic technology to better aggre-

gate fan groups, broaden the communication channels and scope of fan groups, and promote the long-term development of art communication. The algorithmic business platform transmits more relevant information through big data drainage, and reacts on the fan group. The fan group actively participates in the content production of art communication and the communication process of secondary creation, which also improves the effectiveness and effect of art communication.

### **2.3 Impact of algorithms on art communication channels**

The impact of algorithms on art communication channels is essentially the impact of algorithm media on communication platforms. The intelligent media algorithm summarizes and summarizes the communication sources through the algorithm media and expands the communication effectiveness with the help of the communication platform. Traditional media also began to build their own new media channels on the comprehensive media platform. Traditional media and new media seek both cooperation and competition, and seek more possibilities from the perspective of platform development and innovation.

### **2.4 Communication and influence of comprehensive art platform**

Comprehensive art platform refers to a platform with comprehensive art information release, and the art information it transmits is multifaceted. The comprehensive art platform is characterized by wide communication content, many communication channels and many types of audiences. It is the distribution center of communication information and the comprehensive source of information release channels. The communication modes and types of comprehensive art platforms are also different. The types given by the integrated platform are various but not specific. In the process of art communication, the integrated platform often involves different art types and artistic creation such as drama, music, film, dance, painting, etc. the forms expressed also include different categories such as graphics and text, video, 3D exhibition, etc. the forms are also diverse. For the comprehensive platform, the process of art communication also reflects the whole process of symbol personalization. The information of art communication has also become a specific symbol, which can be clearly classified and expanded on the comprehensive platform. It also has different far-reaching significance for different communication symbols.

Take Tiktok app as an example. As a comprehensive platform, the art types covered in the process of art communication are diversified. In 2017, Tiktok, as a comprehensive platform for short videos, realized the possibility of broadening channels and improving effectiveness at the technical level by using algorithm technology. On the Tiktok platform, in the concept of "everyone is an artist" put forward by the "Dou art plan", the Chinese opera society, Henan Henan opera academy, Jiangsu Kunju Opera academy, Central Academy of fine arts and so on have all joined the digital art communication to understand and learn art through the platform. The coverage includes but is not limited to painting, photography, calligraphy, sculpture, opera, etc. the algorithm is then disseminated through "user portrait". According to the official data of Tiktok, by

the beginning of 2021, art videos had been played more than 2.1 trillion times and liked more than 66 billion times. In 2021, Tiktok launched the trendy art plan. In a three-month period, it will work with artists and art lovers to create art IP and disseminate art works with the help of short videos and live broadcasts. More than 60 internationally famous trend artists are collectively stationed in Tiktok, and their creative categories include painting, sculpture, music, visual art, etc., providing Tiktok users with a variety of trend art cultures. As a comprehensive platform for new media, Tiktok will also continue to make efforts in the production and dissemination of art content: in 2021, it will support high-quality art content creators with 1000 million fans, and open long-term cooperation with professional art venues to explore digital and diversified art practices of exhibitions. This has greatly promoted the short video platform to carry out art communication and art education, and widened the educational needs of the communication object and the audience range of the communication subject. As a comprehensive platform, it uses its own advantages to realize the demands of art communication and the functions of art education, and acts as a bridge between the subject and the object in the process of art communication.

With the support of the algorithm, a large-scale promotion and delivery are realized. On the one hand, the traffic is pushed to "one million bloggers" to achieve the role of a port for art communication and widely absorb more audiences. On the other hand, the algorithm supports more young creators and folk artists, realizes the expression and communication between communication subjects and art lovers, and helps more young forces to participate in art communication. According to the Tiktok 2021 data report, by the end of 2021, 1557 national intangible cultural heritage projects had achieved Tiktok coverage of 99.42%, of which Henan Opera became the most popular intangible cultural heritage project, with 77.43 million likes. In 2021, the broadcast volume of Tiktok digital museum reached 38 billion times, which is 70 times of the total number of offline receptions of national museums in 2020. From the above data, it can be seen that the integrated platform uses algorithm technology to achieve a more intelligent communication. When the communication objects receive, they will map a high degree of information aggregation, so that different categories belonging to the general integrated platform can constantly generate communication information communication. While broadening the channels of art communication development, it also enables information fusion among art categories and gradually breaks down information barriers. With the support of digital information algorithms, art communication faces greater opportunities and is full of more possibilities.

## **2.5 Propagation and influence of professional art platform**

Professional art platform refers to the platform specially set for specific art development and specific art communication. The professional art platform can better analyze the artistic needs of the communication objects when carrying out accurate user portraits, so that the channel can better feedback valuable and meaningful art communication information, improve communication effectiveness, broaden communication channels and expand communication scope. Take Netease cloud music, a music streaming software, as an example. It rose in 2013, broke through the siege of kugou



music and QQ music, and won a place in the music application market. In just four years, it has achieved a breakthrough of 400 million users and has become one of the most successful music playback software in recent years (Li Xiaoxue, 2018)<sup>[8]</sup>. As a professional music playing software, Netease cloud music not only enhances its professionalism in the music field, but also uses algorithms to strengthen its personalized interaction design and unique and innovative music ecology. For the communication object, obtaining music to meet the music needs is the first demand for choosing a music platform. Single music playing is no longer meeting the spiritual and emotional needs of users. Communication and social interaction can affect the loyalty and user stickiness of communication objects to communication subjects (koermer, C. and L. mccrokey, 2006)<sup>[9]</sup>. Streaming media software has also begun to use the perspective of algorithms to find social functions in music playing software. The "cloud circle" created by Netease cloud music has become a social platform that can forward music and messages. In the "cloud circle", users can share music, exchange experiences, create social content, and enhance interaction among audiences. When users listen to music, they will have rich emotional changes. Through social attributes such as messages, they can find resonance among convenient communication objects, and also facilitate users' interest in communication, emotional belonging and social interaction.

The algorithm can fully analyze the music listening habits and emotional needs of the communication object, and form a user portrait according to these "demand tags". With the help of the algorithm, the communication platform and the communication object are closely related, enhancing the user stickiness of the platform, and becoming a haven for emotional needs and music needs. The algorithm will also distinguish different communities according to the different categories of listening songs and music genres, mine potential emotional needs and music recommendations, which is conducive to the promotion and dissemination of different categories of music, and achieve a virtuous cycle between the dissemination subject and the object. The algorithm will be more targeted, achieving accurate push, more professional information content coverage and platform communication.

Around 2005, websites specializing in film and television communication began to rise and gradually began to compete with each other. Iqiyi was officially launched in April 2010, and gradually began to develop and eventually changed the operating ecology and profit model of video media. Since 2014, iqi yi began to independently create new IP and self-made dramas, which not only brought great economic returns, but also strengthened the user stickiness of the Video Broadcasting website, expanded the scope of dissemination objects, and maintained certain stability. Iqiyi's commercial algorithm technology makes the professional platform of film and television pay more attention to the copyright effect and film and television quality, and excavate more valuable and meaningful information from the demand side of the communication object (that is, the user). It is no longer limited to the user's production content (that is, UGC) as the production mode. It uses recommendation algorithms to recommend popular content to users using data, and creates "pop points" at the same time, which improves the time efficiency of communication objects. The strengthening of copyright awareness indirectly caused by algorithm technology also gives commercial algorithms dividends, enhances the consumption awareness of communication objects, and real-

izes the stable and sustainable development of film and television content (Jin Xiaolin, 2019)<sup>[10]</sup>. Film and television websites have also begun to focus on their own communication content to varying degrees, and recommending works and film and television plays with different copyrights has become the choice of most websites. The promotion of content under the algorithm platform is more accurate, which better promotes the dissemination of relevant art information.

## **2.6 Influence and dissemination of art institutions**

Art institutions refer to units with the effect of art communication. Art institutions have become the gathering place of art education and art publicity. By expanding the scope of communication, broadening the channels of communication and improving the effectiveness of communication, they have become the main body of communication that can not be ignored in art communication.

For the art communication in China, the Ministry of culture and the Ministry of tourism have become one of the main official communication channels. The Ministry of culture carries artistic and cultural exchanges, while the Ministry of tourism more reflects aesthetic values, and the two have become the mainstays of China's internal and external art communication. Comparing the use of the algorithm business platform and we media by the Ministry of culture and the Ministry of tourism, it is obviously somewhat unsatisfactory. Take the Sina Weibo of the Ministry of culture and the Ministry of tourism of China as an example, the number of fans is close to 800000. For the government media, this communication volume is obviously not enough. In terms of browsing the published and disseminated content, the number of comments and retweets is mostly single digits, so it can be judged that the Ministry of culture and the Ministry of tourism, as communication agencies, have not reached the expected standard in terms of communication effectiveness and scope. As the highest department in cultural tourism, the policy support has not been able to better enhance the artistic function.

In spite of this, there are still many excellent art institutions in China, which have achieved a significant impact on the dissemination of art institutions by using algorithm technology. In the context of the new media era, the Palace Museum has fully realized the demand for art communication with the help of algorithms. The number of fans of the Palace Museum on Sina Weibo has reached 10 million, making it the leader in independent operation of domestic art institutions. As the most representative gathering place of Chinese history, culture and national art in China, the status of the Forbidden City for the Chinese nation is self-evident. With the development of new media and times, the Palace Museum has begun to provide online exhibition service support in addition to traditional offline observation. In the mobile app mall, you can search "daily Forbidden City", "Forbidden City Exhibition", "Forbidden City Ceramic Museum" and other apps, all of which realize online browsing and understand the needs and functions of the culture and art of the Forbidden City. From the perspective of algorithms, the Palace Museum understands and publicizes the novel and popular cultural and art products at present, so that art institutions can better publicize and achieve better communication effects with the support of algorithms. The seal and character engraving-

ing of the National Palace Museum have always been the "cultural periphery" pursued by the history lovers of the National Palace Museum. While the lovers collect them, they also reflect on the history of the National Palace Museum and publicize the art and culture of the National Palace Museum. The palace museum gives full play to the value and charm of its own communication. While promoting the art and culture of the Palace Museum, it also infuses commercial value into it, and realizes the benign development of art communication.

Looking abroad, there are also many art institutions participating in the process of art communication and directly participating in the promotion and development of art. In the Live Sydney Light Festival in 2018, the Sydney Opera House personally participated in the dissemination of light color art. Colorful lights are reflected around the Sydney Opera House, which vividly shows the beauty of Australian light visual communication art. It has become the top of western social media, greatly improving the communication effectiveness of visual communication art. The algorithm has been publicized again according to the explosion point. According to the report of people's Daily Overseas china.com on August 4, 2018, the tourism packages of Sydney Light Festival in Indonesia market increased by 403%, and the tourism packages in China market reached 25000. It can be seen that with the support of algorithm technology, the publicity effect has been further expanded. While appreciating the visual art transmission, it also realizes the commercial value guided by communication.

Similarly, the Metropolitan Museum in New York, the United States, has launched its own application service app - "Metropolitan Museum of art" and associated digital museums on the Internet. It uses Internet technology to realize online exhibition of artworks, so that communication objects can learn and understand the relevant knowledge and historical and cultural background of artworks from different channels. Improve the online art exhibition, and use it as a new publicity point to provide more substantial information guarantee services for the vast number of communication objects. The intervention of the algorithm also provides different artistic communication needs for different types of communication objects. The Metropolitan Museum's voice navigation system provides a voice explanation broadcasting system for communication objects with visual impairment, which helps visual impairment patients provide hearing service support to the greatest extent; It provides multilingual broadcasting for visitors from all over the world, maximizes the value of art communication, and reduces the deviation of art appreciation and understanding caused by language problems.

From the Forbidden City in Beijing to the Sydney Opera House to the Metropolitan Museum in New York, it is obvious that art institutions come to an end in person for the dissemination of art. Art institutions play an important role in the promotion and expansion of art. Combined with algorithm technology, it realizes the accurate output of art institutions for art communication, provides more extensive art information, and enriches their art culture and art social background. Algorithms provide different publicity and services for users with different needs, and art also realizes more meaningful social awareness and cultural communication through algorithms.

### 3 Conclusion

The academic research on algorithm vision and algorithm business platform has been fruitful, but there is still less research on the main body and channel of algorithm and art communication. For art communication, algorithms focus more on the influence of art communication subjects and channels. In the transition period from Web2.0 to Web3.0, the blessing of algorithms and digital technology has become a topic that cannot be ignored in communication research and has also become a significant influence pioneer in art communication. We should grasp the opportunities and challenges brought by algorithms to art communication to better realize the new pattern of art communication development.

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