



Influence of Algorithm on Art Communication Content

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Abstract. With the development of economy and technology, the development of network technology plays a very important role in art communication technology. Through intelligent algorithm technology, we can better develop art communication: broaden communication channels and improve communication effectiveness. For art communication content, the addition of algorithm technology will also have a corresponding impact on the selection criteria, value orientation and communication methods of art communication content. This paper will focus on analyzing the impact of algorithm technology on the content of art communication.

Keywords: Algorithm · Art communication content · Art communication value

1 Introduction

In 1989, Berners first proposed the concept of the world wide web, and this concept also fundamentally changed the cognition of Internet services. Web 1.0 addresses the need for users to obtain information and read it. After 2000, Web2.0 has formed a people-centered mode of communication and interaction, which has also promoted the rise of social networks. After that, software also began to step out of the PC side: wechat, Weibo, Tiktok and other social media emerged one after another. Web2.0 is a network form in which the Internet platform controls the user's data and information and manages the user group. Web3.0 is a new Internet form developed by combining blockchain technology. In the Internet world, algorithm is an important factor that can not be ignored. In algorithmic smart media, big data is widely used to conduct user portraits on user objects, and to complete recommendation and publicity to improve communication effectiveness. For communication, it has changed the communication channel, improved the communication effectiveness and completed the communication mission. The addition of algorithms in big data provides a new research direction and perspective for communication. Algorithm research has also begun to become the mainstream in the field of algorithm research and media technology research from the perspective of Journalism and communication.

The academic community's understanding of art focuses more on artists or works of art, and then ignores the study of communication content in the process of art communication. Art itself is the content and process of communication, and art itself has interactive meaning. Without the content and process of communication, art will lose its value of appreciation and research. In the context of the new media era, algorithms and

cloud computing have become important elements that can not be ignored in the process of art communication. The influence of the algorithm platform on the dissemination of content can not be underestimated. The user portrait analyzed by the algorithm can be accurately matched to the communication object through the analysis and influence of the communication content, so as to enhance the communication effectiveness in the communication process. At the same time, the addition of algorithms also expands and enriches the communication channels, which has become a topic that can not be ignored in the field of communication. This paper will focus on analyzing the impact of algorithms on the content of art communication.

2 Background

In the data age, algorithms have given artificial intelligence technology security and reliability, and also reflected that artificial intelligence technology can achieve technological innovation and far-reaching communication impact with the support of algorithms. The algorithm technology in the era of intelligent media should also have a standard for the authenticity of speech communication. There are sufficient and unnecessary conditions between the problems of algorithm technology and the risks of algorithm technology. Around the algorithm technology itself, we should also build an abstract evidence standard for the authenticity of communication in the era of intelligent media.

The integration of algorithm technology and the times has also brought about a series of changes in the communication format of intelligent media algorithms. In the integration of algorithm technology and news communication, the authenticity, which is regarded as the life of news, has also evolved, and algorithm technology has new definitions and standards for the judgment of communication and authenticity. The essence of the algorithm recommendation mechanism is the matching of content, needs and scenarios, based on user portraits, user data and interactive relationships; Building a content model is also extracting and classifying products, matching resources and judging scenarios, and then determining recommended content [1]. Algorithms have been made possible by the rapid matching of information supply and demand, which has also greatly reduced the time cost for users to obtain information. Intelligent algorithm distribution has become inevitable, and resource allocation in the face of the new pattern has also become a new paradigm [2]. But for the emerging of algorithm technology, we still need to look at the technological revolution with a dialectical perspective. The transformation of technology has promoted the role and position of humanistic values in the algorithm under the background of the transformation of the business form of the press. The mixed use of intelligent algorithms only represents the game and trade-off between risks on the news platform. There are still a large number of ethical defects worth solving and updating. This puzzle has also become a topic of the times in journalism and Computer Science [3]. Taking the traditional social software wechat as an example, the business environment created is not just a chat social tool, but an ecology. As a traditional social media, wechat has also been deeply influenced by algorithm recommendation. The algorithm will form a trend and effect of encircling the user ecology, and use it to spread digital information and interaction between groups, so as to achieve cultural barriers and integration. When the algorithm uses tags to profile users of communication objects,

there will also be a digital divide. On the one hand, strong information push is formed for the mainstream population of intelligent recommendation, which results in information overload. However, the marginal population of intelligent recommendation (such as the elderly and marginal areas) has very limited information. In the process of dissemination and popularization of art information, it will encounter the phenomenon of “digital poverty”. While its data characteristics cannot be constructed, its dissemination effectiveness will also be reduced. In the era of new media, the development of art communication can not be separated from the publicity and promotion of new media. Under the guidance of traffic, the algorithm mechanism realizes the information asymmetry between different information caused by homogeneous information, and the poor flow of information will also make the labels in user portraits stubborn, which will lead to the limitation of art development. The content of art communication is one of the most important achievements of art communication. With the support of the algorithm, it can better sort out users’ preferences and interests, classify and label the communication content, let the algorithm guide the communication content to push to the communication objects with different preferences, and enhance the effective promotion of art communication content. Therefore, the mainstream social values of art communication also need to provide better choices with the help of algorithm vision, provide more social responsibilities for art communication and the need to promote communication content.

Traffic has become the tool that the algorithm calculates and relies on, which can better evolve and deduce what content is the “hot money” favored by the algorithm. With the help of the Internet environment and big data, the algorithm can more effectively sort out the hot money and news hot spots in the network, so as to better promote relevant content. The content orientation favored by the algorithm often causes widespread discussion among communication objects, and also makes news hotspots continue to ferment with the help of network platforms. In the whole communication process, the role of the algorithm is to expand the communication range and improve the communication effectiveness. Find the traffic explosion point in the huge sea of traffic, and expand the capacity of communication objects through drainage to create “communication explosion”. The principle of algorithmic recommendation is based on people’s interests and needs, and provides the communication content that people want to see. Interest demand is a necessary factor on which the algorithm depends. Combined with personal interests, analyze and summarize the communication content, and extract the content needs with more communication value. For example, the Tiktok algorithm platform selectively clicks on the communication content on the short video app to see whether the communication audience is satisfied with the promotion of the communication content. While selecting different analog video content, the algorithm can effectively analyze the communication content, and excellent content production has the possibility of sustainable development.

3 Main Body

3.1 Impact of Algorithm on Selection Criteria of Art Communication Content

When platform media became the mainstream communication channel of algorithm recommendation, the traditional production mode, business mode and communication

effect of communication content had a profound impact [7]. Algorithm recommendation will sort out the content according to the traffic of the content. At the same time that the right of communication content is transferred, algorithm recommendation also has a far-reaching impact on the selection standard of communication content. While spreading the content, the algorithm platform will collect feedback from different traffic information. The popularity of the communication content can be estimated through effective data such as the number of views and the time users stay in search. The selection criteria for communication content began to approach the selection criteria for traffic. While choosing to embrace traffic, the right to control communication content also changed. The traditional news value pays more attention to whether the news information conforms to the theme of the times and the people's livelihood. The intervention of the algorithm has changed it to a certain extent, and indirectly affected the standard of selecting topics for communication content. In Bilibili (hereinafter referred to as "station B") video website, a blogger in the field of agriculture, rural areas and farmers, Shuai Nong video brother, caused quite a stir. More than 760000 fans rose in a week, breaking the million mark in half a month. The high-frequency quick cut lens, the unique creative point of painting, the visible talent display and the iconic action form a fast out of circle video. Subsequently, Shuai Nong's video account was forwarded on multiple platforms, and was successfully included in the popular list of "new farmer program" on Tiktok platform, becoming the target of traffic. For Shuai Nong, the video content is humorous and ingenious, showing the fun of rural life. Therefore, it is strongly supported by algorithm recommendation, and has become a "traffic explosion point". Coincidentally, another well-known blogger, Huanong brothers, who has accumulated more than 4 million fans on station B and watermelon video, has also become the main force of the "new farmer program" and a selection of rural themes in the short video platform. In 2017, watermelon video was launched on the farmers channel, which not only supported farmers' creators in technology, but also helped to realize the content. Elegant art and folk art also get greater communication effectiveness through the review of algorithm platforms and mechanisms. On the other hand, the development of the Internet has also given urban and rural life an information high-speed bridge, helping viewers find "realism" in short video platforms. In the videos of Huanong brothers, they always focus on bamboo rats and some local customs of rural life. High quality video content combined with algorithmic recommendation has made the broadcast volume of farmer's video on station B reach an amazing 250 million times.

As far as video communication content is concerned, its topic selection standard is often constrained by the size of the traffic. As the gatekeeper of the traffic port, algorithm recommendation technology constantly monitors the fluctuations and changes of the traffic, and uses this as a standard to intervene and influence the topic selection of communication content. The fundamental reason why the selection criteria of art communication content have changed is the impact of algorithm platform on the communication effect of communication content. The algorithm platform is good at discovering traffic explosion points and giving continuous traffic input, so that art communication content can be better promoted. The number of hits of farmer's video exceeded 100 million, also because of the support and assistance of the algorithm platform, which further expanded

and promoted the dissemination content of art communication. Algorithmic recommendation allows news to transfer the relevant rights, and realizes the influence and change of the selection criteria of communication content.

3.2 Impact of Algorithm on the Value Orientation of Art Communication Content

Niel pozman believes that “every tool has an ideological tendency embedded in it, that is, its tendency to build the world in one way rather than another, or its tendency to give a thing higher value.” Algorithm tendency will be guided by human factors at the beginning of computer program design, and the value orientation of communication content is not completely controlled by algorithms. In the process of data calculation and promotion, the algorithm platform may have different orientations. However, the technical means are neutral, so the value orientation of the communication content needs to be subject to certain constraints, improve the algorithm values and make the value of the communication content healthier and more in line with the social theme. When guiding the development of communication content, algorithms will be guided by social culture and rational values. The value orientation of communication content in the era of intelligent media should also shoulder the purpose of disseminating socialist core values, generate emotional identity, and form affinity and cohesion [4].

In 2017, the foreign video website YouTube platform was full of a large number of “children’s evil videos”. These we media accounts evaded the push and review of the algorithm platform by labeling “humor” and “funny”. They are created cartoon images well known to children, adding violence, pornography, blood and other elements to the video content, which seriously eroded the hearts of children and had a serious impact on the social atmosphere. Because we media creators mixed tags with video profiles, they escaped from video censorship to a certain extent and entered algorithm recommendation, which greatly appeared in the vulgar taste of users, resulting in the poor quality of platform content. Because cartoon images are automatically judged as children’s videos by the algorithm and pushed directly, it also seriously endangers the physical and mental health of children. At the beginning of its establishment, Kwai, a domestic short video website, also had a large number of vulgar and illegal videos, which seriously violated the rules and regulations of network communication and the correct guidance of value orientation. In April 2018, Su Hua, CEO of Kwai, apologized to users and the society for a large number of vulgar and illegal content disseminated on the Kwai platform. Kwai believes that the imbalance in the value orientation of communication content is caused by the value defects of algorithm recommendation, and it is the primary task to reshape the ecology of Kwai and strongly resist deleting illegal videos. Kwai deleted the relevant accounts that published malicious information and vulgar information, increased the mechanism of art review, and processed and deleted some vulgar and kitsch cultures on the Kwai platform. Malicious pop ups and kitsch advertisements were also reviewed and rectified. All these actions are to reflect the algorithm platform’s better value orientation on the Kwai app and promote healthier values. For the content of art communication, the choice of value orientation is an important topic that affects the choice of communication objects to receive and appreciate art. The artistic aesthetics brought by animation and short videos is also very important

for the construction of values. The algorithm can not only filter vulgar communication content, but also generate different values and evaluation standards under the influence of data in the process of calculation. It is also particularly important to review the choice of value orientation of communication content, so as to better realize the impact of the algorithm on the value orientation of art communication.

3.3 Influence of Algorithm on Art Communication Methods

The algorithm technology can accurately infer the traffic explosion point through digital analysis and use it as a reference standard to influence the topic selection of communication content. The selection of communication content usually depends on the communication background and communication value, screening according to big data, and analyzing the data with more content keywords, which is taken as the standard of content selection. The algorithm forms data exploration by analyzing the reading habits and listening methods of communication objects, and then mines more effective communication methods. For the content of communication, different communication methods have different effects on the effectiveness of communication. The algorithm platform discovers the influence of communication methods through big data mining and calculation, and then affects the selection of communication content and communication methods.

Taking “wechat audiobooks” as an example, as the product of the further extension of professional digital audio language books to mobile social media platforms, wechat audiobooks have developed for a relatively short time, with relatively new content structures and propagation laws that are still worth exploring [5]. Through the analysis of big data, the algorithm transforms text reading into speech communication, which is a transformation from literature and art to reading art form. With the support of algorithm technology, wechat audiobooks can better grasp the change of influence and real-time control of traffic through the data detection platform, and realize the impact on content selection. The 2018 analysis report on the push of audiobooks on wechat official account pointed out that the number of registered wechat official account exceeded 10 million [6]. The total number of audio books pushed by the people’s daily wechat public platform reached 810 million, and the number of audio language books on CCTV news wechat exceeded 610 million, with nearly 20 million likes. According to the report, the top ten audio books pushed by wechat are all official official account of the central media, which have become the representatives of super traffic. On the topic selection of communication content, the central media hopes to achieve the value orientation of the socialist core values through the communication strategy of combining education with fun, and the communication content will be more professional and standardized. In 2018, the total number of audio language books on public platforms was nearly 3 billion, which also directly affected the selection criteria and content orientation in the process of art communication of audio language books. The algorithm pushed and covered according to the selection and content, achieving accuracy in the process of receiving communication objects in art communication. On the other hand, audio language communication is the whole process of turning vision to hearing. There are two standards in content selection: taking nature as the standard, that is, entertainment and knowledge. The other is the

standard of elegance and vulgarity, that is, purpose and demand. The historical interpretation reading materials provided by the intellectual audio language reading materials can pass on the cultural education of the audience, and realize the advantage of audio art in teaching and entertainment; Reading audio books will improve the personal sentiment and cultural connotation of the audience and enhance the value of art communication. The algorithm platform will screen and classify the content according to the needs of the propagation object, so as to facilitate the propagation of auditory art. Vulgar and evil audio language books will also be throttled and screened through the algorithm platform to protect the value and charm of WeChat audio books. The algorithm has also imperceptibly influenced and changed the methods of art communication [7].

4 Conclusion

This paper analyzes the impact of algorithms on the content of art communication from the three dimensions of topic selection criteria, value orientation and communication techniques, reflecting that algorithms affect the content of art communication from many aspects. In the data age, algorithms have a profound impact on the effectiveness of art communication content and changed some inherent ways of art communication. The research on the content of art communication is an important part of the subject of communication. The content of communication often produces certain social effects, and the public opinion guidance of the content of communication also affects the development of values. In the transition stage between Web2.0 and Web3.0, more and more emerging technologies begin to participate in the dissemination process. Among them, artificial intelligence recommendation has become an important tool for the promotion and development of communication content. Algorithms are based on people themselves, and algorithms are generated based on people's needs. Generally speaking, the content dissemination of the algorithm tends to provide the content that the audience wants to see. The impact of algorithms on art communication is fundamentally the impact of artificial intelligence on art communication. Artificial intelligence technology has accelerated its involvement in the field of art communication and become a powerful driving force for its in-depth reform. To a certain extent, algorithms have become an important factor in the gatekeepers of art communication. Algorithms realize an absolute power in the censorship state. This power is accompanied by virtual reality of various actual situations, which is also an increase in the absolute power of algorithms in an implicit state.

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