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# *Research on the Difference of Artificial Intelligence Use Between Chinese News We-media and Traditional News Media*

## *--Taking Xinhua News Agency as an Example*

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***Abstract:*** With the continuous development and popularization of AI technology, in the field of news communication, more and more media begin to use AI technology for news creation and communication. Although AI has greatly improved the speed of collecting news data and generating news articles, as the application of AI is still in the exploratory stage at present, the extensive use of AI has resulted in the spread of rumors and infringement of intellectual property rights in the network. Through the experimental method of case analysis, this study selected Xinhua News Agency with typical characteristics of traditional news media and typical news we media as the case, made a comparative analysis of these two different media, and concluded that there are differences in AI technology sources and news production links between traditional news media and news we media in China at present. In addition, most news we media using AI lack the important part of self-censorship in the production process, thus resulting in negative social impacts. Based on the above analysis, some suggestions are put forward to solve this problem. The case analysis of the use of AI in news we media in this study fills some gaps in this field and provides a foundation for future research in this field.

***Keywords:*** AI, we media, traditional news media, intellectual property protection

## 1. Introduction

The development of artificial intelligence (AI) began in 1956, and the development period is also divided into six periods: the initial period, the reflection period, the application period, the downturn period, the stable period and the vigorous period. Nowadays, AI is playing a very important role in peoples' life, changing and promoting our life.

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However, the adoption of AI in commercial enterprises is also early. If an enterprise has a demand for AI, abundant capital and a sound system, then Internet enterprises with media attributes can be ahead of other professional media organizations in terms of intelligence. For example, Internet company Toutiao has made good use of the functions and roles of AI and media. Toutiao has more than 1.2 million users and publishes more than 500,000 pieces of content on average every day, making it the first intelligent content platform in China. In addition, the content production capacity of the media and the efficiency of the editorial staff are also very important. In 2017, the Southern Metropolis Daily's intelligent robot "Xiaonan" can complete a 300-word story in one second, which can replace some manual work and greatly improve the efficiency and timeliness of news.

In 2022, there is a very eye-catching keyword, which is AI painting, which can generate pictures in a few seconds. Drawing software is convenient and popular among young people. "AI painting" originated in the 1970s, when British artist Harold Cochen created the computer program AARON to draw art. Relevant statistics show that searches for "AI painting" have increased by nearly 500 percent since November 2022, and topics related to AI painting have been read 210 million times.

But the talent pool for AI work is also important, and it varies from country to country. According to a study by the linkedin China think tank, there is a significant gap in the number of talents. In AI, there are about 850,000 people working in the US, 150,000 in India and 50,000 in China. China's AI industry has developed rapidly in recent years, with statistics showing that the number of AI robots in 2021 increased tenfold from 2015 to 366,000.

AI writing was on the scene during the 2016 Rio Olympics, with Toutiao using AI to write press releases in real time for the games. Zhang Xiaoming, an AI robot independently developed by Toutiao LABS, can generate news through two text generation technologies. During the Games, AI robots will be able to write news articles in real time using information from the organizing committee's database. AI robots mainly cover table tennis, tennis, badminton and women's football. It generates more than 200 briefings and information in six days.

In terms of awards, the winner list of the 2022 Wu Wenjun AI Science and Technology Award was officially announced on March 14, 2022. Jd Group was the only company to win both the project award and the individual award. Jingdong Yunyanxi team won the Wu Wenjun AI Science and Technology Progress Award for its "Key technologies of task-based intelligent dialogue and interaction and large-scale industrial applications".

## 2. Literature Review

With the popularity of AI technology, a large number of media attention and application of AI is increasing. First of all, from the perspective of traditional news media, Rong Jianhua and Zhuo Xinyu took Guangming Daily as an example [1], which reflected the rising trend of reports on AI by traditional news media and the increasing attention paid to AI by traditional news media. China Daily website began to apply AI technology to the field of news communication [2]. The global mainstream media's data gathering and further news production is carried out through big data and AI's superior data gathering capabilities. The article "How Artificial Intelligence Makes News: An Analysis Based on 106 Global Cases" (2017-2022) in Qingji Exclusive analyzed the spatial-temporal distribution, adoption subjects and specific applications of AI participation in news activities [3]. According to the article, the use of AI in news production is concentrated in North America, followed by Europe. From the point of view of the adoption of the main body, the number of traditional news media and news agencies is the largest. Finally, from the perspective of specific applications, the adoption of AI technology is mainly distributed in automatic writing and news reporting. It can be seen that the application of AI by traditional news media mainly focuses on the production and dissemination of news. Huang Lihe also mentioned in his article that due to the development of 5g technology [4], traditional news media can realize more modes of communication, just as Jiangxi Daily mentioned in

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"Analysis of Innovative Strategies of Traditional Media News Communication in the Era of Artificial Intelligence" [5], which launched China's first AR livestream newspaper on October 18, 2019. Provide users with a good sense of immersion and reality.

In the aspect of we media, there are few literatures on the analysis of we media cases. The existing literature mainly refers to the social impact on AI caused by the unlimited use of we media. Evolution of Internet Rumors in the Age of Artificial Intelligence: Based on we media Rumor Based on Zhu Ting as an Example, it is mentioned that in the 2021 Tokyo Olympic Games [6], in order to catch the hot spot of women's volleyball team mistakes, news marketing accounts automatically generate relevant rumors with AI to attract attention, resulting in bad social impact. On the other hand, the ethical governance of "manuscript washing" based on AI is introduced into the current assembly line production of manuscript washing [7]. The "AI+ online pseudo-original article generator" based on AI is used to generate "new" articles by randomly changing the words of original articles through AI. This has done a lot of damage to intellectual property.

In view of the intellectual property damage caused by the use of AI, the supervision difficulties and optimization direction of AI News Publishing [8], AI News Copyright Protection and AI News Copyright Research are discussed [9,10]. These three articles analyze the current regulatory difficulties and shortcomings in the application of AI, as well as some ideas and suggestions for solving this problem.

By referring to these literature, it is found that there are few analyses of cases related to the use of AI by we media at present, and case analysis of we media is indispensable for the study of the application of AI in the field of communication. Therefore, this study will analyze the differences in the use of AI between Chinese traditional news media and news we media through case analysis.

## 3. Methodology

This study will use the method of case study, using Xinhua News Agency's AI platform "Media Brain" and a game blogger's report on new game information as examples to analyze and compare.

First, as an example of China's typical traditional news agency Xinhua, the official Xinhua News Agency announced the completion of its self-developed AI platform "Media Brain" on December 6, 2017. And, as of now, it has been updated to version 3.0. The functions of the "media Brain" platform can be roughly summarized as follows: news production, editing, copyright inspection and AI of news release; User portrait collection, analysis and accurate delivery of relevant fields of news information. As far as we know, the news production process of this platform is roughly as follows: using AI to crawl news data and information materials from a large number of authoritative media on the network. Or the text conversion of the recorded content collected by frontline journalists. Then the above information is used to assist the production and editing of news articles and the copyright inspection of the content. Finally, news is delivered through user portraits. Xinhua, or Xinhua Directory, is China's state news agency. Its media market share in China is roughly 32, according to incomplete statistics. According to the scores scored by professional organizations, the communication power of Xinhua News Agency was evaluated as 71 points, only 14 points behind China Central Broadcasting and Television, which ranked first [11]. And because Xinhua is affiliated with the Chinese government, it serves as a "benchmark" for other traditional news media in China. Therefore, taking the "Media Brain" platform developed by Xinhua News Agency as an example can clearly reflect the current use of AI by Chinese traditional news media, and its status as a "benchmark" is also conducive to the research on the development direction of Chinese traditional news media in the field of AI use. Therefore, this case is bright and representative, which plays a positive role in studying the use of AI in China's domestic traditional news media.

Then there is the we media aspect. The general process is as follows: give chatGPT instructions, and the AI will collect a lot of material in the network, and then generate the article. Then the

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production of the video can be completed by orally broadcasting the manuscript generated by AI during the production of the video. There are two reasons for choosing this game blogger. First, this blogger clearly noted the use of AI in the introduction of this video. Moreover, this video copy has obvious AI characteristics, that is, the video copy uses a large number of question-and-answer methods to explain the problem, and quotes the words of relevant people to testify. Second, the blogger has 128,000 followers on the Bilibili video website. As a case, the video has been played about 130,000 times and has 159 barrage. Therefore, this video is universal and plays a positive role in studying the use of AI in news we media. Thirdly, this study originally intended to take a certain social news hot spot as an example to investigate the we media reporting this news hot spot (because a large number of news we media do not mark when using AI for content creation) for case analysis. However, in recent years, with the steady development of the actions to purify the Internet environment in China, a large number of relevant we media have been blocked and deleted, making it very difficult to find target cases.

## 4. Results

In the analysis of the above cases, the following results are obtained. First, in the above cases, among the media platforms independently developed by Xinhua News Agency as “media Brain”, traditional news media generally develop and put into use their own AI platforms, while news we media basically use free AI websites on the Internet. Second, from the process of using AI in the two cases, it can be seen that traditional news media have standardized use of AI with relevant review procedures, while we media have non-standard use of AI due to their particularity. Thirdly, from the analysis of the search for cases related to we media and the above point, news we media has seriously damaged the network environment due to the irregular use of AI and even the abuse of AI. For example, when searching for data, AI cannot determine whether the data is true or false, which can easily spread rumors. Another is that the data may be derived from some articles, which involves the issue of intellectual property.

## 5. Discussion

According to this study, there are three reasons for the phenomenon that traditional news media use AI independently, while news we media generally use free AI on the Internet. First, the volume of traditional news media is much larger than that of news we media. In China, almost all authoritative traditional news media belong to the category of public ownership and accept the direct management of the state. Therefore, in terms of size, traditional news media have great advantages over news we media. Secondly, in terms of talents, news we media usually has only one or two people or a small team. Traditional news media have a large number of teams. So when it comes to research and development, the traditional news media have the advantage in numbers. In terms of quality, since the current market of we media is nearly saturated and we media is unstable, high-quality talents will basically choose traditional news media with large volume to work. Third, the ultimate goal of news we media is to gain profits. Although traditional news we media also need to make profits, with the support of the state, traditional news media are much more active in AI research and development than news we media. This research believes that such difference will have the following effects: although the number and popularity of news we media will continue to improve, the quality of news we media will be significantly lower than that of traditional news we media. For this phenomenon, this study believes that national policies should be supported and subsidies should be given to related research and development activities of news we media.

As for the phenomenon that traditional news media have standardized use of AI, while news we media have irregular use of AI, this study believes that there are two reasons for this phenomenon.

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Firstly, due to the above characteristics of China's traditional news media, it is controlled by the state. Moreover, due to the huge population base in China, when using AI as a traditional news media controlled by the state, it is necessary to consider the audience of this news and its social impact. Therefore, the use of AI will be controlled and regulated. As for the news we media, the audience of we media is not fixed, the number of users delivered by we media is not fixed, and the control of AI in China is still loose, and no relevant laws and policies have been introduced to restrict it. Only for those news we media that have caused serious adverse social impact, the punishment is to ban them and investigate their legal responsibilities. Therefore, many news we media begin to use AI for content creation, and quickly catch up with hot news for the original accumulation of fans. This will result in a phenomenon: the content of news we media is similar, the reporting direction is similar, and the homogenization is serious. In addition, the news we media lacks a self-review mechanism similar to traditional news media, and most news we media lack a corresponding sense of social responsibility. Once AI collects wrong information, it will spread rumors, seriously damage the network environment and cause adverse social influence. To solve this problem, the state should not only introduce corresponding policies to carry out mandatory control, such as increasing the punishment for rumor-mongering and limiting the abuse of AI. It also requires the operators of we media to shoulder their due social responsibilities.

Finally, the use of AI in we media will result in the destruction of intellectual property rights. This study believes that there are two reasons for this phenomenon. The first point is the same as the above, the news we media lacks the corresponding self-censorship mechanism. The principle of AI writing is to collect and crawl information on the network through AI, and then create through the set template or through the simulation of some news manuscripts. As the current AI is unable to judge the truth or falsity of the collected information, in such a complex network environment, there is a high probability of false news reports, which will turn news into rumors. In addition, the information collected may be articles written by some authors, but AI will not mark the referenced articles when writing, which seriously damages intellectual property rights and infringes the legitimate rights and interests of those authors. This phenomenon is not focused on the writing of news articles. In the aspect of painting art, the current AI painting also has such problems. Since AI painting needs to "feed" a large number of existing painting works, a large number of we media "feed" the works of artists posted on the network, and spread the generated paintings as AI painting to earn streamline. This is also a serious violation of the artist's intellectual property rights. In order to solve this problem, this study believes that it is necessary to start from two levels: platform and regulations and policies. First of all, platforms need to intensify their review of AI-related content and address the problem from the way of distribution. Secondly, it is urgent for the country to formulate relevant laws and regulations on the use of AI in creation and establish a relevant legal system. Fundamentally, intellectual property protection for authors, artists and other creators.

## 6. Conclusion

Through the research method of case analysis, this study conducted a comparative analysis on the use of AI by traditional news media and news we media in China, and obtained three approximate results: 1. In terms of the source of AI, traditional news media use independently developed AI, while news we media use free AI on the Internet. 2. The use of AI by traditional news media is relatively standardized, while the use by news we media is on the contrary; 3. The abuse of news we media has caused serious adverse social impact and involved infringement of intellectual property rights. In the process of analysis, the reasons and effects of the three results, and finally the corresponding countermeasures are considered. The results of thinking are as follows: There is nothing wrong with using AI to assist creation, but for we media, self-censorship should be added after creation to identify the truth and falseness of the information collected by AI and prevent the generation of rumors. And

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the repetition rate of the generated articles should be checked to ensure that there is no plagiarism of others' creative results. At the national level, the country should clearly restrict the use of AI in the creation process and increase the punishment for rumor spreading. In the aspect of intellectual property protection, clear laws have been issued to limit the current chaos of AI infringing intellectual property rights.

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