# A Study on Algorithm Controversy in the New Media Era

# Yiyu Chen<sup>1\*</sup> and Tan Li<sup>2</sup>

<sup>1</sup>Visual Communication Design, Nanyang Institute of Technology, Nanyang 473006, China <sup>2</sup>Mathematics and Applied Mathematics, Yutun Second Central Primary School, Jining 272063, China \*Corresponding author: Yiyu Chen, E-mail: 825793515@qq.com.

# Abstract

With the rapid development of internet technology and the rise of the we-media industry, intelligent algorithms are becoming more widely used in all walks of life. As a young product of the new era, intelligent algorithms have many controversies in their application and technologies. On the one hand, the emergence of intelligent algorithms has greatly improved the speed of news production, and the delivery of news pushes with more accuracy; on the other hand, algorithm technology has also brought about the ethical issues of algorithmic news. This paper uses textual research and case analysis methods to analyze the pros and cons of the news media from the perspectives of the intelligent transformation of the news media, algorithm bias, journalism professionalism, algorithm-based media trials, information calluses, etc., to be objective. The algorithm controversy should be treated fairly, news literacy should be improved, and the application of algorithm technology in the news field should be improved.

## **Keywords**

data algorithm, mass media, journalism ethics, news literacy

## 1. Traffic Society and Algorithm News

From agricultural society to industrial society, with the rapid development of scientific and technological information, the internet has now infiltrated all aspects of our daily lives (Vergragt, P. J. 2006). Under certain conditions, the speed and quantity of information flow can be directly converted into digital currency, which drives the flow society into being driven by numbers and capital, and people begin to chase traffic.

Data algorithms rely on public aesthetics and perform personalized calculations and analyses through the collection of social collective data (Dragulescu, A. C. 2009). In today's society, public aesthetics involve capital. To gain the sense of identity and emotional resonance of universal users, algorithmic news is often accompanied by inflammatory speech and exaggerated gimmicks. Once the carefully calculated algorithmic news is released, it quickly creates hot topics one after another, taking advantage of the public's interest in the hotspots. Curiosity and empathy for emotional consumption are needed to achieve content production and realization of traffic monetization.

## 2. Traditional Media Reform Under the Algorithm

## 2.1 News Generation Process

According to the study of news guides, news generation involves the interviewing, writing, and editing of an event by journalists, thus turning a true event into news work.

# 2.2 Smart Life in the Algorithm Era

The application of algorithms has led to a new era of artificial intelligence. Our lives have become increasingly fast because of artificial intelligence. Facial recognition systems, temperature monitoring systems, and location tracking systems have all greatly improved quality of life and changed the world. Our lifestyle makes our life more convenient. Search engines and the digital economy have made our data clearer, and methods for obtaining information have become increasingly efficient. At the same time, the ways to acquire knowledge and improve cognition have also varied in the algorithm era.

### 2.3 Media Revolution in the Algorithmic Era

Xinhua News Agency's H5 shooting game, the AI editorial department of People's Daily, and CCTV's AI sign language anchor, as traditional mainstream media, have all made reforms in the era of intelligent algorithms and are no longer constrained by the propaganda mode of traditional media. Under the influence of media, it not only increased the interest of the media but also stimulated the enthusiasm of people to interact, allowing more people to participate and gain in-depth understanding, which not only increased the number of views but also increased the amount of interaction, making it a memorable point. Moreover, the intelligence of the algorithm can also solve public welfare issues, effectively focus on special groups, and allow unimpeded media communication.

In addition to the success of mainstream media reform, the transformation of traditional media methods, e.g., the Forbidden City, the VR museum, and intelligent audio guides, has also achieved good results. All have achieved very good results, making traditional cultural knowledge come to us again in a modern way.

The algorithm era has effectively solved the rigidity of traditional media and has also used technology to help and benefit more special people, increasing the prominence of the role of the media. Using multiple algorithm programs, such as virtual scenes, AI interactions, and hands-on VR, the audience of traditional media is no longer limited to middle-aged and elderly people, which has greatly increased the intensity of media publicity.

## 3. Algorithm Controversy and News Ethics Issues

#### 3.1 Algorithmic Bias

Algorithmic bias refers to the fact that the algorithm generates unfair results in the system, which leads to systematic errors. Algorithmic bias can be systematically divided into three categories: bias that is detrimental to the inclusiveness of the group, bias that is detrimental to the fairness of the group, and bias that is detrimental to individual interests. Prejudice.

a) Prejudice that is detrimental to group inclusion: Joy Bramwini, the founder of the Algorithmic Justice Alliance, is also a scientist of Ghanaian descent and a black woman. She reported that in the facial recognition products of IBM, Microsoft, and Queshi, the probability of correctly recognizing Caucasian male faces was greater than 99%, nearly 35% of black female faces could not be correctly recognized (Patel, M., de Oliveira, G. F., & Mutlu, O. 2021), and the error rate was. Identify dozens of times that of white males;

b) Bias that is detrimental to the fairness of the group: In 2018, Reuters reported that the AI recruitment algorithm designed by Amazon was biased against women. As long as the word "women" is resumed, Amazon's recruitment algorithm will directly evaluate the resume of the job seeker. Although Amazon eventually shut down the algorithm and disbanded the relevant team, the unfairness of the group caused by algorithm bias is obvious;

c) Prejudice, which is detrimental to individual interests: Consumption pricing is carried out through data tracking and analysis of different consumers, which is what we often say "kills the familiar".

Joy called this algorithm bias the "coded stare". The algorithmic bias system was programmed to lead to the generation of unfair results. The application of this algorithm in the generation of news reports is not the generation of bias, which leads to the generation of algorithmic biases. A series of ethical issues of bias raised by the news

#### 3.2 Algorithmic News and News Professionalism

News needs to be facts. In this internet era, everyone is a disseminator of information. The barriers of the news industry have been broken down. People are no longer limited to traditional news and official news. Information spreads around the internet, but people's opinions are not the same. Everyone is impressed by the professionalism of news practitioners, but owing to the lack of news professionalism, the algorithm news is more inclined to enter the public under the screening of data, resulting in a large amount of false news, exaggerated news, and reversal news on the internet. This overwhelming news not only wreaked havoc on society and caused public panic but also reduced the credibility of the news media to a certain extent. Moreover, the rush of traffic made it impossible for the truth to be disclosed to the public through officials. Moreover, some unscrupulous media outlets are trying to use algorithms to calculate traffic rates and guide public opinion when reporting news. This not only shows disrespect for journalism professionalism but also shows contempt for the victims of the news and a challenge to social order.

### 3.3 Media Trial Under the Algorithm News Situation

Algorithmic news is a product of programmatic data-based traffic screening, which is itself entertaining for the public. However, media trials under algorithmic news often incite public opinion, spread rumors, and hinder the normal judicial process. This behavior gave the news media an overriding behavior in the administration of justice; that is, public opinion vainly tried to intervene in judicial judgment and try to guide the judgment. Media trials are not the same as public opinion supervision, and freedom of speech does not mean free speech. Media trials based on false reports not only push the truth further but also put public opinion pressure on the judiciary, causing the judiciary to lose its authority. At the same time, media trials under the algorithm of news are often accompanied by illegal rumor-mongering and human flesh behaviors in the dissemination process, which not only violates the law but also leaks the privacy of citizens and infringes on the rights and interests of the citizens themselves; thus, this is an illegal act.

## 3.4 Information Cocoon Room Under Algorithm Data

Algorithms in the big data environment facilitate information screening and make the acquisition of information more efficient and faster. However, the emergence of algorithms has also widened the gap in information acquisition. The algorithms for content recommendation rely more on the traffic volume and are more specific. Paying attention to the drainage of accurate customers, the more we want the information, the more we will push whatever information we want, more to satisfy our own sense of satisfaction and superiority in obtaining information. Such a data-mimetic environment will make people rest on their laurels and increase their inertia. As a result, our "information cocoon" is strengthened, which affects our comprehensive understanding of the world, makes our cognition more narrow, and thus reduces our ability to empathize. become extreme.

#### 4. Algorithm Controversy Balance Countermeasures

#### 4.1 Reducing Algorithm Bias

Discrimination in the algorithm generation system can be reduced, more comprehensive and accurate data can be used to write algorithms, the existence of unfairness can be reduced, social barriers can be eliminated, and algorithm technology can be used to truly serve people. In both the setting of the program and the operation of the program, one should remain objective and carry out multifaceted data reference, user

research, and practice testing to eventually make the application of the algorithm more objective and accurate in society, an idea with multiple countries and multiple nationalities. Inclusiveness and accuracy of different cultures.

#### **4.2** Improving the Professionalism of Journalism

Journalistic professional literacy affects a person's values in the process of news dissemination and news production. Establishing good news literacy can greatly reduce the occurrence of ethical issues in journalism. To improve the credibility of news, news practitioners should report news and seek truth from facts rather than exaggerate and publicize the news to create gimmicks. The purpose of algorithms is to assist in reporting and supplementing content without affecting the authenticity of the news. This requires us to strengthen the personal news literacy of news practitioners so that the news industry is separated from online public opinion to increase the degree of news credibility.

#### 4.3 Strengthening Online Supervision

The internet is not a place outside the law, and strengthening the supervision of online speech can effectively prevent the rumor-mongering behavior of "keyboard men" and allow the judiciary to be supervised by public opinion rather than controlled by media trials. The protection of cybersecurity can effectively control the dissemination of public opinion, reduce the number of algorithm data errors caused by high frequency and high dissemination, and reduce the risk of public opinion.

## 4.4 Creating Diversified Information Promotion

Creating a diversified traffic network environment, strengthening the promotion of diversified knowledge, breaking the information cocoon, and improving thinking and cognition. Let people understand the multifaceted nature of algorithmic intelligence and the fact that technology does not stand still. Only by understanding the current development of the intelligence field, correctly viewing the achievements of technological development, and fully understanding algorithms can we make more meaningful discussions on modern society and realize scientific realization. Serve society.

#### 5. Conclusion

Algorithm controversy has been a hot topic in recent years. Data-based algorithm generation systems have been gradually applied. For both news media and artificial intelligence, algorithms all have the shadow of algorithms. In the use of algorithms, our data are larger, the information is obtained faster, and the response is more sensitive. However, this is accompanied by discrimination caused by algorithmic data, confusion caused by algorithm changes, and information cocoons caused by single information caused by algorithm pushes.

However, the algorithm era will inevitably become mainstream in the future. We should correctly view the algorithm controversy, strike a balance between the algorithms, and let the algorithm era truly serve society and facilitate life. To correctly identify network algorithm news, avoid spreading falsehoods, strengthen one's own news literacy, correctly address algorithm controversy, maximize the benefit of algorithm intelligence, better disseminate information, breakdown information barriers, make data more authentic, and search results more rapid and convenient.

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