

Ethical Failures of Generative AI in News Production, Implications and Countermeasures

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Abstract: Generative AI is recognized by the media (people) for its high-quality dialogue, complex reasoning and other emergent capabilities in content generation, and human-machine collaboration will gradually become the norm in news production, with application advantages in news production, news distribution and other news survival links. While generative AI assists news production and promotes innovation in news reporting, it also has problems such as providing inaccurate facts, opaque algorithms, and controversial boundaries of application, etc. For this reason, the media should regulate the ethics of human-computer collaboration in terms of optimizing the editing process, disclosing information about algorithms, and setting the boundaries of application of machines.

Keywords: Journalism Ethics; Artificial Intelligence; Data and Algorithms.

1. Introduction

With the rapid development of artificial intelligence technology, China's AI big model industry shows a booming trend, and the application of AI big model in the field of news is becoming more and more extensive. Among them, Xinhua Zhiyun's "Wonderful Brush" and "Flower" AI model products, and People's Daily's "Write Easy" intelligent creation engine and other applications have come into being, triggering a profound change in the field of journalism. On the one hand, AI models provide powerful tools and resources to help journalists efficiently acquire, process, analyze, present and disseminate information, improve the efficiency of news writing, and make it easier to provide audiences with a more personalized and diversified news experience. On the other hand, AI big models have brought many challenges to news writing, with problems such as privacy leakage caused by data mining, distortion of facts due to technical errors, and formation of information cocoon by algorithmic dependence, which ultimately affects the authenticity of news reports. While we have optimistic expectations for the advantages of AI technology, we cannot ignore the problem of ethical misconduct in news production brought about by the technology in all aspects of news production. Compared with the traditional news production process, what are the changes in the news production process using AI technology? What are the ethical failures in news production and why? How to solve the above problems? This is the question this paper will explore.

2. The Impact of Generative AI on Journalism

Generative Artificial Intelligence, or GAI, is an AI technology that focuses on generating or creating new content by utilizing existing datasets such as text, audio, or images for machine learning and then generating entirely new content. The continued advancement of generative AI technology is becoming an important adjunct to many areas of conventional journalism, and is becoming a critical piece of infrastructure in the media's news production process. The emergence of generative AI has accelerated the intelligence of the media

production process and greatly improved news productivity.

Improve news productivity. Writing robots, for example, can not only quickly process massive amounts of data and complete news releases under the premise of not being prone to errors, but also quickly and accurately release them after verification to gain attention. The integration of generative AI in multiple news production processes, such as gathering, editing, distribution, and verification, also promotes the development of intelligence and has a gradual and deep impact on the news industry. Generative AI can automatically retrieve content to form news in accordance with set production requirements, and through statistics, classification, integration and proofreading of data, it can help journalists expand the scope of topic selection, identify social hotspots, judge news value, and enrich news sources; it can also utilize massive data to analyze audience preferences, predict the hotness of an event, and quickly generate content such as public opinion hotspots and public opinion maps, thus improving news productivity.

Enriching the form and level of news content. Generative AI can not only generate text, images, audio, video and other forms of content, but also generate different levels of content according to demand. It can generate summaries, articles, interview outlines and other texts, and it can also convert some difficult-to-understand academic language into news language, and it can even generate different levels of news videos according to the requirements of professional news gathering and editing, under limited materials and prescribed conditions. Distribution mode innovation. Generative AI can generate personalized content according to the user's preference, and automatically focus on network hotspots and topic heats, and automatically distribute and push news according to specific classifications, which not only improves the effective allocation of news resources, but also enhances the news dissemination and influence. In terms of timeliness, reading rate and arrival rate, the generation and distribution of personalized content based on algorithmic recommendations of users' reading interests is significantly more competitive than traditional news production. Promote fact-checking. The application of generative AI in the field of fact-checking has become a powerful tool for multiple subjects outside the mainstream media to enter this field, and

other subjects can quickly realize the acquisition and integration of information and enhance their own discourse and trust in the field. Based on the principle of objectivity and authenticity of news, fact-checking may become an opportunity for innovation in the field of professional news production, and mainstream media should take the initiative to guide the construction of standardized industry autonomy, face up to the challenges brought about by generative AI, and promote the efficient, transparent and good development of fact-checking.

3. Changes Brought About by the Application of Artificial Intelligence to the News Production Process

News production is the process of selecting and processing newly occurred facts to form a complete news work. In the past, without the intervention of technology, the news production process mainly went through the steps of "pre-writing meeting, news report planning, field interview and writing, editing and proofreading, finalizing and printing and distribution", but the emergence of artificial intelligence technology has made the news production process more and more intelligent.

3.1. News Planning and News-Gathering: Richer and More Accessible Sources of News

Traditional news gathering is mainly through the accumulation of their own news sources (that is, a fixed "informer"), a fixed newspaper or reporter hotline, news topic planning, the reporter's own news sensitivity to find news facts with "news value", related reports of the deep digging. Deep digging is mainly based on human communication and human-thing connection. In the news production process using AI technology, in terms of news topic planning, big data can be used to analyze audience preferences, speculate on the topics of interest to the audience, predict the heat of the event, and use audience feed forward to produce the news content needed by the audience. For example, Media Brain, the first media AI platform in China, sorted out relevant public opinion hot words from 500 million webpage data during the 2018 National People's Congress and provided news topics for Xinhua News Agency's video news "MGC Public Opinion Hot Topics of the 2018 National People's Congress".

3.2. News Production and Fact-Checking: A Faster Pace of News Production

The traditional media, which takes "content is king" as the standard for measuring news value, often needs to go through pre-interviews, writing and editing by the writers, including news selection, fact checking, and "secondary processing" of the manuscript layout, etc. Although the quality of the manuscripts is guaranteed to a certain extent, the timeliness of the news is often discounted. Although the quality of the manuscript is guaranteed to a certain extent, the timeliness of the news is often discounted. Robot news writing, by virtue of its superior arithmetic power, is able to quickly process massive amounts of data and produce news articles under the premise of not being prone to errors. News releases after completing fact-checking can also be released to social media in the first instance, receiving widespread attention from users. For example, Xinhua News Agency comprehensively launched the first robot reporter - Fast Pen Xiaoxin, which is

able to analyze and process various materials and cumbersome information in just a few seconds, and can also write news reports on its own, as well as carry out effective supervision and management of various trends as well as key information in the online platform, and help through a wide range of social media. Through extensive social media, it helps journalists determine news topics at the first time, and centralize the collection of experts' remarks, analyze the internal connection between different information, provide rich writing materials for news gatherers and editors, and help journalists reduce their workload.

3.3. News Distribution: Higher Reach of Target Groups

Traditional media distribution generally has two forms: agency distribution and direct distribution, agency distribution means that readers get news products by purchasing from newspaper distributors or subscribing to newspaper subscription stations; direct distribution means that readers subscribe monthly or annually from the head office directly through subscription hotlines, and postal distributors will deliver them to the designated addresses at a fixed time. Whether from the timeliness of the news or from the reading rate of the news works and the arrival rate of the audience groups, the news distribution of traditional media does not have strong competitiveness compared with the personalized news distribution relying on the algorithmic recommendation of the user's reading interest, and it is impossible to realize the accurate delivery of news content.

4. Ethical Failures Arising from the Application of Artificial Intelligence to the News Production Process

The access of artificial intelligence technology has made the news production process different from the past, specifically, it is manifested in relying on data crawling for news planning and information gathering, generating news reports quickly with the help of algorithmic programs, and carrying out personalized news distribution. As the application of technology in the news production process continues to deepen, we have been able to identify a number of ethical failures brought about by it when facing different aspects of news production.

4.1. News Planning and Information Gathering: Invasion of User Privacy and Deviation from News Values

Public opinion monitoring systems capable of tracking Shanghai's massive data on social platforms in real time and sensors capable of acquiring users' geographic location and movement routes are artificial intelligence technologies that help news planning and information gathering. Because big data captures and screens the browsing traces and history left by users on the Internet, although it can acquire users' reading preferences and interest focuses and quickly grasp news clues, it inevitably. Although it can obtain users' reading preferences and interests and quickly grasp news clues, it will inevitably face source data leakage, and citizens' data will be forced to fall into the danger of illegal collection and over-analysis, which violates users' personal privacy. At the same time, if the long-term use of big data crawling and screening to obtain news clues, there will inevitably be a deviation from the news value. The end result of big data crawling and screening is to

find the audience's point of interest, and information on violence, pornography, curiosity and other topics that can attract the audience's attention and entertainment occupy a larger proportion, which will undoubtedly damage the social responsibility of the media and the credibility of the media, and the entertainment information that is seriously deviated from the news value will also lead to the audience prioritizing the topics that are of interest to the individual, and gradually ignore the social public interest and important social issues. social public interest and important social issues. It is worth mentioning that AI news and news written by journalists show the development trend of expanding information and shrinking knowledge of news in terms of news quality. News reports based on massive data do not have the reporter's citation of news events in writing, and the news produced is largely a compendium of data. The news we need is not a pile of data that reads like chewing wax, but rather an incisive analysis and reflection on social phenomena.

4.2. News Production and Fact-Checking: Lack of Humanistic Concern Jeopardizes News Truthfulness

Artificial Intelligence (AI) has shown a strong production capacity in the news production process, relying on data from databases as the "raw material" for news articles, and based on algorithms implanted by engineers as the "templates" for news articles. Artificial intelligence is able to quickly generate a news article, and this has led to the emergence of new news styles such as algorithmic news, robot news and sensor news.

4.2.1. Inability to Empathize and Lack of Humanistic Care

There is no denying that news styles such as robot news have an unrivaled advantage in terms of generation speed. For example, Today's headline news robot "xiaomingbot" produced more than 30 newsletters and event reports on badminton, table tennis, and tennis on a daily basis at the 2021 Rio Olympics. Since emerging news is mostly data-based, its programmatic nature limits it to financial, earthquake, and sports reports. The standardized and programmed language of robot writing cannot simulate and express human emotions or empathize, which makes AI technology unable to consciously regulate its behavior from the perspective of journalistic ethics as media practitioners do. Therefore, in the reporting of disaster news such as earthquakes, it is easy to cause disturbing the affected people in order to collect enough data, lacking corresponding humanistic care.

4.2.2. Potential Algorithmic Bias that Jeopardizes Truth in Journalism

Nowadays, the threshold of access to the Internet is low, and user-generated content has become mainstream in the context of Web2.0, but users who have not received professional training make the authenticity of the content they provide greatly reduced, which will undoubtedly increase the possibility of false information into the information collection content of writing robots, reducing the authenticity of news reports. The underlying operating logic of the writing robot is an algorithmic program designed by the designer, and because the designer has an unavoidable subjective tendency towards the algorithmic program and its future generation of content, the algorithm itself has a "black box" that cannot be explored by human ability in the process of mining, organizing, and analyzing the data, as The New York Times once found in a

football game report. As the New York Times once said in a football game report, "Despite the big data, our robots tend to be more optimistic in their reports than the NFL coaches." Since the writing robot cannot perceive the news scene, it is limited to understanding the surface of the truth and is not able to dig into the deeper news facts, which also tends to result in the reduction of news authenticity. In terms of news fact checking, compared with the traditional media news through the layers of news practitioners, news checking in the era of artificial intelligence has been transitioned from news practitioners to intelligent algorithms. The problem faced by intelligent algorithms is that the algorithm itself cannot guarantee the authenticity of the source data, which is essentially a deviation from the authenticity of the news.

4.3. News Distribution: Creating Information Cocoons and Shaping Power Centers

The audience interest-oriented news distribution model organically combines data, algorithms, and humans and machines to establish a personalized correlation mechanism between users and resources, and to provide users with accurate news placement and distribution. Personalized news delivery, while continuously catering to users' personal information needs, makes individuals with the same interests gather into small scattered groups, resulting in the "Balkanization" of the network. In addition, the trend of segmentation brought about by precise pushing and the fact that the audience only pays attention to what they expect to get and what pleases them have created what American scholar Sunstein calls "information cocoon", in which the audience no longer has the right to actively choose information, and the user's attention to public affairs gradually decreases, which means that the public nature of their lives is constantly diminishing. The audience no longer has the right to actively choose information. In the long run, the audience's information exposure will become narrower and narrower, and their social cognition and sense of responsibility will be weakened, and their power to supervise social and public events will become nonsense. Personalized news push is mainly supported by algorithmic programs, and the news letter(c) Personalized news matching. However, due to the opacity and lack of control of the algorithmic process, media platforms have become the "hidden power centers" of personalized news pushing, and the right to push and distribute information has been transferred from public media institutions to online technology companies that use algorithmic recommendations to distribute information, leaving users and society with no way of knowing where the news comes from or whether there is human manipulation behind it. judge whether there is human manipulation behind it. Such a situation will lead to the recurrence of incidents similar to Face-book's 2016 "Biasgate" incident.

5. Countermeasures to the Problem of Ethical Misconduct Brought About by the Application of Artificial Intelligence to the News Production Process

In the face of the problem of ethical misconduct brought about by artificial intelligence in the news production process, we can analyze the response initiatives from the two dimensions of law and emotion, improve the relevant laws and regulations, and clarify the responsibility of the main

body for the use of artificial intelligence technology. While we enjoy the convenience of technology, we also need to utilize our initiative as users to make it work better for us.

5.1. Policy Guidelines, Legal Regulations, Clear Bottom Line for Technology Use

Policies are introduced to influence the direction of the industry, and laws and regulations become the bottom line that cannot be crossed. When facing the problem of ethical misconduct, we can take a two-pronged approach. First, we can invite domestic famous scholars and industry representatives to discuss a unified management mechanism for the whole industry and improve the details to form an industry standard suitable for China's national conditions, and supervise the implementation of the standard. The standard should include the boundaries of data capture, extraction and use, and the forms of social supervision of AI in all aspects of news production, etc., in an attempt to realize its transparency and openness in the news production process. Second, it can draw on the EU's General Data Protection Act, which provides detailed regulations on all aspects involving the acquisition, storage, processing, transfer, and supervision of personal information, and the U.S. Algorithmic Accountability Act of 2022 (draft), which was updated on the basis of the Algorithmic Accountability Act of 2019, to absorb beneficial experiences and legislate and regulate AI. Recently, the State Internet Information Office and seven other departments promulgated the Interim Measures for the Administration of Generative Artificial Intelligence Services, which sets forth specific measures to promote the development of generative AI technology, clarifies the overall requirements for the provision and use of generative AI services, and stipulates the specifications for generative AI services, etc., and provides a guide for the application and development of AI technology.

5.2. News Organizations and Platforms have Their Own Responsibilities and are Clearly Identified as the Main Body of Responsibility

At present, the application of artificial intelligence technology is mostly concentrated in central and local news organizations and platforms represented by today's headlines. In response to the above-mentioned problems of "hidden power centers" and jeopardizing the truthfulness of the news, news organizations and platforms should assume their due social responsibility. First, media outlets and platforms should reflect their due public value, play the dual roles of government regulation and corporate autonomy, fit into the government's macro-level policy arrangements for media outlets and platforms, and be subject to the scrutiny mechanism of the external monitoring system, so as to avoid the emergence of "hidden centers of power".

Secondly, in the face of the media and platforms using artificial intelligence technology to produce intelligent news, the production mechanism should clarify the main body of responsibility and realize the human-machine responsibility bundle. Media and platforms can formulate the accountability mechanism of intelligent news, clarify the responsibility of news gatekeeper, assign the corresponding responsible person for each plate of intelligent news, responsible for the review of the authenticity of news articles, to avoid the emergence of algorithmic gatekeeper who is uncertain about the

authenticity of the original data. At the same time, the media and platforms should set up appropriate content release rules in their daily operations, standardize the content release of self-media accounts, and formulate punitive measures, so that if inaccurate news is released, the account will be seized once it is investigated and dealt with.

5.3. Combination of Man and Machine to Bring into Play the Subjective Initiative of Journalists

In the field of financial and sports news writing, we should give full play to the existing advantages and functions of artificial intelligence technology to produce news reports quickly. To a certain extent, this has eased the work pressure of journalists, giving them more time for in-depth thinking and producing in-depth, socially stimulating news reports. However, we cannot ignore the problems caused by the deviation of news value and the lack of humanistic value reports.

First of all, in order to solve the problem of news value deviation, we should promote news organizations and AI technology research and development companies to realize the communication of the vision of the technology, to keep abreast of the process of production and actual operation of the technology, to further clarify the expectations of the news organizations on the technology as well as the expected results, to continuously improve the technology products, to avoid the information collection to follow the audience's interest completely, and to improve the technology's ability of recognizing the information. The technology will also improve its ability to recognize the information.

Secondly, we should give full play to the subjective initiative of journalists, add humanistic value factors in intelligent news, and realize the organic combination of technology and people. First, they take the initiative to use intelligent algorithms to analyze data, keenly capture hotspots and major events and form the first draft, after which journalists gradually improve the news articles on the basis of in-depth investigation, and finally deliver the news reports to the users by means of intelligent recommendation. Journalists' in-depth analysis of news facts and investigative ability can increase the humanistic factors of news articles, thus improving the use and control of AI technology, realizing "human-machine symbiosis", and promoting the efficient and intelligent development of the journalism industry. With the empowerment of AI big model, exploring the construction of human-machine cooperative news writing mode is an issue that news media need to focus on in the future.

5.4. Technological Innovations to Improve Violations

The use of artificial intelligence technology in news planning and information gathering as well as news distribution can help users access information quickly, but it has also created a group of "lazy people" in the information age. While cheering for the convenience of information, they do not realize that they have been caught in the privacy violation dilemma and "information cocoon".

First of all, it is necessary to clarify the boundaries and scope of artificial intelligence technology in searching information, constantly improve or optimize the algorithm, balance the relationship between technology application and content selection, and build a more scientific and reasonable algorithm model. Such an algorithmic model can not only

recognize the personal interests of users, but also push and distribute information in real time based on current hotspots and the objective status quo of social development, so as to avoid the emergence of "information cocoon". In the program design, a certain amount of time is set aside for users to read the "user notice", so that the "default checkbox" does not become a "hegemonic clause" that violates the privacy of users.

In addition to this, the use of technology can also improve the problem of fake news. We can use technology to label the data source and content generation method of news produced by robots, so as to realize the authenticity of the news backtracking. Before the technology is fully mature, the role of "gatekeeper" should still be played by news practitioners, who should take on the responsibility of data management and program verification to ensure that the source data is real and usable. We can also use blockchain technology to keep records of the manuscripts generated by writing robots, so that they can be used to authenticate media sources in case of false news.

6. Conclusion

It is foreseeable that in the future, with the development of artificial intelligence, the combination of journalism and artificial intelligence technology will become closer and closer, personalized news aggregation and push has become an inevitable development trend, how to tend to the benefits and avoid the harms, and better use of technology in order to reshape the value of the news industry, is worth continuing to think about and discuss the issue. As Levinson said, any new technology must be carefully observed and not blindly rejected.

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