

Ethical Examination and Governance Exploration of Generative AI Algorithms

Lina Yang*

Liaoning Communication University, Shenyang, 110000, China

*Corresponding author

Abstract

The widespread application of generative artificial intelligence has significantly transformed the landscape of news dissemination, delivering personalized and efficient communication experiences. However, the ethical dilemmas arising from the core algorithmic technologies underpinning it have become increasingly prominent, severely impacting the development of the media industry and the public opinion ecosystem. This paper elucidates the connotation of generative AI algorithms, conducts an in-depth analysis of the ethical misconduct issues in AI algorithms, and proposes targeted multi-dimensional governance strategies to promote the stable advancement of AI algorithm technology in the news and media sector.

Keywords

Generative AI, algorithm, ethical misconduct, governance strategies.

1. Introduction

In the era of digital information explosion, generative artificial intelligence technology is rapidly developing. As the core technology, intelligent algorithms with their powerful content generation and data processing and analysis capabilities are profoundly changing the ecology of the media field. From automatically writing articles to generating virtual anchors, generative artificial intelligence has not only improved news production efficiency and expanded news presentation forms, but also raised many serious ethical issues. These deviant phenomena have impacted the credibility of the news industry and the development of society, and have posed challenges to traditional news governance. In this context, it is of great practical significance to conduct ethical scrutiny on generative artificial intelligence algorithms and explore governance strategies that can adapt to new environments.

2. The Connotation of Generative Artificial Intelligence Algorithm

The so-called generative artificial intelligence algorithm is an algorithm system that can autonomously generate new and reasonable, relevant content by learning potential rules, patterns, and features from massive samples. The core logic lies in constructing a probability distribution model or feature representation space behind the input large-scale data through deep analysis and pattern extraction. When given specific input conditions, the algorithm can generate new content based on the constructed model that is consistent in style, structure, or semantics with the training data and has not directly appeared in the training data.

3. Ethical Misconduct of Artificial Intelligence Algorithms in the Media Field

3.1. News Push "Catering Style"

In the era of digital intelligence, algorithm recommendations can accurately push personalized content by capturing users' browsing history, reading time, and other data. This type of news push is more "catering", which not only meets users' internal interests and needs, but also gradually surrounds them with more and more homogeneous information. When users are immersed in the satisfaction of independent choices for a long time, they gradually lose the opportunity to access diverse information, detach themselves from their social context, and form an information cocoon.[1] In this environment, self-awareness is imprisoned and it is easy to fall into the "echo chamber effect", focusing only on content and groups that share similar views with oneself, exacerbating the barriers and oppositions between social groups.

3.2. Inducing Discrimination and Differential Treatment

Algorithmic bias is the behavior of automatic decision-making systems relying on intelligent computing to discriminate against different data subjects and cause discriminatory consequences when conducting decision analysis on data subjects due to non neutrality of data, implicit errors in algorithms, or human manipulation. In addition, the training data of generative artificial intelligence comes from the real world, and biases in reality will be learned and amplified by the model. As the training data contains a large number of stereotypical descriptions of specific professions, when using AI to write industry reports, labels such as "attention to detail" and "patience" will also be bound to female practitioners, and "leadership" and "decision-making power" will be associated with male practitioners, leading to the reinforcement of gender bias in news content and the presentation of differentiated treatment of career descriptions.

3.3. Privacy Rights Violated, Information Leaked

Generative artificial intelligence requires a large amount of data support during training and application, including users' personal privacy information. If these data are not managed and used properly, it can easily lead to privacy violations and information leaks. For example, when obtaining user preference data to optimize news recommendations, without effective data protection measures, users' personal information may be leaked to third parties, posing security risks.

3.4. Infringement Causes Disputes and Controversies

Artificial intelligence is trained on existing news works based on massive historical data, and the information used in the production process may be unauthorized, which can easily lead to copyright and intellectual property disputes; Meanwhile, if the generated content has a high degree of similarity with the original work, it may constitute infringement. The issues of whether news generated by artificial intelligence has "originality" and copyright ownership need to be clarified, which also seriously impacts the intellectual property system of traditional news and damages the legitimate rights and interests of news creators.

3.5. News Professionalism is in Crisis

At present, artificial intelligence technology cannot fully understand the inherent requirements of news professionalism. Automatically generated news content is prone to logical confusion and cause effect reversal. Media institutions and practitioners are increasingly relying on algorithm technology to recommend content, lacking important verification and professional judgment, which seriously misleads the audience. Moreover, technological progress has accelerated the dissemination of information, leading to the emergence and proliferation of

fake news. Moreover, using generative artificial intelligence to complete news writing is prone to homogenization, and batch output lacks diverse and rich emotions, failing to construct a humane "information environment". The use of generative machines to participate in writing greatly weakens the diversity of news production.[2]

4. Governance Strategies for Generative Artificial Intelligence Algorithms

4.1. Establish and Improve the Management System for Technology Application

In regulating the application of generative artificial intelligence in the field of news, government agencies should play a central role. We should improve the legal framework, establish a sound execution and supervision mechanism, build a governance structure and collaborative mechanism guided by pre prevention, and improve risk assessment, review, and regulatory systems. The government should take the lead in building a diverse and collaborative governance pattern, and promote the formation of a systematic regulatory synergy. Joint departments such as cyberspace, industry and information technology, and public security have issued special management measures, based on laws and regulations, connecting industry standards, professional norms, and other diverse means to build a multidimensional institutional system.

4.2. Strengthen Media Self-discipline, Clarify Responsibilities and Requirements

Journalists should start from both self demand and industry collaboration, and take the initiative to assume the responsibility of being a "gatekeeper". Strengthen one's professional ethics and sense of responsibility, and consciously resist negative effects such as "information cocoons" in work. Participate in and abide by strict internal management mechanisms, and adhere to correct public opinion guidance, strengthen service capabilities, accept public opinion supervision, and enhance interactive effects in the specific practice of news communication work.[3] We should also actively participate in and maintain various rules and regulations within the media, and strictly implement the "human-machine collaboration" review process. The content generated or recommended by artificial intelligence must undergo manual review and consciously accept the supervision mechanism within the industry. Strengthen institutional collaboration, enhance communication with peers from other media organizations, jointly explore methods to address common industry issues, and jointly build a healthy news ecosystem.

4.3. Establish Enterprise Technology Supervision and Achieve Interactive Integration

In order to build an effective governance paradigm for generative model applications, technology companies also need to deeply integrate technology governance with ethical considerations. We should increase research and development investment, develop advanced technology tools such as algorithm bias recognition and fake news detection, and enhance the regulatory capabilities for the application of generative models. At the same time, optimize algorithm design, eliminate personal biases of technical designers, and establish correct values. Actively embed ethical principles in algorithm development and code writing, and construct scientifically reasonable algorithm models. At the same time, establish a sound algorithm supervision and ethical impact assessment mechanism, introduce interdisciplinary governance concepts, establish specialized ethics committees, formulate and implement ethical standards, and dynamically monitor news dissemination related to public topics.

4.4. Improve Audience Literacy, Enhance Ethical Awareness and Identification Ability

In the face of ethical challenges in news communication brought about by artificial intelligence technology, audiences need to actively improve their own literacy, enhance their ability to discern and resist information. By learning media knowledge, understanding the technical logic and algorithm recommendation mechanism behind news production, actively cultivating critical thinking, and not easily misled by false information. We should strive to build our own cultural literacy, actively learn advanced cultural knowledge, cultivate correct aesthetic and discernment abilities, while recognizing the harm of backward and decadent culture, and consciously resist vulgar and harmful information content in news consumption. At the same time, further enhance ethical and information awareness. Adhere to the moral bottom line in information behavior, use social ethics to constrain one's communication behavior, not create or disseminate false, vulgar or illegal information, and indirectly promote news media to adhere to professional ethics through personal moral choices.

5. Summary

Generative artificial intelligence technology has not only revolutionized news production and dissemination, but also raised a series of ethical issues such as fake news, privacy violations, information cocoons, and distorted news values. To effectively prevent and control these deviant phenomena, we need the collaborative efforts of multiple parties such as government agencies, journalists, technology companies, and audiences. Specifically, the government is responsible for guiding regulations and policies, building a sound management system and legal framework; News agencies strengthen industry self-discipline and assume main responsibility; Technology enterprises provide safe and reliable technical support, optimize technical governance; The audience needs to enhance their media literacy and ethical awareness, and actively supervise. Only through collaborative efforts from multiple parties can we effectively address challenges and standardize algorithm applications. Ultimately, enabling generative artificial intelligence technology to better serve the field of news and media, providing audiences with more authentic and objective information, thereby promoting the stable and healthy development of society.

References

- [1] Zhang, X. (2017). The concept, significance, and ethical risks of personalized recommendation for algorithmic news. *Media*, (11), 82–84.
- [2] Xu, J., Wei, W., & Gao, Y. (2019). Ethical review of robot news production from the perspective of technological philosophy. *Contemporary Communication*, (01), 89–91+99.
- [3] Sun, Q. (2025). The ethical dilemma and solution path of news communication under algorithm technology. *Southeast Communication*, (06), 25–29.