An Analysis of Journalists' Coping Strategies in the Face of ChatGPT

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Abstract: Artificial intelligence technology powers ChatGPT, a tool for natural language processing. On the one hand, this kind of more intelligent and cutting-edge technology development has promoted the continuous change of the industrial structure of journalism; on the other hand, it has also caused a large shock to journalists. How journalists use ChatGPT correctly is the research topic of this paper. This paper uses the literature research method and the case study method to focus on the relevant concepts and connotations of ChatGPT, conduct specific research on the application of ChatGPT in journalism, and further analyse the double-sided impact of ChatGPT on journalism. Finally, the paper discusses the coping strategies of journalists in the context of the application of ChatGPT technology at two different levels. In the short term, journalists should learn to master the new artificial intelligence technology of ChatGPT. In the long term, the development prospects for journalists are accompanied by threats. Human beings need to conform to the trend of the times and improve their news capabilities and levels.

Keywords: ChatGPT, artificial intelligence, journalism, journalist, coping strategies

1. Introduction

The big wave of science and technology set off by artificial intelligence production content (AIGC) represented by ChatGPT brings new technology and new characteristics, new changes and new worries. ChatGPT is the product of the forefront of the development of artificial intelligence, and its "working mechanism" gives scholars sufficient research space. As the disadvantages of ChatGPT gradually emerged, John V. Pravlik published the first SCI paper on the impact of ChatGPT on news communication, showing the capabilities and limitations of ChatGPT, reflecting on the impact of generative AI on news communication education, and providing background materials for this paper to study the relationship between ChatGPT and journalists [1]. Xu Xinxin also launched an academic discussion on how to have a positive interaction between technology and law at the legal level. The article "Science and Technology Ethical Issues and Legal Governance of ChatGPT" mentions the current conflict and collision between science and law, and the author believes that further relevant measures should be taken to better provide a way out for the sustainable development of artificial intelligence [2]. In the face of the ecological level changes caused by the artificial intelligence technology represented by ChatGPT, this paper uses the literature data method and the case study method [3]. Combining with reality, the cases of the application of ChatGPT in journalism and the

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cases of journalists exploring identity are taken as materials for specific analysis and dissection, and the theory is concretized to better improve the discussion on the practice of journalists under ChatGPT technology. Starting from the research on the identity of journalists, this paper gives new thought to the relationship between people, media, and technology. On the one hand, this kind of more intelligent and cutting-edge technological development has promoted the continuous change of the industrial structure of journalism. On the other hand, it also caused a large shock in journalism. Journalists and the general public are worried about the ethical and professional identity challenges brought by new technologies. This research could help journalists use ChatGPT as a tool and minimise its negative impact.

2. ChatGPT Overview

2.1. Introduction to ChatGPT

ChatGPT (Chat Generative Pretrained Transformer) has the ability of language understanding and text generation and trains the model by connecting the giant corpus [4]. Its core capability is to use RL-HF (namely reinforcement learning based on human feedback) technology to solve the core problem of the generative model: how to make the output of artificial intelligence perfectly fit with human common sense, cognition, needs, and values, and its essence is to promote human-computer interaction and dialogue [5]. Unlike previous chatbots, it can complete tasks such as composing emails, copyediting, and generating code. ChatGPT reached 57 million users in the month it was launched. In January 2023, monthly users continued to grow by more than 100 million, becoming the fastest-growing intelligent media in history [6].

2.2. Development Process of ChatGPT Technology

With the new wave of the intelligent revolution coming, people are paying more and more attention to the application field of ChatGPT. The downstream application field of artificial intelligence continues to expand, and the AIGC (Artificial Intelligence Generated Content) news represented by the use of ChatGPT technology has become a hot topic in journalism. Since 1950, the United Kingdom and the United States have studied the language interaction system between humans and computers. ChatGPT was first envisioned by Alan Turing, who predicted the birth of ChatGPT: computers are not humans; they can imitate human thought expression and behaviour; and eventually humans will not be able to tell the difference between machines and humans.

On November 30, 2022, OpenAI released blockbuster news: the ChatGPT chatbot model was born. In March 2023, the American artificial intelligence company Open AI launched GPT-4, and once it was released, a technology boom quickly swept the world. The dialogue format makes it possible for ChatGPT to answer follow-up questions, admit its mistakes, challenge incorrect premises, and reject inappropriate requests.

The media applies artificial intelligence to the three links of production, presentation, and distribution. A pan-subject or mixed-subject news dissemination field in which human subjects and artificial agents interact and make joint decisions is slowly taking shape. The intelligent machine is gradually transforming from the dependence and subordination of human beings into a relatively independent and equal quasi-subject, along with journalists participation in the production and dissemination of news [7].

3. New Possibilities for News Production

In essence, ChatGPT provides a new possibility for news production. It systematically solves the trivial and complicated tasks of journalists, which not only ensures the integrity and wisdom of

content output but also improves traditional content production methods. Compared with the traditional news production process, the production efficiency has improved.

3.1. ChatGPT's Information Acquisition and Integration Capabilities

In news production, AIGC News improves the efficiency of news reporting. It can not only quickly obtain text from the information but also intelligently obtain the corresponding picture through the big data network [8]. ChatGPT has become a part of productivity and is involved in the news production process as an auxiliary tool, with the aim of increasing the degree of automation in the media industry.

As a new engine for the production of human knowledge, ChatGPT's core competence lies not in the breadth of information collected, but in the self-organizing ability of its language and the recreation of its content. It works almost endlessly, constantly updating its knowledge base while generating dialogue, producing knowledge and transmitting information, and answering questions according to the context of the user's understanding of the question, committed to providing the user with a real sense of personification. The specific use method is as follows: Log in to chatGPT and enter the content at the bottom of the screen on the main page of the software. The user can enter any question to ask, and the software will give you the answer according to the question. At the same time, users can also enquire about all aspects of the question in detail. The dialogue of this software has a certain continuity, and you can have an in-depth discussion with it [9].

3.2. Improving News Productivity

Tasks that require a lot of time and manpower, such as cutting down on complexity and being highly concise, can now be typed into ChatGPT's search box, and objective, timely, automated reporting will emerge. ChatGPT features creative writing assistance. Many we-media have greatly improved the writing speed due to the use of appropriate prompt words and the intelligent recommendation of the material spliced into a copy. So that articles can be sent directly [10]. Reach, the publisher of the Daily Mirror and The Daily Express, tried to use ChatGPT in short news stories, starting with regular stories about local weather and traffic. In this era of information explosion, the ability of artificial intelligence to sift through massive amounts of information has reached a height that humans cannot reach. Realising a real-time news release in a short period of time, reducing labour costs, increasing economic benefits, improving the speed of manuscript updates, meeting the needs of readers for news timeliness, and achieving multiple goals with one stone.

4. ChatGPT's Challenge to News Production

4.1. Fake News Production

"ChatGPT could become the most powerful tool for spreading disinformation the Internet has ever seen," said one news credibility rating agency. Algorithms are not a panacea, and over-reliance on algorithms can compromise the authenticity of news. Since ChatGPT was born, there have been numerous cases of artificial intelligence technology producing false and untrue information. In the final analysis, it is difficult to distinguish between the truth and falsehood of the content compiled by ChatGPT. The news organisations did not effectively search for and intercept the false information at the time of the release of the fake news, resulting in the masses with poor discernment abilities receiving the false news. Moreover, in the post-truth era, rumors spread faster than clarifications, and wildly forwarded fake news will cause an uproar on the Internet. It has seriously disturbed the news order and caused adverse effects.

In April 2023, ChatGPT generated a list of "legal scholars with a history of sexual harassment" of which George Washington University Law School professor Jonathan Terry was accused by AI. OpenAI even found "evidence": an article published in The Washington Post in March 2018 said that Terry had made sexually harassing comments and tried to overhand touch a student during a school trip to Alaska. But in fact, the article is fictional, the charges are fictional, and even the study trip is fictional. This fake news exposes the problem. How to improve the relevant legal and ethical framework and avoid the risks brought by new technologies has become the next urgent issue.

4.2. Absence of Autonomous Thinking and Humanization

"Intellectual ability is high and emotional ability is low." The fact that ChatGPT needs improvement is clear. Journalists are much more accurate than AI at analysing information. At present, ChatGPT is not self-aware, does not have the judgement of a journalist, and does not have the ability to express his true feelings. Its behaviour is defined by programmes and algorithms, and the so-called "robot writing" is just the stitching of relevant information that mimics human intelligent avior. It can only perform natural language processing, cannot analyse unorganised data, cannot interpret text, and cannot distinguish between real and fake data. So ChatGPT can't do all the tasks in the news pipeline on its own.

In terms of writing style, ChatGPT produces news like a factory assembly line. This kind of patterned writing lacks features and new ideas and can make some achievements in news reports and other timely manuscripts, but it cannot play an important role in the field of in-depth reporting.

In the aspect of news interviews, the inconvenience of man-machine communication greatly increases the difficulty of using ChatGPT in news applications. It is difficult for artificial intelligence to communicate freely in the form of questions and answers in front of the interviewees, and the output of biased parties makes the communication atmosphere more and more awkward. In the end, the dialogue does not have much meaning or value, and it takes time and energy to fight for nothing.

4.3. New Challenges Arising from Technological Development

ChatGPT has many problems such as factual errors, knowledge blind spots, and common sense biases, and also faces general AI risks such as training data source compliance, data bias, and copyright disputes [11].

The question of data security and privacy protection hangs in the balance. There is a lot of privacy information in ChatGPT's database that is not well protected. In the human-computer interactive Q&A, the privacy inadvertently disclosed by the questioner is copied by ChatGPT without reservation, which greatly increases the risk of privacy disclosure.

Copyright is also at the center of the debate. ChatGPT continues to play an "ancillary" role in the use of journalism, ultimately due to its inability to generate original reporting [12]. There is currently a lack of legal regulation when it comes to AI-generated content. Many people have questioned the protection of the right to self-work, and if ChatGPT is skilled enough in transferring materials and the database is rich enough, its "creation" will be judged as "original". There is no doubt that content generated by artificial intelligence should be granted copyright protection as long as it meets the constitutive requirements of the copyright law [13].

5. Coping Strategies of Journalists in the Context of ChatGPT

Under the wave of intelligent revolution, the human-machine relationship in intelligent media field has undergone a fundamental change. To put it simply, the instrumental parasitic relationship between people and ChatGPT has gradually changed to a competitive symbiosis relationship, and people and emerging technologies are both interdependent and competitive with each other. The contest between

news content produced by journalists and news content produced by artificial intelligence has become the focus of journalism. In view of the various defects of ChatGPT in news applications, journalists actively adjust, including manual inspection and legal procedures to solve them.

5.1. How Journalists Deal with In-depth Reporting

First of all, journalists should be practitioners of news. Interviews need to inject emotion and interview skills. Only through close-range, all-round and multi-angle field visits and interviews can the most real and effective front-line scenarios be reported.

Second, journalists should be observers of the news. Distinguish between right and wrong gains and losses, recognise the trend of the situation, and strive to see clearly, see through, and see far. How to distinguish information in the huge flow of information and noisy cluster of opinions is a necessary ability for journalists. Humans way of thinking and logical structure are different from artificial intelligence; we use our senses to explore the world, use experience to connect the ancient and modern, and use association to outline our understanding of things. This subjective analysis of objective things is based on "feeling" and "context". Express your views clearly, see a unique news perspective from the news topic selection, and see the essence of news insight through the phenomenon of the crystallisation of wisdom and the embodiment of news value.

Finally, the journalist should be the transmitter of the news. How to use new technology to help create a news world that makes the audience immersive is the direction of continuous improvement in the current news production. "It is indeed a luxury to keep mankind sane forever." As the carrier of emotion, morality, and culture, many high-order judgement problems involving ethics, morality, and aesthetics are not clear-cut. It is the value of journalists to carry out in-depth discussions on news events and output targeted views.

5.2. Journalists' Handling of ChatGPT Risks

Knowing that there are still many technical shortcomings in artificial intelligence, we can better avoid the risk of using ChatGPT. Journalists are reaping the benefits of technology and are well positioned to tackle copyright infringement in the digital age.

Firstly, journalists should adhere to professional ethics, assume social responsibilities, and maintain news order. At a time when restrictions on the use of artificial intelligence are not clear, journalists should correctly face the news chaos brought by technology through the law. ChatGPT does not have the concept of the most basic moral bottom line of human beings, and it needs manual secondary inspection and processing, so journalists need to check the news content and prevent the production of false and wrong news.

What's more, Usually, pay attention to personal information, corporate secrets, and other highly sensitive data that you do not publish or transmit on the network, from the root, to reduce the disclosure of privacy. The generated texts need to be manually proofread and traced to prevent plagiarism, resolutely safeguard the legitimate rights and interests of the original authors, strengthen awareness of intellectual and cultural property rights and copyright protection, rectify the chaos of journalism, and build a good human-machine relationship.

6. Conclusion

In the short term, journalists will have to learn to harness ChatGPT, an emerging AI technology. For a long time, the fundamental difference between artificial intelligence and people will not be eliminated soon. Of course, journalists who do not use emerging technologies are likely to be eliminated; after all, in the future of the rapid development of artificial intelligence, the process of history will never stop; harmonious coexistence and win-win cooperation between people and

ChatGPT is the inevitable trend of productivity development; complying with the trend of the times and doing their own work is the best choice for journalists. In the long run, the development of ChatGPT will pose a threat to some programmatic work. As long as the development of human science and technology is within the control of human beings, its impact on journalism and journalists is definitely more beneficial than harmful. In conclusion, ChatGPT reminds and warns journalists to a certain extent that they need to constantly improve their journalism abilities and levels. At present, there are some defects in this paper, such as the fact that the cases are not abundant and the solutions are cumbersome. In the future, we will continue to focus on the use of chat in the news industry and provide specific feedback to journalists on the topic of technological development.

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References

- [1] John V. Pavlik. 2023. Collaborating With ChatGPT: Considering the Implications of Generative Artificial Intelligence for Journalism and Media Education [J]. Journalism & Mass Communication Educator. 278(1): 84-93
- [2] Xu Xinxin. 2023. Scientific and Technological Ethical Issues and Legal Governance of ChatGPT [J]. Democracy and Law Times.
- [3] Michael singletary. 2000. Contemporary methods and application [M].
- [4] Joe Fedewa. 2023. What Is ChatGPT, and Why Is It Important[EB/OL]. How-To Geek, Feb8, 2023.
- [5] Yu Guoming, So Jianwei. 2018. Communication Revolution and media Ecology under the wave of Generative Artificial Intelligence [J]. Radio&TV Journal.
- [6] EduTaxTuber Team. 2023. What is ChatGPT[EB/OL]. https://tco/sHDm57g3Kr.
- [7] Peng LAN. 2023. The panorama and prospect of intelligent communication and human-machine relationship from ChatGPT [J]. Journalism Research, No.204(04):1-16+119.
- [8] Let's dance the news! How the news media are adapting to the logic of TikTok. Journalism, 23(8), 1717-1735.
- [9] Ho, A., Hancock, J., & Miner, A. S. (2018). Psychological, relational, and emotional effects of self-disclosure after conversations with a chatbot. Journal of Communication, 68(4), 712-733.
- [10] Technology Media Technology. 2020. Study Results from University of Pittsburgh Update Understanding of Media Technology (Producing newsgames beyond boundaries: Journalists, game developers, and the news business) [J]. Technology News Focus.
- [11] Sucameli, I. (2021). Improving the level of trust in human-machine conversation. Advanced Robotics, 35(9), 553-560.
- [12] Gondwe Gregory. 2023. CHATGPT and the Global South: how are journalists in sub-Saharan Africa engaging with generative AI? [J]. Online Media and Global Communication, 2(2):228-249.
- [13] Stokel-Walker Chris. 2023. ChatGPT's knowledge of copyrighted novels highlights legal uncertainty of AI [J]. New Scientist, 258(3438):13-13.