An analysis of the ethical issues arising on the involvement of artificial intelligence in the production of media content

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Abstract: at present, artificial intelligence technology is mainly through the static algorithm based on template and the dynamic algorithm based on context in two ways to access to the media content production, and the dynamic algorithm based on the context is the direction of future intelligent media development, but also led to a series of ethical issues, such as the deep content overload, content, noisy, and so on, and these problems for certain user groups represented by teenagers especially hard. This paper argues that the ethical problems caused by the involvement of artificial intelligence in the production of media content should be solved by improving the scientific and technological literacy of the communication subjects, integrating humanistic care into the intelligent media, strengthening the management and regulation of the technology system, and constructing the ethical bottom line.

1. background

With the development of the new generation of information science and technology, artificial intelligence has been gradually applied to various fields of media. The vision of artificial intelligence technology is to enable computers to accomplish all kinds of things that human intelligence can do. It is this characteristic that makes artificial intelligence widely applied in the field of media and thus has a very broad prospect. Including the data mining and information collection, automatic writing, distributed algorithms, automated verification, product optimization and social robots to interact with the user's, and other fields, the application of artificial intelligence in these areas, all with varying degrees of journalists will be liberated from the high repetitive work, at present, the artificial intelligence involved in media content production for the process of the database and other sources to find and identify the related data, the "clean" and classifying raw data, identify key facts and data sorting, comparison and summary, narrative in semantic structure, And the distribution and dissemination of media content. This paper focuses on the ethical issues arising from the involvement of artificial intelligence in the production of media content.

So far, the use of AI in media content production -- automated writing -- has been divided into two types of algorithms:

1.1. Static algorithm based on template

This algorithm is the so-called template filling algorithm, given a standard structure, each time only to the fixed part of the information can be modified, similar to cloze filling. And such a template is mainly used for weather forecast, sports news and so on. It has the advantages of simplicity, control and rigor. But at the same time, the pre-defined structure also brings disadvantages such as limited usage scenarios, high reproducibility of generated content, and difficulty in ensuring the richness and real-time of template, making it difficult for the filling-in template to reflect the wisdom and creative ability of human media content producers.

1.2. Dynamic algorithms based on context

In other words, sentences are dynamically created based on the semantic structure information of the context, which is the completed paragraph, the type of content entered at the beginning of writing and the content keywords. That is the future of artificial intelligence in the main development direction in the field of media content production, so far, have 4 kinds of dynamic algorithm based on context, including Markov chain, circulation attention, both short-term and long-term memory network and the neural network model, each have differences between them, but on the whole, this kind of dynamic algorithm based on context has the "wisdom", but not controllable and logical contradiction between before and after, and under the condition of current technology level cannot review the context in which the length is too long.

And according to the current intelligent trend of the development of science and technology, we can see that the dynamic algorithm based on context has larger innovation space in the future, will be more widely used, and with the passage of time, this algorithm will be more perfect, to solve the weakness of the now, is very prospects for a kind of artificial intelligence in the application of media content production, therefore, this article will be based on this algorithm in the media content production to for the application of the above analysis may lead to the media ethics problems.

2. Analysis and judgment of ethical problems

2.1. Elaboration of relevant ethical issues

In the artificial intelligence involved in the media content in the process of production, the emergence of the ethics is inevitable, and that is because the old rules are not matched with new tools to the result, we should timely find these ethical issues and find the reason, in this way can help us into a amended rules, match with new tools, new tools that artificial intelligence within the maximum play to the role of it. For artificial intelligence in media content production process, this paper argues that there are a number of ethical issues, including: (1) the truthfulness of the contents of the challenge (2)Prejudice and discrimination (3) the prejudice and discrimination for the credibility of the contents (that is, the content of the production process of transparency) reduce (4) the infringement of privacy (5) The lack of humanistic feelings(6) the lack of humanistic feelings deep content overload (7) Content is noisy.

First of all, the challenge to the authenticity of content is mainly caused by the phenomenon or trend of misjudging facts in the automated news production caused by the error and incompleteness of data and other quality problems, thus producing fake news. And considerations on the nature of the artificial intelligence itself, we can see that the artificial intelligence in the media content production on the surface of the application of constructive, but actually compete with media practitioners professional subjective status identity dislocation caused by the potential problems, this is caused by the introduction of artificial intelligence can destroy the authenticity of news content and manufacturing virtual situation which affects the audience experience.

Secondly, the bias and discrimination is mainly caused by "algorithmic bias". Is due to the artificial intelligence algorithm is the external form of involvement to the media content production, the algorithm is written, so some man-made factors, social factors will influence in different phase algorithm itself, resulting in the "deviation" algorithm, and finally a lot may form the algorithm of "bias", resulting in the media content now people see the prejudice and discrimination, for example, in the recruitment website for the resume of male and female resume score does not agree, and so on.

Third, the content of less trust in media content production is artificial intelligence was criticized after a big problem, this is due to the artificial intelligence in the involvement of media content production in many link, makes the algorithm and the role of human overlap structure, it is difficult to distinguish between each other, and high dimension data, complex decision logic code and variable factors, such as lack of interpretability and automated decision-making leads to algorithm itself, thus make people feel by artificial intelligence to produce low transparency of the problems in the news.

Fourth, in the media ethics, privacy right includes two aspects, one is "information privacy", the other is "personal information protection right", both of which we should pay attention to and maintain. However, after the involvement of artificial intelligence in the production process of media content, media ethics issues related to privacy rights appear. This paper concludes that there are three

reasons as follows: 1. When artificial intelligence is involved in the production of media content, the complex operation of artificial intelligence system and the opacity of its automatic decision make it difficult for users to realize the corresponding informed decision right. 2. It is difficult for users to control the usage scope of the collected data. 3. In order to obtain the identifiable information of personal information, the algorithm can still piece together the personal portrait by means of association and classification or infringe the information privacy of the whole group after obtaining the group characteristics.

Fifth, as a machine is a machine after all, although with the progress of science and technology, it will add some modal particles or emotion-related words often used by people in the process of generating news, it still has a single emotion, which is quite different from the emotional dimension of human news production.

In addition, this paper argues that there are two very important ethical issues arising from AI's involvement in media content production, namely deep content overload and content noise.

2.1.1. Deep content overload

Depth of content information overload is in the production process due to overproduction and overload phenomenon, and as the involvement of artificial intelligence, the content of production efficiency is greatly improved than ever before and mechanical and smart technology will increasingly make information, so have sprung up in more and more content, content is much more complex than we actually need. It is this problem that leads to what is now often referred to as the information cocoon effect. However, the emergence of information cocoon makes people's access to information become narrow, and has a degenerate effect on the cognition of problems, the self-thinking ability declines, and the social knowledge gap expands. Therefore, the deep content overload caused by AI's involvement in media content production is one of the most important issues that cannot be ignored, and its potential consequences cannot be underestimated.

2.1.2. Content is noisy

The reason for content noise is similar to deep content overload, which is also caused by artificial intelligence. The greatly improved efficiency of content production makes the content produced become uneven, and the overall quality of the content is lower than that of artificial production. Some content that does not conform to the positive value norms of the society may even be produced by artificial intelligence, resulting in potentially uncontrollable adverse effects on human society.

3. An overview of the situation in which the adolescent group is affected by ethical issues

The ethical issues caused by the involvement of ARTIFICIAL intelligence in media content production have a certain impact on all people of different ages in society. However, in this paper, the ethical issues caused by the involvement of artificial intelligence in media content production have the most profound impact on young people. With the popularity of smartphones, the age at which teenagers are accessing the Internet has dropped dramatically and the scope has expanded. Along with the development of the intelligent media, content to enhance the efficiency of production, teenagers user is enveloped by a large amount of information every day, and large amounts of information around them and makes them lose a lot of should have time to think, rather than blindly accept the media the torrent of information, which can cause teenagers cognitive ability overall fell sharply. In addition, adolescence is a crucial period for the formation of everyone's outlook on life and values, so the authenticity, objectivity and correct guidance of media content are extremely important. In the era of intelligent media, the Internet has largely replaced the roles of parents, teachers and classmates in the past. Therefore, only by ensuring the authenticity and objectivity of information, as well as correct guidance to a certain extent, can teenagers, who are in the key formative period of their outlook on life and values, embark on a better life path. No matter in what era, no matter how deeply intelligent media is involved in content production, it is extremely important to ensure that the information teenagers are exposed to is true and not false, objective and not biased, and broad and not narrow. We should ensure the use of artificial intelligence to improve the efficiency of content production, and at the same time, inject humanistic feelings and strengthen human control. On the premise of ensuring the authenticity of information, the production and dissemination of information should be carried out within the scope of social ethical values, so as to avoid adverse effects on young people.

4. Solutions

With the emergence of new technologies, ethical problems are inevitable. However, with the development and wider application of new technologies, as well as people's in-depth understanding of new technologies, people can gradually solve the related ethical problems brought by new technologies and adapt them to the new environment. In this paper, the following measures should be taken to solve the ethical problems caused by the involvement of artificial intelligence in the production of media content:

4.1. Strengthen the construction of scientific and technological literacy of communication subjects, and integrate humanistic care into intelligent media

Human beings have subjectivity, which cannot be ignored or denied no matter how advanced the technology. However, due to the development of artificial intelligence, the public, without understanding the functions and structures behind the new media, just use it blindly and are pushed forward passively by the new technology, instead of giving full play to people's subjectivity, thus being wrapped in the cocoon of information. Therefore, it is not difficult to see that in the era of intelligent communication, we should deepen our understanding of the nature of new technologies and improve our ability to properly use the latest research results, namely the new technologies, so as to prevent the public's excessive dependence on the media and avoid the suppression of human subjectivity by the new technologies. In addition, the algorithm designers also should establish the link between scientists and journalists, such ability can journalists heads the news value and the concept of better integrated into the new technology, new technology of making more adapt to the information society as a whole ecology and the environment, can produce more in line with the concept of news value. Journalists still have to play the role of gatekeeper, after finished news production in smart technology, to stand for the level of the state, society and the public through the intelligent media to produce news value judgment, whether it conforms to the state, society and the public on the basis of the, don't blindly pursuit of novelty seeking, but want to be in accord with news value within the scope of novelty and personalized. Therefore, it can be seen that in the process of communication, journalists should emphasize humanistic care, integrate humanistic feelings into the cold production of intelligent media content, and give full play to human subjectivity. Only in this way, can we produce the news that is labor-saving, in line with the news value and the society with humanistic feelings needs.

4.2. Strengthen the management and regulation of the technology system

In the era of intelligent communication, in order to effectively deal with the ethical issues caused by the involvement of artificial intelligence in the production of media content, it is necessary to strengthen the industry management, regulation and regulation of network infrastructure, large platforms and the application of important technologies, and the norms of relevant regulations. Only when there are clear and clear guidelines for these industries can we fundamentally ensure that the people who work in the industry have something to rely on. This means that both news producers and disseminator, all need to bear the corresponding responsibility and mission, and the construction of network infrastructure, operating personnel, and related technology and equipment suppliers, also need relevant ethical responsibility, ethical responsibility differentiation, only will implement to each person's head, to make the building artificial intelligence benign ecological media content production, solve the problem of corresponding ethical goals can be achieved.

4.2.1. Building ethical boundaries

That is, to formulate some of the most basic ethical codes of behavior that all members of society must abide by, as well as a minimum standard of ethical consensus. This basic ethical requirement is not only for journalists, but applies to all members of society, any level of education, is a direct and basic criterion to follow. The ethical bottom line is a responsibility that everyone in the society in the era of intelligent media cannot shirk and a basic criterion that everyone must meet. Only when everyone in the society is included in the most basic circle of ethical consensus can ethical anomies be effectively dealt with.

5. The summary

At present, with the continuous innovation and development of artificial intelligence technology, based on the relevant science and technology of artificial intelligence more deeply and widely involved in the process of media content production, its in greatly improve the productivity of the media content at the same time, also caused a series of inevitable ethical issues, including: to the truthfulness of the contents of the challenge, prejudice and discrimination, and trust the content reduce, violation of privacy, the lack of human feelings, deep content content of overload and noisy. And these ethical issues will have an adverse effect to the society as a whole, such as forming information cocoon room, intensify social knowledge gap enlargement, has made people cognitive decline, etc, especially for teenagers are now in a critical formation outlook on life values, which formed due to the artificial intelligence involved in media content production potential ethical problem is especially serious, based on this, this article put forward that should be based on the indepth understanding and analysis of the ethical issues, to solve the problem of ethics from the following three aspects: first, strengthen the construction of scientific and technological literacy spread the main body, the humanistic care into intelligent media; Second, strengthen the management and regulation of the technology system; Third, build ethical bottom line. Only from these three aspects can we solve a series of ethical problems caused by the involvement of ARTIFICIAL intelligence in the production of media content.

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