The Current Situation And Future Development Trend Of Robot News—Take The "Xinhua News Agency Kaibi Xiaoxin" As An Example

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ABSTRACT

With the advent of the era of intelligent media, all links of news communication activities have begun to be penetrated by artificial intelligence technology, and the application of "robot reporters" is one of them.This article will take "Kaibi Xiaoxin" as the research object, trace the background of the "robot reporter" and its operating principles, and then analyze the status quo of the application of "robot reporter", and look forward to the future development of robot news writing on this basis.

Keywords: Robot reporter, Kuaibi Xiaoxin, The era of Intelligent Media

1. INTRODUCTION

The emergence of artificial intelligence has transformed the traditional media era into an intelligent media era, and people's enthusiasm for artificial intelligence has once again risen.The rapid rise of journalism in the information age is inseparable from the innovation of intelligent technology.The birth of robot news is the period when the news production model has crossed from the handicraft stage to the pipelined large-scale industry. The robots rely on computer technology to accurately capture data from the massive information, select the reporting angle according to the captured data, generate text, and then use natural language to perform Retouching realizes the intelligentization of news content production, content distribution, and content monitoring.In 2015, Tencent Finance took the lead in launching Dreamwriter, the first domestic robot to write news articles, and published the first financial news articles on the Internet platform, which opened the prelude to domestic news automation.

2. DEFINITION AND PRINCIPLE OF "ROBOT REPORTER"

2.1. Artificial Intelligence

As an important part of the application of artificial intelligence in the field of news, "robot writing" summarizes and summarizes the concept of artificial intelligence by collecting documents.Bellman first proposed the definition of artificial intelligence in 1978. He believes that artificial intelligence is the automation of activities related to human thinking, decision-making, problem solving, and learning[1].Haugeland believed in "JA Intelligence" in 1985 that artificial intelligence is an exciting new attempt to enable computers to think and make computers intelligent[2].In "Introduction to artificial intelligence", Chharniak and McDermott pointed out that artificial intelligence refers to the behavior of studying intelligence with computer models[3].Zhimin Zhou and Aihua Ji in "Artificial Intelligence Changing the Future Disruptive Technology" artificial intelligence is a simulation of the information process of human consciousness and thinking, but it is not human intelligence. It can think like humans, or it may exceed human intelligence.At the same time, it is pointed out that this field includes robotics, language recognition, image recognition, natural language processing and expert systems, etc., which is of great help to the author in researching artificial intelligence news[4].Artificial intelligence news is not only a robot that can write articles, but also a powerful database and theoretical technology for news distribution and video processing.In summary, artificial intelligence is a science and technology that integrates robots, language image recognition, and natural language processing to make understanding, calculation, and behavior reach or exceed human standards.

2.2. Robot Writing

By looking up relevant materials from CNKI, Baidu Library and libraries, there is currently no unified definition of the concept of robotic writing in the academic world. Some studies have explored the concept of robotic news writing, and the definitions of scholars are slightly different.In "Media Disruptor: Machine News Writing", Zhihong Jiang believes that machine news writing is a

technology that uses algorithms to automatically generate target data through natural language to output articles. News writing is an application of artificial intelligence in the field of news[5].Foreign studies use terms such as "robot news," and "machine-written news" to refer to "machine news writing" technology, all emphasizing factors such as "data-based", "natural language claims", and "no human intervention".In "Study on the Status and Development Trend of Machine News Writing", Songhao Liu believes that machine news writing is produced by using a well-designed artificial intelligence program to intelligently analyze, process and process the collected information and data[6].The writing of "Kaibi Xiaoxin" can be divided into three processes: "collection and cleaning", "calculation analysis" and "template matching".Relying on big data technology to collect, clean and standardize the data in real time, and then customize the corresponding algorithm model according to business needs, calculate and analyze the data in real time, and finally select the appropriate template based on the calculation and analysis results to generate the CNML Chinese news markup language Standard manuscripts are automatically entered into the library of manuscripts to be edited for the editor to review and issue.

3. "ROBOT REPORTER XIAOXIN" WRITING APPLICATION STATUS

On November 7, 2015, on the 84th birthday of Xinhua News Agency, the editors and reporters of Xinhua News Agency welcomed a special colleague named "Kaibi Xiaoxin", who was the first robot reporter of Xinhua News Agency.After more than two years of continuous iterative development, "Kaibi Xiaoxin" has a stronger "writing" ability.After "Kaibi Xiaoxin" went online, it worked 7×24 hours.Whenever important sports events, or when the stock market opens and closes, breaks through the integer mark, or the national debt opens and closes, or when financial information such as the annual report and quarterly report of listed companies is released, it will automatically generate a press release based on the published information.The editor will formally sign and issue the manuscript generated by "Kaibi Xiaoxin" in the editing system.

3.1. Advantages Of Robotic Writing

3.1.1. Real-time reporting and fast writing speed

Robot reporters only need to use algorithms to calculate when writing machine news. When facing breaking news, they can often process manuscripts more accurately and quickly.During the Rio Olympics in 2016, "Kaibi Xiaoxin" tracked all competitions throughout the schedule, quickly generated news articles at the end of the competition, and tracked and reported the results of all competitions in real

time. More than 500 articles were received. It was officially issued, achieving zero error.During the PyeongChang Winter Olympics, "Kaibi Xiaoxin" fulfilled its mission and served the entire Winter Olympics with zero errors in the broadcast of the results and the release of the medal list, and a large number of contributions were collected.

3.1.2. Reporting is fair and without emotion

When journalists conduct news interviews, organize content, and write news articles, they will inevitably mix personal feelings when dealing with news events, and the evaluation will be biased.However, when robot journalists write news, they use program algorithms to ensure the accuracy and accuracy of news, and they can publish news events without any personal emotions.

3.1.3. Low production cost

Robot reporters use computer programs to write news. Compared with news reporters, the cost of using robot reporters is almost negligible.

3.2. Disadvantages Of Machine News

3.2.1. The content of the report is modular and the field is limited

At present, robot news writing at home and abroad relies on a text production template that can be generated.In the pre-set news template, only need to import time, location, event and other information to generate a specific news release, the language is more rigid.And this technology is mainly used in reports of breaking news such as sports, economy and some natural disasters.

3.2.2. Easy to invade privacy and violate ethical issues

The data collection of machine news writing comes from a specific database on the one hand, and user data based on audience network usage behavior on the other.Most of these data involve the privacy of the audience, such as hobbies, capital transaction information, etc.In the writing process, the user's relevant data will be collected, analyzed and even used by the machine program.It can be seen that machine news writing has pervasive violations of audiences' online privacy.
Furthermore, in the era of big data, machine news writing infringes on the audience's online privacy is highly concealed.The machine program will survey the audience's interests and preferences in the form of disguising images and issuing questionnaires, so as to carry out accurate push,

generate user stickiness, and create economic benefits.It is against ethics to obtain private information from the audience without the audience's knowledge.

3.2.3. Insufficient coverage

When making news reports, robot reporters can only describe the content of the news on the surface, it is difficult to discover the essence of the news based on the content, they cannot dig out the deepest true meaning of the news, and they cannot understand the deep thinking behind the news.

4. THE DEVELOPMENT AND PROSPECT OF ROBOT WRITING

With the advent of artificial intelligence, news users and the evaluation of communication effects have been incorporated into the news production process, which has led to great changes in the news production mode of the media industry, and news has become more intelligent[7].The media industry should use the productivity of artificial intelligence based on the construction of a pan-content ecological platform to reconstruct the relationship between news production and industry.With the development of intelligent media, the form of news reports has been further enriched, and interactive and multi-dimensional reports such as data news and voice news have emerged one after another.User analysis is becoming more precise, scenario-based and intelligent, news distribution is becoming more personalized and social, news experience is becoming more on-site, and interactive feedback is becoming more intelligent and sensory[8].The future of robotic writing will develop in the direction of human-machine collaboration and intelligent production.

4.1. Broaden Application Areas

The emergence and development of writing robots will inevitably change the work pattern of news editorial departments in the future.The manuscript writing robot will become a member of the editorial department, a colleague and assistant of human reporters and editors.When operating some large-scale topics, the writing robot can use its own artificial intelligence technology and big data search capabilities.Fast and accurate processing of text, audio, and video data in the complex information saves humans the time to edit, search and search data.As a result, human journalists can shift their work focus to their logical reasoning and emotional experience, and form more valuable and in-depth explanatory reports and analytical reports.American journalist Margaret Jackson once put forward the concept of "digital Taylorism".That is to say, in today's highly developed information explosion and artificial intelligence,

in order to adapt to the development of the times, the ability of "multitasking" is a must for media workers.In the future, media professionals will face more challenges. Only journalists with high comprehensive quality, creativity and creativity will not be eliminated by the times.

4.2. Strengthen In-Depth Reporting And Realize Emotional Interaction

Current robotic writing lacks depth and temperature.In the future, with the development of artificial intelligence, in-depth reporting will inevitably be strengthened to realize emotional interaction with humans through text.Scholar Yuqiao Zhao once expressed his opinion that robot news at this stage only stays at the level of intelligence and has not yet risen to the height of affection.So it cannot be equated to smart news.Although there is currently no way to achieve emotional interaction, with the increasing maturity of technology, the emotional index of robot writing is just around the corner in the near future.Kevin Kelly, the founder of the American "Wired" magazine, believes: "Technology will have a forward direction. It is called inevitable. This trend is like gravity and will definitely happen."The writing of the robot "Xiaoxin" is maturing. From the beginning, it was just writing programmatic reports, and later it used artificial intelligence algorithms to simulate human writing poetry.It can be expected that in the future, robot writing will be richer and the content will be more emotional and interesting.

4.3. Promote Media Integration And Realize Immersive Restoration Of The Incident Scene

At this stage, the applications of artificial intelligence in news production mainly include video recognition robots, chat robots, semantic analysis robots, automatic data visualization robots, and automatic writing robots.However, most of them are independent and separated from each other.The future news production scene will be full of high technology. With the help of computer interface technology, writing robots can quickly establish contact with aerial photography robots, video editing robots, etc., and process and organize first-hand information such as images and videos obtained at the front end.Combining the data stored on the Internet to quickly write manuscripts, supplemented with 3D models and other display methods, realize the immersive restoration of the incident scene.Such news presentation methods will bring a refreshing audiovisual experience to the audience.In the future, the media can better integrate technology and content, expand towards e-commerce, entertainment, etc., and build a pan-content ecological platform to seek broader development space.

5. CONCLUSION

In the era of intelligent media, the development of artificial intelligence technology is unstoppable. In the future, robot writing will further expand the application field and develop in the direction of human-machine collaboration and intelligent production. Human reporters and editors should find their own position, enhance their overall quality, cooperate with writing robots, and promote the development of news reports in a personalized direction.

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