AI Anchors' Development Status and the Prospect of Traditional Hosts in the Era of Artificial Intelligence

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Abstract: AI is one of the development themes of the current era, and the broadcasting and hosting industry is also facing tremendous development and change in the field of AI. AI anchorman can reconstruct the media ecology of the traditional broadcasting and hosting industry and bring new opportunities to the television industry. They have unique development advantages. On the contrary, AI anchorman also has development disadvantages related to functional and business defects. In the era of artificial intelligence, traditional hosts need to upgrade their business under the impact of technology to ensure their own development. At the same time, they should embrace artificial intelligence with a more open attitude and cooperate with AI anchors actively to build a new form of the industry.

Keywords: AI; anchor; media; broadcasting

1. Introduction

"AI anchorman" is a virtual character with the same broadcasting ability as a real anchorman cloned through voice synthesis, expression synthesis and other technologies.

At present, the image of AI anchorman is mainly divided into two types, one is the real person image, such as the "Xin Xiaohao" of Xinhua News Agency based on the host Qiu Hao, and the "Xiao Xiaosa" of CCTV based on the host Sa Beining. This kind of image often enters the mainstream TV program and has great popularity. The second is the cartoon image. The famous virtual singers "Luo Tianyi" and "Yan He" in "bilibili (a video website)" are welcomed by the audience in the field of subculture.

In 2018, Xinhua News Agency and Sogou jointly launched the first Artificial Intelligence news anchor in the world. In May 2020, the world's first 3D AI news anchor "Xin Xiaowei" appeared officially. AI synthesis technique continues to improve, and the audiences' acceptance of it has improved, which has brought great changes and new opportunities to the broadcasting and hosting industry.

2. Development advantages of AI anchors

2.1. Reconstruction of Media Ecology

AI anchorman is not simply a replacement for traditional anchorman, but a new concept of the meta universe. It creates a popular trend in the virtual hosting industry and redefines the fan economy. In the context of the global epidemic in recent years, people have the psychology of seeking humanistic care, especially in young people. The interactive demand for virtual anchors has increased, and the proportion of virtual industry consumption has increased year by year, which also provides AI anchors with more development opportunities and promotes the formation and development of the industrial chain.[1] For example, 2021 is considered as the "first year of the meta universe", "Nijisanji(a virtual anchor company)" of Japan launched the world's first male virtual idol group "LUXIEM", which has attracted a lot of attention and reaped huge economic benefits. With the continuous development of technology, the new ecology of AI anchorman has shown great development potential and reconstructed the media ecology of the traditional broadcasting and hosting industry.

2.2. New Opportunities in Radio and Television Industry

2.2.1. In the production stratification plane

As a product of science and technology, AI anchors can work without interruption and will not affect the broadcast quality due to physical and psychological factors. In order to ensure the program quality, the AI anchorman only needs regular system maintenance and program upgrade by technicians to ensure the smooth operation of the program. This has greatly improved the production efficiency of radio and television programs. At the same time, AI anchors are replicable, and their images can appear in multiple programs at the same time, which greatly saves the time to mobilize human and material resources and improves the efficiency of program production.

In terms of production cost, although the development of AI anchors at this stage will cost a lot of money, manpower and material resources. However, in the long run, its vigorous promotion and long-term application will greatly reduce the cost of program production. Microsoft "Xiaobing" hosted 21 TV programs and 28 radio programs within one year. Only 5 technicians and operators are needed behind "Xiaobing" to meet such a large supply.[2] In addition, AI anchorman can ensure continuous and timeless high-quality output. For example, in September 2020, the AI audiobook production platform was launched, and the AI anchorman produced more than 5 million words every day. At the same time, it can cooperate with the real person anchorman to record the whole work, and can also conduct multicasting, English broadcasting, to meet more diverse content needs.

2.2.2. In the content stratification plane

Compared with real human anchors, AI anchors can eliminate the interference of the environment and present the broadcast content smoothly and orderly. Because it excludes physical and psychological factors, it also greatly reduces the probability of errors. In case of emergencies, using AI anchors can achieve real-time reporting. AI anchors are not like real human anchors. They need to prepare first, and they are under certain psychological pressure, which makes them have the risk of delay and inaccuracy. AI anchorman only needs to input text instructions, and can broadcast the news correctly at once, which greatly improving the timeliness of the news. If there has a rumor crisis, the AI anchor can convey the answers of scientific authority to the public before the rumor spreads widely, or clarify the false information in time to ensure public order.

In addition, due to the fact that AI robots have not been widely promoted in life, and the popularity of the concept of meta universe in recent years, the audience has a strong curiosity in this field. Adding AI elements to various programs can popularize the concept of AI anchor, expand the application scope of AI anchor, and provide reference for the development and innovation of various programs. For example, in TV programs, real human hosts and AI anchors can co host, or AI anchors can be arranged as program guests to bring audiences a new experience.

Due to its machine characteristics, the AI anchor can conduct personalized production as required. First, determine the needs of AI anchors, and customize the production of AI anchors according to the needs. For example, the AI anchor who needs to broadcast the morning news should be designed according to the needs of the morning news and customized for the program.[3] Therefore, we can predict that AI anchors will be targeted in the future. With the help of personalized customization, it is possible to create TV programs completely composed of artificial intelligence elements and stimulate the innovative potential of various TV programs.

3. Development disadvantages of AI anchors

3.1. Limitations of functions

3.1.1. Lack of responsibility

AI anchors will have a wide audience after entering the radio and television industry, which represents that they have become "public figures". However, the AI anchor does not have self-awareness, so it does not have the ability to assume responsibility as a citizen. AI anchorman has objectively become a public figure, enjoying the rights of public figures, but is unable to change the lack of responsibility. If the AI anchorman makes mistakes and mistakes in his work, such as text command errors that cause broadcast errors, or program disconnection that causes work stoppages, it has a negative impact on the news industry. How to investigate their dereliction of duty and how to ensure the future working conditions will become a new problem.

3.1.2. Emotional estrangement

Real human anchors have strong professional quality, can understand the emotions of the audience, form emotional resonance with them, and establish emotional ties with the audience. Over time, the audience will have a strong liking for these hosts and pay for their personality charm, and the hosts will gradually form a reputation. Relatively speaking, although AI anchors can perform a highly functional imitation of real people, they cannot really have the unique emotional function of human beings. Therefore, for some audiences, AI anchors can only meet information needs, but not emotional needs.

In addition, the human emotion towards the AI anchor whose appearance is infinitely close to the real person is subtle. Professor MoriMasahiro, a Japanese robot expert, described the relationship between the fidelity of the simulation robot and the human perception in 1970. As the degree of anthropomorphic simulation rises, the human's good impression on it is also improving. However, when the degree of simulation reaches a critical point, the human's preference for it will drop sharply and fall into a low point, which will be replaced by negative psychology such as confusion, rejection and fear. This phenomenon of fluctuation of favorable perception is called "Uncanny-Valley Effect".[4]

"Uncanny-Valley Effect" indicates the risk of AI anchor application. According to this theory, before the virtual technology has reached full maturity, excessive pursuit of the simulation of appearance and sound should be avoided. Otherwise, people will feel terrible if they only have shape but not mind.[4] At present, AI anchors based on real people have entered the mainstream programs, with a large audience, and there are hidden dangers in the audience's emotions.

3.1.3. Diminution of authority

The news programs of mainstream media have always been considered to be serious, authoritative and credible, and news anchors are public figures who have been paid close attention to. As a product of advanced technology, AI anchors are highly entertaining in the eyes of a large number of audiences, many of whom regard them as entertainment stars. In this context, the attention paid to AI anchors and their programs is also aimed to watch the fun, and it's hard for them to really trust AI anchors. AI anchorman replacing real anchorman will reduce the authority of traditional media to some extent.

3.2. Drawbacks of vocational work

3.2.1. Lack of humanistic concern

The current AI anchor has the ability to express the basic human emotions. Take Microsoft Xiaobing as an example. When chatting, Xiaobing will express different emotions such as happiness and surprise according to the topic, and will also ask questions. In this regard, the shaping technology of AI anchors has been a breakthrough. However, the tone and expression of the AI anchor are formed by collecting real human corpus and expression library, which are ultimately the product of program instructions. When the audience seeks emotional sustenance, they cannot give real humanistic care. Only real anchors can establish emotional ties with the audience. For example, in 2008, a huge earthquake occurred in Wenchuan, Sichuan. Countless people care about Wenchuan and are eager to learn information through television networks. The female host of Sichuan Satellite TV read the casualty figures in a choked voice when she reported the disaster. Her true feelings connect the hearts of all TV viewers. This scene has touched countless Chinese people. After that, netizens called her "the most beautiful female anchor". However, without emotional diversity beyond the established basic elements of the program, it is difficult for the AI anchor to let the audience experience the real emotional performance, which is still a major lack of humanistic factors.

3.2.2. Lack of interaction and response

Interactive response can be divided into interpersonal interaction and on-site response. Interpersonal interaction refers to the interaction between the host and the audience and guests inside and outside the scene. For example, in the previous Spring Festival Gala programs, the host partners should make fun of each other to promote the party process, or select audience to ask questions randomly to activate the party atmosphere. In a public service program, the host, in order to show respect for the translator Mr. Xu Yuanchong, adopted the form of kneeling interview to keep her vision lower than Mr. Xu, and fully took care of Mr. Xu's interview experience. The real human host will make appropriate interpersonal interaction by observing the situation of the guests on the scene.[5]

On site response means that the host can make a smart response in case of emergencies. If the host has excellent quality, this will be an opportunity to greatly increase the reputation. It is not uncommon

for the communication situation to get out of control. A fixed program must have time limits. Therefore, the host should play a role in on-site response to control the communication situation. In the program "Happy In China" in 2007, the director immediately arranged the host to save the scene because of time gap. When the host began to improvise, the guide misjudged the time, and she quickly adjusted the word order to prepare the concluding remarks. Then, the director made correction once again, the impromptu time needed to be extended. The host did not appear flustered. She walked to both ends of the stage and bowed deeply to the audience. Through her body movements, she gained time for herself to think. With smooth language expression, she created a classic scene.[5]

It can be seen that the on-site interaction and response to emergencies need to take into account the audience, context and other factors. At present, the AI anchor acts according to the program instructions step by step, and has no ability to think, so it is difficult to predict and respond to changes in these factors. The variety and unpredictability of unexpected events in the program make it impossible for the staff to set up the procedure in advance. Even if the emergency assistance is provided manually, it is also detrimental to the program effect.

4. The Prospect of Traditional Hosts in the era of Artificial Intelligence

4.1. AI anchors bring challenges to traditional hosts

In the era of artificial intelligence, AI anchors have brought challenges to the development of traditional hosts, which requires traditional hosts to make transformation and upgrading. The advantages of AI anchors over traditional hosts are emerging. For the work of simply reading manuscripts in some low threshold programs, the application of intelligent voice technology can replace traditional manual broadcasting. These works can be completely realized by AI anchors.

In the current fast-paced information society, once people are isolated from information for a long time, they will feel anxious and insecure, lacking a sense of security. AI anchor gives full play to the sense of security brought to the audience through information with 100% accuracy and timeliness. On the other hand, the widely circulated video of the host's verbal errors on the network also reflects that the real human hosts will be interfered by various external factors to cause errors in expression. This also requires the hosts to have a more professional level of hosting, a stronger psychological quality, a deeper and broader cultural accumulation to achieve more accurate transmission of information, so as to create an information environment full of security for the audience.[6]

4.2. Traditional hosts need to upgrade themselves

The application of AI anchorman in the field of broadcasting and hosting, to a certain extent, promotes the business upgrading of traditional anchorman. In order not to be eliminated under the impact of artificial intelligence, they must improve their professional quality and seek broader development space. When AI anchors enter the broadcasting and hosting industry, they will eliminate some unqualified hosts. However, high-level broadcasters and hosts will not be replaced by AI, and their comprehensive abilities are incomparable to those of AI anchors. Therefore, when facing the challenges brought by artificial intelligence, the announcer and host must exercise a stronger field control ability, present a deeper cultural accumulation, and enhance their irreplaceability by improving their core competitiveness. At the same time, they should embrace Media Convergence, build their own reputation and achieve business upgrading.

4.3. Cooperation of the two sides to build a new style of hosting

The emergence of AI anchors is an injection of new elements into the radio and television industry. AI anchors and real human anchors should cooperate with each other, learn from each other's strengths, and jointly improve the efficiency and quality of the hosting work.

AI host is a product of advanced technology. Compared with real host, it can adjust its own style according to personalized needs. The cooperation between AI hosts and live hosts on the same stage can break the current phenomenon of single host style and poor visual experience. For example, in the 2019 CCTV Online Spring Festival Gala, the real human an and AI host Xiao Xiaosa jointly hosted the gala. The cooperation between human beings and AI is a collision of emotion and technology, which brings unexpected surprise effects.

In addition, the advantage of AI anchorman lies in its accuracy to meet the information needs of the audience. The advantage of real human anchors lie in their humanity, which meets the emotional needs of the audience. If programs can be innovated, while AI anchors provide accurate information, real human anchors will make emotional expression on this basis, and the two will develop together to meet the audience's emotional and rational needs.[6] AI anchors and real human anchors can cooperate to build a new style of hosting, which has great development space in the future.

5. Conclusions

The progress of science and technology promotes the progress of all walks of life, and the broadcasting and hosting industry is no exception. In the era of artificial intelligence, the application of AI anchor has its innovative advantages and functional disadvantages. Its innovative features should be maintained and updated, and its application limitations need to be developed and solved.

The promotion of AI anchors has brought some challenges to real anchors, but challenges and opportunities coexist. On the basis of continuous improvement of AI anchor functions and continuous upgrading of real human anchors, AI anchors and real human anchors should form a cooperative relationship as soon as possible. As the voice of the era, the broadcasters should embrace AI and contact the frontier of science and technology actively. The two sides should cooperate with each other, learning from each other's strengths, promoting the innovative potential of TV programs, and jointly push Chinese TV hosts to a new stage.

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