

The Dilemma and Development of Traditional Announcer-Hosts in the Context of Artificial Intelligence

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Abstract: In recent years, the scientific and technological revolution marked by the deep integration of digitization, networking and intelligence is strongly pushing the production mode towards intelligence. Artificial intelligence is at the core, and its rapid development has not only transformed production and labor patterns, but also reconfigured the way capital and organizations are managed. Among them is the emergence of artificial intelligence anchors, which has brought brand new challenges and opportunities to the broadcasting and hosting industry. This paper starts from the development history of artificial intelligence, the traditional announcer host's dilemma of the times and the direction of development, and discusses that in the era of intelligence, artificial intelligence anchors and real anchors need to complement each other's strengths and integrate and coexist.

Keywords: artificial intelligence; AI Synthesis Anchor; broadcasting moderator

1. Introduction

With the rapid progress of science and technology, artificial intelligence technology, with its powerful computing power and deep learning ability, is gradually participating in various fields of society, profoundly changing people's production and life style. In the media industry, this change is particularly significant. Traditional announcer hosts are irreplaceable in terms of emotional transmission, timely interaction, etc., while the continuous maturation of AI technology allows some repetitive and standardized work to be partially replaced by AI anchors. The purpose of this paper is to explore the dilemmas faced by announcer-hosts and possible paths for their future development.

2. The Development History and Current Status of Artificial Intelligence Technology in the Field of Broadcasting and Hosting

2.1. Budding period (2001-2004)

At the beginning of the 21st century, the world's first virtual announcer "Ananova" was launched by British Networks, leading the way in intelligent broadcasting technology. Subsequently, Japan, the U.S., and Korea launched "Terai Yukie", "Vivian", and "Lucia".

In China, in 2001, Tianjin TV "Science and Technology Weekly" program debuted in the "word East", marking the opening of a new era of virtual hosting in China. The character was a deep fusion of the then cutting-edge sensing technology and 3D animation art, creating a bald figure with a distinctive oriental face, whose unique appearance quickly became the focus of public attention. Though not as animated as a real person, "Speech Dongfang" is able to change its facial expression according to the rhythm of speech, bringing a novel experience to the audience. In 2004, China Central Television (CCTV) Movie Channel launched the self-developed virtual presenter "Xiaolong". The character relies on fine CG production technology, the voice is synthesized by a professional dubbing artist in post-production, and its image is skillfully blended with the qualities of a number of celebrities, presenting a unique visual effect. In the program "Light and Shadow Weekly", "Xiao Long" independently assumed the responsibility of hosting, and further promoted the development and popularization of China's virtual hosting technology with its unique charm and professional performance.

2.2. Exploratory period (2005-2017)

The use of virtual hosts in the early media was a gimmick created for the purpose of pursuing program effects, and viewers mostly stayed to watch for a short period of time because of the novelty, and the virtual hosts in this period did not make much contribution to the ratings and program quality. This period of virtual presenter is characterized by three-dimensional animation synthesis, character image is not realistic, modeling is relatively rough, limbs are more rigid, more tend to be animated images, the sound is later artificial synthesis. Artificial intelligence programmers are more dependent on technology, and during this period, artificial intelligence programmers who try to “emulate” are often “unrealistic”^[1].

2.3. Application period (2018-present)

In 2018, virtual presenters began to shift to application intelligence, upgraded from 2D to 3D, and the character portrait capture technology is becoming more mature, and virtual presenters showed a blowout development. The virtual hosts in this period are more anthropomorphic in terms of physical features, voice tone, body movements, etc., and richer in personality traits generated through algorithms. For example, in the news and information program, Xinhua News Agency has launched “New Xiaohao”, “New Xiaomeng”, “New Xiaowei”, all three of which appear as news hosts and can automatically generate broadcast videos according to the input news text. According to the input of news text, automatically generated broadcast video, voice, appearance, facial demeanor are highly similar to the real anchor, but also can be done 24 hours a day, zero error, triggering widespread concern. In the evening's variety program, the 2019 CCTV Network Spring Festival Gala featured Sabin on stage with his digital twin, “Little Sabin”. With its highly simulated appearance, agile physical movements and natural expression, “Little Sabeing” is a subtle “replica” of Sabeing himself. In the same year, at the CCTV May 4 Gala, “Xiaoling”, a virtual host, also made a stunning debut. Relying on powerful data storage capacity and sophisticated algorithmic drive, it showed the quality of a professional host. The technology of virtual anchors is constantly being innovated, such as the application of 3D modeling, real-time rendering, AI-driven emotional expression and other technologies, which makes the image of virtual anchors more three-dimensional and vivid.

3. The Dilemma of Traditional Announcer Hosts in the Age of Intelligence

3.1. Positions replaced

With the development of artificial intelligence technology, natural language processing, speech synthesis, facial capture and rendering and other technologies have become more mature, the generation of AI anchors has become more efficient and realistic. These technologies allow AI anchors to highly mimic the abilities of human anchors, and there is a high potential for AI anchors to replace them in highly repetitive and standardized positions. In the national (Hangzhou) short video base's AI production experimental workshop, the emergence of the AI anchors “Xiaoyu” and “Xiaoyu”, which are digital avatars modeled after real-life anchors Yu Chen and Qiyu, represents an attempt to mimic their every aspect, including image, expression, and voice, as a blueprint for generating future generations. The two AI digital anchors have already been featured on “Hangzhou News”. At present, the first phase of the construction of the laboratory is basically ready, initially built the first domestic “curation, picking, editing, sending” the whole process of artificial intelligence short video AI production line. The algorithmic application of generative artificial intelligence has gradually landed in the large and small screen content dissemination of Hangzhou Media Group, and has played an important role in major reports such as the Hangzhou Asian Games and the 2024 Hangzhou Congress, which has greatly improved the efficiency of content production while bringing users a brand new experience.

3.2. Lack of diversity and stability

Traditional announcer-hosts tend to adhere to a more rigid style and process, which often results in a relatively monotonous style perception among audiences, making it challenging for them to cater to the increasingly diverse needs and preferences of their viewers. Artificial intelligence, on the other hand, can be programmed to achieve a variety of styles and languages according to the needs of the program, which is more flexible. The artificial intelligence broadcasting system has the ability to dynamically

adapt to audience preferences and can be customized to push highly personalized program content, which significantly optimizes the audience's viewing experience.

In the case of a long continuous period of time or an urgent news event, the traditional announcer-host needs to adjust quickly to deliver the information accurately, objectively, and in a timely manner. However, due to personal emotions, physical conditions and other factors, sometimes it may not be possible to cope perfectly. The AI anchor, on the other hand, is not disturbed by these factors and can always maintain a stable working condition.

3.3. Inadequate integration of competencies

With the development of the mobile Internet, broadcast hosts need to have more comprehensive abilities and qualities to face the increasingly complex development needs of the broadcast hosting industry. In order to further improve the effectiveness of the program, the announcer needs to further improve his or her ability to collect, write, produce and broadcast information. However, in the actual process, often due to the lack of individual comprehensive ability, the quality of the program can not be effectively guaranteed. In contrast, virtual hosts can be very good for efficient broadcasting of program content^[2]. During the 2020 session, Xinhua News Agency's "new small micro" platform demonstrated high efficiency, zero errors, and round-the-clock online availability. Furthermore, it could seamlessly switch to various scenarios, tailoring the news content based on background inputs, thus presenting audiences with unique, lively, and engaging information about the two sessions.

4. Coping Strategies for Traditional Announcer Hosts in the Context of Artificial Intelligence

4.1. Cultivating comprehensive competencies and strengthening identity

With the in-depth development of media integration, traditional announcers and hosts need to have higher comprehensive quality and cross-border capabilities. Not only do you need to be proficient in the broadcasting business, but you also need to understand the knowledge and skills in a variety of fields, such as newsgathering, program production, and new media operations. In the age of intelligence, a single expertise is no longer sufficient to meet the market demand. Broadcasters and hosts should actively learn interdisciplinary knowledge, such as news communication, psychology, sociology, etc., to further strengthen the ability to analyze news hot spots and social phenomena. Strengthen the development of comprehensive editing and broadcasting skills, while actively acquiring and mastering the utilization of audio and video editing software, in order to enhance the quality and efficiency of programs. The development of comprehensive competence by broadcasters and hosts is not only conducive to competitiveness, but also helps to strengthen identity. In the face of the onslaught of virtual anchors, some of the announcer-hosts who focus on audio language creation are at risk of being replaced by their positions. For example, "AI anchor said two sessions" has realized the AI anchor resident, at this time the real anchor no longer has the identity of the particularity, and the freshness brought about by this change in the image of the main body of the communication, so that the audience's attention is more likely to be attracted by the virtual anchor. In the long run, it can't help but make real life anchors question their self-worth. In the realm of tech and art, genuine anchors should enhance their original operations, refine their skills, solidify their identity, and shift from a narrow "hosting-only" mindset to a multi-dimensional approach, fostering diversification in professional attributes.^[3]

4.2. Enhance the sense of interaction and strengthen the emotional link with the audience.

In the age of all-media, the media should not only let the audience see and hear, but also participate and interact in the communication. In the rapid development of science and technology today, artificial intelligence anchor relying on huge data resources and deep learning advanced technology, has initially had the ability to improvise within a rational framework, but its essence is still significantly different from the traditional broadcasting host based on emotional thinking improvisation oral expression. AI anchors lack human emotions and are unable to accurately understand concepts such as "context". On the contrary, the traditional announcer, by virtue of his or her on-the-spot perception and the art of verbal expression, can speak appropriately, decently, and even skillfully in a given situation^[4]. In the intelligent era, the announcer host should effectively use improvisation oral expression, timely interaction with the audience, use more vivid, image, friendly, natural expression, and the audience to produce timely interaction, to build an emotional bridge with the audience. For example, Kanghui

released a vlog of the Asian Games ride on the eve of the Asian Games, showing the audience the cityscape of Hangzhou and the preparations for the Asian Games through a first-person perspective in the form of a ride. In the vlog, Kang Hui changed his usual dignified and formal attire and appeared in front of the camera wearing a full set of professional cycling equipment, which quickly drew closer to the audience in terms of image. When expressing, Kang Hui skillfully let the selfie stick on the bicycle handlebar, introduced the audience to the Hangzhou Asian Games while riding, led the audience to enjoy the beautiful scenery of West Lake along the way, and encouraged the public to pay attention to their health through the way of cycling sports through personal experience, which conveyed a positive attitude to life. This kind of timely and emotional interaction with the audience cannot be replaced by virtual anchors, which is one of the key uniqueness of real life anchors in the present time. They can report news events through personal experience, directly experiencing and delivering the news scene, and at the same time, integrating personal deep feelings and experiences, building a closer emotional bridge with the audience. This process not only significantly promotes the emotional resonance and integration between the audience and the content of the report, but also effectively dismantles the alienation barriers that may exist between the traditional media and the audience, prompting the audience to develop a warmer and more trusting psychological tendency towards the media platform, which in turn strengthens its authority and influence in the dissemination of social information.

4.3. Opinion leaders on new media platforms, good “gatekeepers”

In the era of all-media, the way of news dissemination has changed from a single channel to a diversified platform. In order to maintain close contact with the audience and realize effective information transmission, mainstream media must carry out the layout of all-media platforms and adopt corresponding operation strategies^[5]. “Xiao Qiang Hotline” is a livelihood news program on Zhejiang Television's Teaching Video Channel. The program focuses on ordinary people and has received more than 4 million calls and 300,000 letters from viewers over the past 21 years, solving nearly 100,000 problems. In the era of all-media, “Siu Keung Hotline” follows the characteristics of the times and interacts with viewers in a way that not only retains the traditional telephone hotline, but also creates accounts with different characteristics in several new media platforms. For example, on the WeChat public platform, “Xiao Qiang Hotline” adopts the symbol combination of “text + picture”, while cleverly inserting net red emoticons to tell viewers about news events in the form of dialogues. On the microblogging platform, Xiao Qiang Hotline adopts a “video + words” format. The language is concise, and conforms to the reading habits of the audience. On Jitterbit platform, “Xiao Qiang Hotline” adopts the form of “short video + like comment interaction”, the video length is short, breaks through the traditional news “inverted pyramid” narrative, using the montage technique, the conflict point of the news event, turning point cut together, the story conflict is briefly presented to capture the attention of the audience. The conflict of the story is presented briefly, which captures the audience's attention. Now, “Xiao Qiang said” account has established “2 ends and 5 numbers”, moved into a number of new media platforms, and traditional TV media platforms to form a positive interaction with the program, creating a good personal IP image.

In today's world of more diversified information, the hosts of mainstream media have taken on the responsibility of being the “gatekeepers” of in-depth excavation and multi-channel verification of information. The news story itself should be presented in a vivid and multi-dimensional way to ensure that the information is audible, visible and easy to understand, and the planning, editing, interviewing, producing and directing of the news program all require human hosts to give full play to their comprehensive abilities and deep involvement, which is not a task that can be accomplished automatically by visual AI technology alone^[6].

4.4. Embrace artificial intelligence to achieve convergence

The use of AI technology in the field of broadcasting and hosting has changed the traditional media ecosystem, not only for the audience to bring a richer and more innovative listening and viewing experience, but also for the media industry to bring new opportunities. Artificial intelligence technology can quickly generate basic news content based on information input, while real anchors are more discursive, dynamic and emotional, and through the complementary strengths of real anchors and AI anchors, it can provide better conditions for broadcasting and hosting creation. For example, during the two sessions in 2022, the central video launched the “crown” inspect the two sessions”, the head office for the first time to launch a super-simulation anchor “AI Wang Guan”. This initiative not only injected technological innovation into the coverage of the two sessions, but also fully demonstrated the

success of the application of AI technology in the field of journalism. In the program, the real-life anchor has rich experience in reporting on the two sessions of the National People's Congress, and has sustained attention and thoughts on the macro policies of the country and the micro details of people's livelihood. They are able to provide more thought-provoking, realistic perspectives on the program. AI anchors rely on the support of a vast database, which can provide viewers with background information, data analysis, etc. in a more rapid and detailed manner. Real-life anchors and AI anchors reporting on the same screen complement each other's strengths and improve the overall quality of the coverage.

5. Conclusions

Technology and practice are mutually reinforcing and evolving, and when new technology is applied to practice it inevitably generates new needs and also accelerates the optimization and innovation of technology. As the range of AI voice applications continues to expand, broadcast presenters are faced with new opportunities. To illustrate, the profound integration of 5G technology with artificial intelligence has transformed the conventional media landscape, fostering the creation of novel broadcasting and hosting scenarios alongside emerging linguistic paradigms. This integration has ushered in a novel perspective on broadcasting and hosting, which has been embraced by the broader audience. Continuous breakthroughs in speech synthesis, facial micro-expression imitation and other technologies have enabled AI anchors to show strong application capabilities in broadcasting news, weather forecasts, traffic information and other aspects. However, these technologies also reveal their limitations, namely the lack of true emotional resonance and deep interaction. In a nuanced perspective, this limitation underscores a fundamental competency that traditional broadcast presenters ought to preserve and further refine. The dynamic interplay between human and machine does not adhere to an exclusive dichotomy; it transcends the simplistic notion of a mere amalgamation ("plus"), instead embodying a profoundly intertwined symbiotic relationship, whereby the two entities complement and coexist in harmony. With the assistance of artificial intelligence, announcer hosts can focus more on the unique creation of viewpoints, the interactive delivery of emotions, and the shaping of their personal new media IP image. Through human-machine dynamic collaboration, it can further realize the harmonious symbiosis and co-development of human and AI technologies, bringing audiences a richer, deeper, and warmer audio-visual experience, and injecting brand-new vitality into the media industry.

References

- [1] Song, Cunjie. (2022). *Between what is true and what is false: The evolution of the virtual facilitator and a discursive outlook*. *Media*, (14), 52-55.
- [2] Shen, Zhiwan. (2022). *Opportunities and challenges for broadcast presenters in the age of artificial intelligence*. *Media*, (20), 45-47.
- [3] Zhang Aimo, Li Shiyu, Wang Tingting. (2024). *Siege and breakthrough: Rethinking real life anchors in the face of virtual anchor onslaught*. *Radio & TV Journal*, (03), 145-148.
- [4] Li, Huiwen. (2021). *Developmental innovations in virtual and traditional podcasting*. *Media*, (13), 44-46.
- [5] Song, Yan. (2024). *Innovative path of mainstream media news anchor transformation in the new media era*. *Media Forum*, (10), 84-86.
- [6] Li Shiyu, Wang Tingting, Zhang Aimo. *Thoughts on whether announcers can be replaced--Take the AI anchor family for example*. *Radio & TV Journal*, 2024, (07), 146-150.