How AI Technology and Traditional Media Should Complement Each Other and Coexist in the Era of Intelligent Media: Post-Print

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Abstract

Against the backdrop of the intelligent media era, the emergence of a wave of AI synthetic anchors has impacted the traditional media industry, generating considerable unease among scholars and practitioners in the field. This has consequently sparked debates such as "Will AI synthetic anchors replace traditional human anchors?" and "Will technology forever remain merely a technology?" This paper will examine the development trajectory of AI synthetic anchors, conduct an objective analysis of these debates, analyze the strengths and weaknesses of both sides, explore how both can leverage their strengths and mitigate their weaknesses in future development, and achieve interdependence and collaborative win-win outcomes while realizing their respective core values.

Full Text

Title and Authorship

How AI Technology and Traditional Media Can Complement and Coexist in the Era of Intelligent Media

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Abstract

Against the backdrop of the intelligent media era, the emergence of AI synthetic anchors has impacted the traditional media industry, causing concern among many scholars and practitioners. This has sparked debates such as "Will AI synthetic anchors replace traditional human anchors?" and "Can technology only ever exist as technology?" This paper begins with the developmental history of AI synthetic anchors, objectively analyzes these debates, examines the strengths and weaknesses of both parties, and explores how they can leverage their respective advantages while avoiding shortcomings in future development

to achieve mutual dependence, collaborative win-win outcomes, and realize their core values.

Keywords: intelligent media era; AI synthetic anchor; traditional human anchor; leveraging strengths and avoiding weaknesses; innovative development

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Introduction

The Rise of Virtual Hosts

In 2001, a British internet company created the world' s first virtual host—Ananova—sparking a hurricane of virtual host creation that represented a major innovation in the media industry. Subsequently, various countries launched their own virtual hosts, such as Yuki in Japan, Vivian in the United States, and Lusia in South Korea. In 2004, CCTV-6 launched China' s first virtual TV program host, Xiaolong. The virtual host trend burned brightly but briefly, and it was around this time that Ananova bid farewell to the stage, perhaps due to technological iteration, or perhaps because excessive similarity to real human hosts caused audience fear and psychological resistance.

At the same time, many media industry practitioners and learners, especially those in the broadcasting and hosting profession, began to worry. Are AI synthetic anchors opponents or helpers? Will their emergence replace traditional broadcasters and hosts? Will AI become as essential as water, electricity, and internet infrastructure? Or will this technology merely exist as a new technique?

AI Synthetic Anchors in the Intelligent Media Era

In 2017, "artificial intelligence" was written into the government work report, with various fields innovatively developing in conjunction with AI technology. Building on existing virtual host technology, Sogou and Xinhua News Agency jointly released the world' s first fully simulated intelligent AI host—commonly known as an "AI synthetic anchor" —at the Fifth World Internet Conference on November 7, 2018. On February 19, 2019, Sogou' s "Avatar" technology achieved another breakthrough, partnering with Xinhua News Agency' s New Media Center to upgrade and release the first "AI synthetic anchor" capable of combining body movements for "standing broadcast." In March 2019, with the support of AR/VR technology, the newly upgraded standing AI synthetic

anchors "Xin Xiaohao" and "Xin Xiaomeng" officially took up their posts and participated in the National Two Sessions news coverage. On May 21, 2020, the 3D AI synthetic anchor "Xin Xiaowei" was officially launched, debuting before the National Two Sessions. Compared with "Xin Xiaohao" and "Xin Xiaomeng" from the 2019 Two Sessions, "Xin Xiaowei" highly restored real human hair and skin, with significant improvements in three-dimensionality, flexibility, plasticity, and interactive capabilities, while also being able to make various postures and expressions closer to real humans based on broadcast content.

However, investigating the current deployment and application status of AI anchors reveals that relatively few media outlets have actually deployed and continuously operated them in programs. They are only used in short news broadcasts on some client platforms, such as Xuexi Qiangguo and Xinhua News Agency' s AI anchor column. When the novelty wears off, audiences seem to prefer believing in and accepting human anchors.

The emergence of AI synthetic anchor technology has made people feel novel and broadened horizons, but it has also caused concern among many media industry practitioners, especially broadcasters and hosts. This has sparked debates: Are AI synthetic anchors opponents or helpers? Will they replace traditional broadcasters and hosts? Will AI become essential infrastructure like water and electricity? Or will this technology merely exist as a new technique?

The Debate: Replacement or Coexistence?

1.1 AI Synthetic Anchors Will Replace Traditional Human Broadcasters and Hosts

Arguments such as the "host elimination theory"and "host threat theory"suggest that human hosts are completely unnecessary in programs. Influenced by these arguments and current variety show formats, some believe that cross-border hosting, guest hosting, or even anyone with a mouth can host. Therefore, the emergence of "AI synthetic anchors" leads many to believe that AI anchors will completely replace human hosts in the future.[1] The main reasons for these views are twofold.

1.1.1 Unmatched Timeliness Speed, accuracy, and truth are the lifeblood of news communication. Speed means timeliness. Against the AI backdrop, AI synthetic anchors can immediately broadcast the latest news in real-time simply by inputting text and commands in the backend, without needing makeup, lighting adjustments, cameras, microphones, or studios like traditional broadcasters, and without any pre-preparation or subjective factors. AI synthetic anchors can be on standby 365 days a year, 24 hours a day, unaffected by personal condition, emotions, or weather. As virtual entities, they can even create infinite avatars to maintain stable status and work simultaneously across time and space. This

greatly promotes development in the news communication industry—something extremely difficult for traditional broadcasters and hosts to achieve or surpass.

1.1.2 Unparalleled Accuracy Correct reading rate has always been a key criterion for broadcasters and hosts. As long as backend instructions are correct, AI synthetic anchors can achieve 100% reading accuracy. While traditional human broadcasters can practice continuously and gain extremely rich experience, achieving 100% accuracy is almost impossible. Keeping pace with the times is also an essential professional capability for broadcasters and hosts. AI synthetic anchors are controlled by backend instructions and program data. As long as versions are updated, AI synthetic anchors can adjust program status according to data, immediately learning and mastering knowledge content in various fields and languages from around the world, instantly becoming an encyclopedia. Extremely rich knowledge and strong learning ability are key guarantees of reading accuracy. For human broadcasters, this kind of instantaneous learning ability is completely impossible to achieve. This confirms the irreplaceability of AI synthetic anchors, while also suggesting that as the era develops, traditional human broadcasters may struggle to keep pace, and AI synthetic anchors will replace them.

1.2 AI Can Only Exist as a Technology

Some scholars believe that whether AI synthetic anchors or other AI attempts, they are all completed under the background of AI technology, so essentially they are just a type of technology.[2] Born from technology, they will only exist as technology. Compared with human broadcasters and hosts, AI synthetic anchors still have aspects that cannot surpass humans no matter how much they are updated and improved, because these are uniquely human.

1.2.1 Lacking Emotional Ethics As a technology, AI synthetic anchors lack the experience of living and interacting with humans like traditional broadcasters. Therefore, they can only read word-by-word according to pronunciation, but cannot empathize with communication content, conduct deep-level analysis and interpretation, or process different content with different emotions based on life experience, making it difficult to resonate with audiences and achieve emotional connection. The book *Practical Broadcasting Tutorial: TV Broadcasting and Hosting* comprehensively states: "TV news broadcasting has diverse forms, requiring TV news broadcasters to enhance their sense of communication with audiences, from preparation to broadcast, referring to the entire news content, psychologically forming a sense of wholeness, visual sense, and camera sense, creating an organic harmony between inner feelings, vocal language, and body language." [3] As the mouthpiece of the Party and government, and also as participants in real social life, broadcasters and hosts need to express positive social energy from their own emotions. AI synthetic anchors, as a technology, are more about routine rationality, without attitudes or positions, and will not connect with national conditions or understand public sentiment. For media

and communication industries, what matters more is perceptual thinking and empathy in content.

1.2.2 Accumulated Professional Skills Professor Zhang Song mentioned in *Chinese Broadcasting Studies*: "When having a script, one can speak eloquently; when without a script, one can add icing on the cake." [4] A professional broadcaster or host needs years of learning and practice to achieve so-called eloquence without a script. The so-called "imitating the surface but not the core" is the weakness of AI synthetic anchors. Program production also requires personal scene control, impromptu commentary, and clever emergency response to unexpected situations. These skills cannot be calculated through big data as instructions, but need to be gradually formed through long-term accumulation and learning. During program communication, changes in language expression, stress, and pauses also need to be adjusted according to scene atmosphere, audience reaction, and the host' s own style characteristics to achieve better communication effects. These cannot be determined through big data calculations.

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2. Complementary Strengths

Compared with traditional human hosts, AI synthetic anchors in the intelligent media era have shifted the communication industry from "human-dominated" to "technology-dominated." However, the current standard for measuring whether a technology is good is not how advanced it is in replacing humans, but whether it can provide better services and convenience for humans. Therefore, technology must fit the essential needs of the industry. The same applies to AI synthetic anchor technology. Although it does have some advantages that humans can never surpass no matter how hard they try, these are all "rational" existences. A healthy and orderly society needs emotions to maintain, and as advanced emotional animals, humans can better empathize with the public, making the "perceptual" existence of human hosts essential.

Based on analysis of the current status and literature of AI synthetic anchors, the author believes that AI synthetic anchors and traditional human hosts should coexist complementarily. For media communication and broadcasting industries, humans should fully exert their subjective initiative in the industry to create their own core values. Just like when the 2007 "Joyful China Tour" New Year' s special program approached midnight, host Dong Qing' s impromptu rescue: facing the director' s misjudgment of time in her earpiece, Dong Qing calmly bowed deeply to the audience twice, then used parallel sentences like "joyful laughter" and "moving tears" to express "gratitude" impromptu. Her fluent language expression and coordinated body movements created a perfect case in hosting studies—the "Golden Three Minutes." Similarly, at the 2015 Hunan TV "I Am a Singer" finals live broadcast, singer Sun Nan suddenly announced his withdrawal, which was undoubtedly a "bolt from the blue" for the live TV

program. Host Wang Han turned from shock and blushing to rapid calmness, using an extremely skillful rhetorical emergency response to buy precious discussion time for editors and directors while also comforting the audience and contestants, which the industry calls the "Black Seven Minutes." Neither Dong Qing's "Golden Three Minutes" nor Wang Han's "Black Seven Minutes" negatively affected the programs; instead, they added icing on the cake. Isn't this the subjective initiative of hosts in programs and the core value that AI hosts can never achieve or create?

In the "everything is media" intelligent media era, AI synthetic anchors have demonstrated characteristics of intelligence, contextualization, and full-time availability while also providing convenient services in many aspects for humans. For example, when the sudden COVID-19 pandemic in Spring 2020 brought tests of public health emergencies and media ecological changes to the nation and media, Guangxi's first AI synthetic anchor "Xiaoqing" on February 16, 2020, automatically output text-to-video using multiple AI technologies including speech synthesis, recognition, understanding, and image processing, completing automatic multi-language content broadcasting. It also appeared on Guangxi TV's new media platform's special "Fighting the Epidemic" report "Fighting the Epidemic: Live," presenting a complete AI virtual anchor effect.[5] Xiaoqing's launch not only maximally avoided risks from personnel concentration during the special period to ensure staff safety, but also could immediately broadcast programs within 10 minutes of the latest epidemic release, achieving "cloud recording," "wide distribution," and "fast communication" promotional effects. In the future, when facing risky geological disasters such as floods, earthquakes, and typhoons, we may also use this technology to ensure media workers' personal safety, no longer requiring real people to report on-site, but using AI synthetic anchor technology to present smoother live feelings and spatial sense unrestricted by venue or space.

Therefore, the shortcoming of AI synthetic anchors lies in their lack of human life experience, resulting in relatively mechanical intonation, pronunciation, tone, and pauses without variation, and relatively rigid body movements and mouth shapes. The shortcoming of traditional human hosts lies in reading accuracy, etc. Therefore, AI synthetic anchor technology needs continuous research and improvement based on public feedback and era progress, while relevant practitioners and students should have foresight, examine themselves, and strengthen their professional capabilities to find positioning and develop their own characteristics. Thus, whether AI synthetic anchors or traditional human hosts, both need to face their shortcomings, avoid them, and in this process, collaborate to promote new development, enhance centripetal force, concentric force, and cohesion between AI synthetic anchors and traditional human hosts, and jointly serve as communicators between the state and the people.

3. Future Development Directions

3.1 Leveraging Strengths–High Efficiency to Achieve New Creation

The emergence of AI synthetic anchor technology undoubtedly poses a challenge to the media industry and related sectors. Media professionals and the entire industry should learn to transform challenges into opportunities. For AI synthetic anchor technology to gain a firm foothold in the public mind, it must also undergo continuous updates and improvements. Therefore, both AI synthetic anchors and traditional human hosts should view each other as "comrades-in-arms" and "helpers" in work, not as "opponents" or "competitors." As long as both sides actively embrace each other, they can achieve high-quality, high-efficiency, and high-creative human-machine cooperation, allowing AI and traditional media to integrate and develop together, achieving mutual functional and value-based interdependence, complementary win-win, and co-creating victory.

AI synthetic anchors' advantages lie in high-efficiency news generation and 24/7 online broadcasting with extremely high accuracy. Traditional human hosts' advantages lie in their subjective initiative and humanized emotions. Therefore, while achieving "human-machine integration" and "human-machine collaboration," AI synthetic anchors can be responsible for mechanical and tedious work, liberating humans from heavy routine work to focus on in-depth reporting, news commentary, and more creative, high-quality content and unique products, thereby achieving complementary advantages and mutual benefit. For example, in objective news broadcasting or weather forecasting, AI synthetic anchors can be used effectively, making them good helpers for humans. Like the AI weather host "Moe Xiaobing" that appeared on December 22, 2015, and has worked at Shanghai Media Group (SMG) TV News Center to this day, its accurate broadcasting and humorous interaction with host Bai Xuxu have attracted attention from numerous news media and audiences, undoubtedly becoming a good helper for traditional human hosts.[6] With the help of high-efficiency assistants, traditional human hosts can achieve new creation. For example, in CCTV' s original cultural TV program *Chinese Poetry Competition*, each episode' s wonderful opening remarks were crafted by Dong Qing using different poems through repeated deliberation, demonstrating the host' s "bookish grace" while making the scene poetic and subtly spreading China' s excellent thousand-year traditional culture to audiences. The author believes that in the future, with the help and cooperation of AI synthetic anchor technology, media practitioners will focus more on cultivating high-quality program content, creating and presenting more cultural products with high creativity and epoch-making significance.

3.2 Avoiding Weaknesses–Self-Reflection to Promote New Development

In the intelligent media era, the emergence of a new technology brings competition and challenges but also development opportunities. What we need to do is not blindly escape but, as Confucius said, "reflect on oneself three times

a day" —re-examine ourselves, learn to avoid our own shortcomings while also spurring improvement in our professional capabilities and technology. Wilbur Schramm, the master and founder of communication studies, once said: "Emotional appeals are more likely to lead to attitude change than logical appeals." The shortcoming of AI synthetic anchors lies in their lack of human life experience and humanized emotions in communication. Therefore, whether AI synthetic anchors or traditional human hosts, both need to face their shortcomings, avoid them, and in this process, collaborate to promote new development, enhance centripetal force, concentric force, and cohesion, and jointly serve as communicators between the state and the people.

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Note: Figure translations are in progress. See original paper for figures.