A brief analysis of the new pattern of China's virtual anchor enabling Webcast -- Taking Jiaran as an example

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Abstract: *With the boom of the concept of metauniverse, virtual anchors continue to come out of the circle. Among them, "Jiaran", as a member of A-Soul in the domestic virtual idol group, held the live broadcast of the birthday party and set the revenue record of global virtual anchors. From niche culture at the beginning to sweeping the new media live broadcasting industry, avatars have also been involved in all walks of life and gained wide attention. Taking entertainment virtual anchor Jiaran as an example, this paper analyzes why domestic virtual anchors can rise rapidly in the field of live broadcasting from the aspects of image design, technology application, fan psychology, crossover and so on.*

Keywords: *Virtual anchor; Metaverse; Person set; Science and technology; Quadratic element*

1. Introduction

Virtual anchors come from the secondary meta-culture. They are characters who are produced through painting, animation, CG and other forms and carry out activities on video websites and social platforms, but do not exist in the physical form. In 2016, the first virtual anchor "Kizuna AI" was born in Japan, which is translated into Chinese as tripai, meaning to bond with humans. She is a 3D virtual female character with a sweet face and pink heart-shaped hair clip. She interacts and chats with viewers live on YouTube, and also contributes video games, singing and dancing. Due to its cute dubbing and extremely high visual expression in the video, it became popular on YouTube in a short period of time and successfully introduced the public to the novelty of virtual anchors.

In fact, as early as 2003, China has already appeared a similar virtual character - Dragon, as a virtual host in the children's channel of CCTV and well-known host sister Lu co-host. In 2017, virtual anchors saw explosive growth in Japan, and the craze quickly spread to China, but it was not well received at the time. Hu Ni, the first virtual anchor in China, and VUP, a cross-dimensional virtual live broadcast software, have gained a lot of attention, but they have not shown good results in the competitive market, and still belong to a relatively small culture.

Until the arrival of "the first year of the meta-universe" in 2021, virtual anchors, as a branch of the virtual world, began to appear in people's vision in a large range. In March 2022, as A member of A-Soul, a domestic virtual idol group, "Jiaran" held the live broadcast of the birthday party and set the revenue record of global virtual anchors. At this time, the live broadcasting industry is in constant accidents, virtual anchors in the mire of China's video industry rose to prominence, received great attention. Virtual anchor circles begin to have similar activity platforms and video styles, and a large number of fans also have fixed communication methods and environments. All of these indicate that domestic virtual anchors have formed a set of their own unique cultural system, and network broadcast shows a new form under the influence of virtual anchors.

2. The exquisite and gorgeous appearance attracts the quadratic masses

2.1. Without real appearance, exquisite "leather case" can gain the audience's love

Compared with real anchors, virtual anchors don't have to consider any appearance factors, nor do they need to appear on camera, only need to prepare a delicate and beautiful cartoon image. The human anchor behind the screen is called the "man in the middle", and the two-dimensional image presented to the audience is called the "holster". The video platform will provide free avatars for couples to use, or designers can customize them, with prices ranging from several thousand yuan to tens of thousands of

yuan. With the help of technology such as face capture and motion capture, the camera captures facial expressions and body movements of the subject and feeds them back to the leather case in real time. The avatars have unlimited possibilities, with hair and eyes of any defined color, and the desired physical features can be designed. Whether it is elegant and cool, or humorous, can find a place in the hearts of the audience. Jiaran is a lovely brunette girl with blue eyes and a princess dress. With the super high level of appearance, the virtual host can zoom in on the camera at any time, even if the person's face is tired.

Fans of virtual anchors are mostly quadratic natives who yearn for the special image, identity background and skills that exist only in the virtual world, while the real world cannot meet their emotions, ideas and wishes [1]. The virtual anchor can change the background of the second element at any time during a live broadcast, and can also change different clothes. Chatting with the audience in the live broadcast, Jiaran wore a blue cheongsam, then changed into a pink princess dress the next moment. He even changed his clothes five times in a row to celebrate his 500,000 fans. What cannot be achieved by live broadcast can be realized in the virtual binary world, which also gives the audience an overhead and perfect universe.

2.2. A large group of quadratic users and a high consumption rate inject vitality into the live streaming industry

In recent years, the secondary culture has gone from minority to mass. In 2021, the number of pan-quadratic users has reached 460 million. In a survey, 70.7 percent of respondents give virtual anchors "tips", and 90 percent of them spend 300 yuan a month on average. Secondary user consumption mainly focuses on games, animation, hand-run and other fields, while in the field of live broadcasting, game anchors enjoy a good development. Such a large quadratic consumer group undoubtedly provides a new depression for the live streaming industry. By November 2021, on bilibili, a video website with the largest number of virtual anchors in China, the total revenue of virtual anchors has reached 450 million yuan, and the monthly income of head virtual anchors ranges from 500,000 yuan to 2 million yuan. While live broadcast is in a declining stage, the development of virtual anchor just fills this vacancy.

3. Unique and well-rounded people have more memory points than real people

3.1. Strong quadratic character and unrestrained character background

Each virtual anchor has a unique "persona". It is not required to fit ordinary human beings, but the image, voice and behavior should form a unified whole with this persona. Jiaran, for example, started out as A cute 19-year-old art student who joined the idol group A-Soul and made a successful debut. She is also a foodie, and when interacting with fans, she said she hoped to chat with the audience while eating snacks. Once the virtual character's personality is full and three-dimensional, it can leave a memory point in the audience, and the IP image is easier to create. IP awareness is the most intuitive index to evaluate the development of virtual anchors [2]. The audience can feel distinct personality characteristics from appearance and behavior in a short time and judge whether they like it or not, which is also one of the reasons why virtual anchors can quickly attract followers.

Vox akuma, also a popular virtual anchor this year, his background story is set in the end of the Warring States period in Japan, a voice demon, led by the Tokugawa clan after the destruction of the war, in order to make a living as a virtual anchor. This kind of character setting like anime novel and cool and handsome image is very in line with the aesthetic of young women, coupled with a very recognizable British voice, the first live broadcast on b station was only broadcast for more than an hour, earning more than millions of dollars.

Whether the virtual anchor has a good voice and enough recognition has a great impact on the popularity. Just like watching a cartoon, the audience often wants the main character to have a touching voice to fit his character image. Jia Ran has a girl's lovely voice line, listen to let a person feel full of vitality, but also with her idol set very fit. Vox's deep British voice is the irreplaceable voice of many virtual anchors, which is also one of the characteristics of his high popularity.

3.2. Metauniverse technology makes the expression and movement of the virtual image flexible and free

It benefits from the development and maturity of meta-universe technology to let "paper man" walk into reality and interact with the audience. Modeling is the key to a "holster" that perfectly replicates the

expressions and actions of real people. After the basic image of the virtual character is finalized, each small part of the character is broken down. The more detailed it is broken down, the smoother the expression will be during the live broadcast. Finally, the most commonly used technologies to make virtual anchors move are usually dynamic capture drive technology and real-time rendering technology. The virtual image created by individuals can be modeled, bound and motion-capture on video websites or apps at a low cost, but it cannot make some complex actions; Virtual images created by enterprises often choose 3D modeling, which is based on 3D technology and matched with dynamic capture equipment to carry out the movement of virtual images [3]. The project is large and the price is relatively expensive, but the image details will be more exquisite and smooth. As a branch of the concept of the meta-universe, the virtual anchor technology not only makes the two-dimensional image closer to a real "person", but also makes the audience feel the novelty and charm of modern technology in the broadcast room.

4. Perfect avatars to satisfy the imagination of fans

4.1. Virtual idols with perfect personals become the choice of fans

In the real world, bad artists have emerged in recent years, and many fans have "collapsed". With perfectly stable people who don't lose control of their faces, show signs of fatigue, or act in violation of moral laws, virtual idols are a more reliable target. Virtual anchor is designed to fit the preferences of fans carefully packaged, can fully meet the imagination of fans, but also more able to attract non-quadratic users of the emerging consumer groups. Virtual anchors have more idol attributes than real anchors. "When you watch a virtual anchor, you don't have to think about what he's doing in the real world, because the virtual anchor only exists in the second dimension." Said one consumer of the virtual host.

Jia Ran as a female idol group member debut, belongs to the entertainment company to create the virtual image, towards the direction of entertainer development. Since her debut, the group has released four singles, including "Hopeful Dreamer". Jiaran is good at the house dance, once on the birthday live dance 20 dances, are performed by the people behind the scenes. It's not just the perfect design, but also the positive and dedicated spirit that infects the fans.

4.2. Long-term interaction in a closer distance can be achieved through live broadcasting

The desire to participate in the growth and development of idols and gain a sense of companionship is one of the psychological characteristics of fans, which is called "quasi-social interaction" in psychology. When the virtual anchor becomes the ideal image of the audience, it can also accompany the audience for a long time and form fetters with the audience. During the live broadcast, the virtual anchor would interact with the audience, thank fans for their gifts of "tipping" and read super chat (i.e. eye-catching messages obtained through the recharge). Every day you can watch your own two-yuan idol live, as long as you recharge and reward, the message can be answered by the anchor. Compared with star-chasing, it seems easier to watch a live broadcast of a virtual anchor and get the interaction of the anchor, and it is easier to have a sense of dependence.

5. Virtual anchor cross-platform more easily out of the circle

5.1. Multi-functional virtual anchors span education, entertainment, e-commerce and other industries

The rise of virtual anchors is not only fueled by the meta-cosmic boom, but also supported by policies. At the end of last year, the State Administration of Radio, Film and Television released the 14th Five-Year Plan for the Development of Radio, Television and Internet Audiovisual Technology, which mentioned that virtual anchors should be widely used in the production of innovative programs such as news broadcasting, weather forecasting, variety show science and education. Jiangxi Satellite TV meteorological AI sign language virtual anchor explains weather for the hearing-impaired; Hunan Satellite TV welcomed a virtual host "Xiao Yang", adding a lot of freshness to the program. As a virtual idol, Jiaran appeared on a Zhejiang Satellite TV theme party last year. Virtual anchors are active in different platforms and media at the same time, which makes the existence of "virtual people" more acceptable to the broad public, and also easier to break the cultural circle and form a unique image IP.

In the e-commerce industry, it is favored by various brands and platforms because of its lower cost

and less negative content than real people. A large number of virtual anchors flooded into the field of e-commerce live broadcasting, opening the mode of bringing goods. The e-commerce live broadcast market is highly competitive with serious homogenization, which is easy to make the audience feel dull and dull. The appearance of virtual anchors can significantly improve the entertainment of live broadcast and save time and improve efficiency in scene switching. Brand stores can also use pure AI virtual anchors, without the control of real people can explain and sell goods in the broadcast room, can do 24 hours non-stop, solve the night blank period of the broadcast room, further improve the profit of the broadcast room. For entertainment virtual anchors with certain popularity, the brand will also invite them to the broadcast room and adopt the mode of "real person + virtual person" to form certain IP appeal, bring certain traffic to the broadcast room and increase their own influence.

5.2. As a branch of virtual idol, both attributes will have greater development space

The concept of virtual anchor and virtual idol is very similar, but there are still some differences. Virtual idols are packaged and created by entertainment companies, and will arrange trips, attend events and release singles or albums in the real world. In 2012, China has launched localized virtual idols such as Luo Tianyi, and has a relatively mature operation model and industrial chain. Today's virtual anchors have been greatly different from the original "virtual" and "idols" both in terms of technology and definition, but it is these changes that make virtual idols closer to the audience and attract more attention [4]. Virtual idols can only become virtual idols, or they can have two dimensions of anchor character and idol character. As a virtual idol, Jiaran set the highest revenue record in 50w fan live broadcast, which also symbolizes that virtual idol has found a good balance point in the old virtual live broadcast, and ushered in a huge market opportunity for the virtual live broadcast industry. The virtual anchors with the most captains (a form of fan top-up) on Bilibili are almost all from virtual idols. The popularity of virtual idols is reflected in livestreaming, and the industry is feeding other subcultures in both directions.

6. Drawbacks of virtual anchors still exist

6.1. The income disparity of virtual anchors is serious, and the proportion of head anchors is small

Among the virtual anchors, the most popular one is the entertainment virtual anchors who rely on fans to reward them. They are the initial form of virtual anchors, and still have the characteristics of polarization in the traditional live streaming industry. The vast majority of virtual anchors with personal power have low operating costs, and low-quality virtual images are difficult to gain a large number of audiences. Virtual anchors created by enterprises have a mature system from image design, 3D modeling to motion capture. The virtual images created by abundant capital and scientific and technological level are visually different from low-cost virtual anchors. The first factor that determines whether the audience is willing to reward him or not is the image of the character. This gap makes it harder to win viewers and fans for anchors who can't afford the high costs. The head virtual anchors with a lot of attention form their own image IP and participate in various platform activities to further expand their influence; Most of the virtual anchors get little or no attention, and the income is not even close. These virtual anchors have no traffic and audience, and their long-term low income makes them want to graduate. (i.e., people in Nakato no longer live stream)

6.2. Although he has a perfect image, he is not an iron rice bowl.

The expansion of the market leads to the emergence of more and more virtual anchors, which are easy to homogenize in the same field. If virtual anchors do not have technical competitiveness, enough personality charm and personal characteristics, it is difficult to retain users for a long time only by interactive chat. Good appearance is the beginning of the accumulation of popularity, the real interesting soul, to convey the emotional value to the audience, is the most key kernel of virtual anchor. Jiaran has always made the audience feel positive energy in the broadcast room. At the same time, she is constantly accumulating works and presenting valuable content output, which is the reason why she can continue to have a large number of popularity.

Fans give gifts to entertainment virtual anchors, also belongs to the idol economy. How to manage the relationship with fans, including the maintenance of the avatar established person setup, is also an important factor to maintain popularity. If fans feel the difference between the character of the person in the middle and the set of the avatar through the leather case, the whole unified person is divided into two people, creating a "sense of tear", fans will also find it difficult to accept. Virtual anchors have also had

problems involving intellectual property rights. Virtual anchors have copied other anchors' facial images and performed unauthorized dances. All these negative effects require virtual anchors and their teams to bear corresponding responsibilities and consequences.

7. Conclusions

With the help of meta-universe concept and technology, virtual anchor has become one of the hottest topics nowadays, and the live broadcasting industry has brought new look and new business opportunities. More animation and two-dimensional images appear on live streaming platforms. They no longer belong to a minority subculture, but also affect the preferences and aesthetics of the audience when they become the mainstream. Live with real people to bring goods, virtual and real integration of visual experience has brought traffic and improved the studio's income. At the same time reduce labor costs, improve work efficiency, has highlighted a certain commercial value. Virtual idols began to interact with fans in the broadcast room, with more space for development, and the broadcast room has become a "permanent residence" for star-chasing girls.

In 2021, more than 30,000 virtual anchors settled in B station, a 40 percent year-on-year increase. In the same year, the industrial market scale driven by virtual anchors and the core market scale were respectively 107.49 billion yuan and 6.22 billion yuan, showing a strong growth trend. Virtual people gradually integrate into our lives, and also accelerate the development and progress of meta-universe technology. In the future, more and more technologies will appear on live streaming platforms.

Although the virtual anchor industry is in a right momentum of development trend, but it is still in the early stage, want to become more mature, there are still a lot of improvements. For example, it is difficult to protect the IP image of virtual anchors, which is easy to be copied or infringed by others. How to use the law to protect the rights and interests of virtual anchors, in this aspect is still in a blank stage. At the same time, as a new industry with huge interest attraction and traffic effect, there will be chaos. To maintain a clean and healthy network environment, not only depends on policy management, but also needs the operator to pay attention to the words and deeds of the employees, carry out necessary compliance training for them, and agree on relevant liability for breach of contract in the agreement.

References

[1] Huang Yutong, Chen Huijie, Ke Ke Ren. Fans participatory culture influence on the development of the virtual host study [J]. Journal of new media research, 2022, 8 (9): 101-105.
[2] Fan Zhenlin, Feng Zhehui. Research on the Development status of Chinese virtual anchor industry [J]. Modern Audio-Visual, 2021(03):44-49.
[3] Gao Yong, Ma Siwei, Song Bowen. Current situation and trend of development of the domestic virtual anchor chain research [J]. Journal of new media research, 2020, 6 (01): 10-14.
[4] Zhao Wenhui, Wu Tianlin, Liao Minqi, Cao Jiawei. On the commercial market value of virtual Idols [J]. Business Culture, 2022(06):15-18.