

Interaction Between Digital and Reality: Identity Construction of Virtual Avatars

—A Case Study of Virtual Network Streamer Kizuna

Haolin Liu^{1,a,*}

¹Shanghai Qibao Dwight High School, Gumei Street, Shanghai, China

a. hlliu_colin@qibaodwight.org

*corresponding author

Abstract: With the development of artificial intelligence, virtual anchors began to appear and became popular among young people. For various reasons, young people have built a community in the circle of virtual anchors and established a sense of identity. At this time, young people can eliminate their passive identity and gain the power to influence society. Therefore, how virtual anchors can subtly create a sense of identity for young people is a topic worthy of study. This research chose to use the process tracking method in the case study. First, this research read much literature to understand the virtual anchor and its operating mechanism. Focusing on the virtual anchor “Kizuna,” This research conducted an identity construction analysis and finally found that it carried out real-time actions through its people. Communicate to display virtual images that satisfy the aesthetics of fan groups and display personal elements during the live broadcast to enhance fan cohesion and gain recognition. However, due to the excessive involvement of capital and the lack of people involved, and the elements displayed during the live broadcast were too complex, it could not reach a tacit understanding with fans and was eventually abandoned by the fan group. In this study, the way virtual anchors construct identities is restored. By learning this method, young people can build their sense of identity in society.

Keywords: virtual anchors, identity construction, live broadcast

1. Introduction

The birth of virtual personas can be traced back to the 1980s with the creation of Max Headroom in the UK [1]. Since 2018, virtual streamers have proliferated, driven by the continuous development and widespread application of next-generation information technologies such as big data, cloud computing, the Internet, artificial intelligence, advancements in the digital economy, and live-streaming techniques. Virtual streamers first emerged on the YouTube platform in Japan and were defined by their fans as Vtubers. Starting in 2018, they began to gain traction in China through media like “Bilibili.” In 2020, they began to rise gradually due to the influence of the COVID-19 pandemic, expanding the live-streaming market [2].

While conventional online streamers engage in profound interactions with viewers and fans during live streams, relying on gifts and subscriptions as their primary sources of income, virtual streamers

adopt 2D or 3D avatars voiced by real individuals and generate revenue through live streams, video uploads, and other formats [3]. Compared to human streamers, virtual streamers possess numerous advantages, primarily lower costs, enhanced stability, and heightened entertainment value, aligning well with the prevalent aesthetic preferences of today's youth.

Due to the extensive development of society's transition into a networked realm, the lives of social groups have shifted from traditional to online communities. Concurrently, based on social psychology and sociology research, individual identity is evolving towards group and social identity. Network space, a "disembedding space" by Giddens, is an open area where Internet users can communicate freely and gather thoughts [4]. As information spreads through the online sphere, it brings about significant social integration and mobilization capabilities, enabling members to establish a mutual senses of identity.

Virtual streamers, acknowledged and influential among the younger generation online, can foster a greater sense of group identity in young people. Currently, most virtual streamers in China are concentrated on the Bilibili platform due to its inherent attributes of culture and live-streaming, catering to the aesthetic preferences of the virtual streamer's audience and fostering an interactive virtual community. Within this community, members easily share their perspectives with strangers and enhance communal cohesion through resonances between members and between members and streamers. This underscores that individuals no longer need to relocate to engage physically in the online space, fostering a sense of identity within virtual communities through shared interests and everyday needs among members. Young people who watch virtual streamers can exchange information, breaking away from traditional, passively accepted identity structures and acquiring the power to influence society. Therefore, investigating how young individuals construct their identification with virtual personas in the virtual online world is a subject worthy of research.

2. Literature Review

2.1. Construction of Online Social Identity

The definition of "identity" is highly complex, but its essence lies in information exchange and communication. When individuals seek or construct identity anywhere, they must do so through certain media. Internet technology disrupts mass media's monopoly over information dissemination, allowing more people to express their viewpoints. Thus, the Internet can serve as a medium for mass communication. When individuals identify with a community, they must find the commonality and distinctiveness between themselves and their group [5]. Perceiving internal commonality reflects in their sense of community belonging, reinforcing a shared psychological bond among community members, enabling them to believe they are part of the collective and willingly adhere to its norms. The process of seeking distinctiveness must be undertaken to differentiate between different communities.

As people detach from the industrial society model, modern individuals question previously universally accepted values such as class, family, and gender [6]. Consequently, people turn to the internet to find new group identities. This form of identity shifts from affiliative identity to evaluative identity. It is collective, active, and meaningful. However, in this process, real-world social identity is significantly impacted. The Chicago School introduced the concept of "deviant behavior," suggesting that subcultural groups reinforce specific traits to attract and develop similar individuals, leading to more significant differentiation.

2.2. Virtual Images on the Internet and the Audience

Projecting human images onto visual representations and perceiving oneself while viewing these images has been a process throughout human history. The emergence of digital virtual avatars in

recent years builds upon this concept. Internet virtual human images break the traditional boundaries between visual and tangible, enabling interaction between real and digital beings. By closely mimicking human behavior, virtual images can resonate with reality, generating visible conflicts and evoking empathy in viewers [7].

Virtual influencers represent a further development beyond virtual characters and idols. They possess interactivity and sociality, allowing real-time presentation of virtual character information, with the audience as the interpreters [8]. Within the limited screen space, virtual influencers present visual richness, causing viewers to focus on the reproduced scenes within the frame, neglecting the physical space outside the screen. Viewers might experience the illusion of real-time interaction when making eye contact with simulated digital beings. Alternatively, they could find their digital counterparts in the virtual world, engaging in self-reconstruction through gaze behavior.

2.3. Construction of Identity for Virtual Influencers

Audience members construct identity alignment with virtual images primarily through self-reshaping, decentralization, and cloud interaction [9]. These features satisfy users' imaginative, emotional, and social experiences, giving them a discernible identity that spontaneously gathers into a community. Users prioritize their subjective entertainment experiences when interacting with virtual influencers and eagerly establish simulated social relationships within homogeneous groups [10]. The foundation of these relationships lies not in administrative power but in emotions, creating a stronger emotional resonance among individuals and enhancing their sense of belonging within the group.

The fan circles of virtual influencers possess unique cultural systems and solid subcultural attributes. Users within this group wield varying degrees of discourse power and exhibit relative exclusion of individuals from other artistic circles. They even establish corresponding operational rules, rendering their cultural group highly distinctive and exclusive, allowing individuals to sense the differences between them and others, thereby fostering deeper emotional connections.

3. Case Restoration

3.1. The Rise of Kizuna

Kizuna Ai's story began on November 29, 2016. She is a virtual streamer, artist, and YouTuber. At that time, people did not understand a virtual avatar and thought she was a pure avatar similar to Hasten Miku. So they did not pay much attention to it. The principle behind virtual streamers is that real people control the characters through motion capture technology. In her character setting, she knows she is a virtual character. She calls herself an independent artificial intelligence, denying the existence of the human being (the natural person controlling the feeling behind the scenes). She posted videos of herself playing games on YouTube and started live streaming. The live content is mainly live game commentary or funny videos. In the live broadcast, as a virtual streamer, she combines the perfection of the two-dimensional virtual image with the interactivity of a natural person. She uses this as a selling point to quickly attract the love of the audiences who love two-dimensional animations, allowing some viewers who want to escape from real life to achieve sustained satisfaction. Due to market scarcity, Kizuna attracted millions of fans on YouTube within a year, released her records, photos, and concerts, and participated in TV shows.

3.2. The Decline and Fall of Kizuna

In June 2019, Kizuna's operating company Activ8 launched a "doppelgänger project," launching three Kizunas played by three people—No. 4 can speak Chinese and is called "Chinese Kizuna". Since then, whether it is birthday parties or live broadcasts, the original Kizuna's outing rate has

become increasingly low, and various conspiracy theories have emerged among her fan base. The first, Kizuna Ai, tweeted that almost confirmed that she was marginalized. The operating company even released a video of Kizuna making insulting expressions. At this time, the sense of belonging that fans briefly gained from escaping reality during the initial virtual streamer's live broadcast disappeared. Moreover, due to the exposure of inappropriate remarks, more fans were angry and chose to unfollow. The incident ended with the establishing of a new company to take over Kizuna's image. In the end, No. 2 and No. 3 of the four Kizunas were renamed and established as new virtual Vtubers, and No. 4 Kizuna was mainly used for Chinese operations.

Since then, Kizuna's popularity has continued to decline. She began to follow the trend and make some song cover videos playing popular games, and even said, "I am no longer special" in a live broadcast. Although she has relatively good traffic based on the number of fans she has accumulated before, the overall number of viewers has remained the same. Finally, on December 4, 2021, Kizuna announced that she would hold her final concert on February 26 of that year and then began to enter a dormant state, that is, to cease activities indefinitely.

4. How to Build Group Identity

The image of the virtual streamer is derived from the virtual idol. Unlike the traditional virtual idol model, virtual streamers are a collective term for people who use virtual images to carry out activities on video websites and other platforms [11]. Virtual streamers like Kizuna Ai construct their identity from three aspects: first, the person in it. Second, their virtual image, and finally, the persona they create for themselves and the image they display in videos and live broadcasts. In the original vision of the creative team, the virtual streamer itself is the unshakable center, and the people in it are just tools to assist the virtual image to complete the live broadcast task. However, as its fans increase, the people who can interact in real-time become the natural center [12].

4.1. The Man in the Middle

While virtual idols are developing towards becoming more intelligent, virtual streamers have begun to "technically degrade." The company introduces human elements into the live broadcast of virtual streamers - since the virtual idol cannot communicate through algorithms, human actors are added so that she can interact with fans. Virtual singers such as Hatsune Miku complete the task of speaking and singing by copying and adjusting the voices in the voice package. However, such copying will reduce the unique sense of possession of the fan group, and the emotional value provided to fans will also depreciate [13]. The actual fan base pursues not this type of emotional satisfaction but to feel the unique charm of the virtual streamer. When the people among them interact with fans in real life according to their social circles, they can not only bring "beautiful" emotional value to fans through their perfect two-dimensional image but also satisfy the fan group's desire to escape from the real world, allowing them to get sustained satisfaction.

4.2. Avatar

Kizuna's audience is mainly two-dimensional otakus. The composition of fans on various communication platforms shows that male fans are much more accepting and enthusiastic than female fans. Therefore, to cater to its audience, Kizuna's character is an image of a beautiful girl who is ignorant, cute, and full of the desire to be protected. They fully conform to Southeast Asian men's "white, thin" aesthetics and can stimulate their protective appetite and imagination, not just pure sexual impulse. Therefore, many otakus believe that "the beauty of Kizuna Ai is a very pure and artistic and creative act." When fans get such a consensus, they develop a sense of identity [14].

4.3. Live Broadcast Character Design

Fans of Kizuna Ai will gradually break down the elements of her body into more minor details and look for similarities between her and themselves. At this time, the richer the personal aspects of the avatar and the closer it is to a natural person, the stronger the fan adhesion will be. Moreover, during the live broadcast, Kizuna can create an identity gap between the consumer and the consumer. Her behavior of asking for rewards during the live broadcast makes her a commodity, making consumers feel responsible for her [15].

5. The Mechanism of Identity Disappearance

5.1. Capital Intervention

Many fans are addicted to two-dimensional virtual anchors, mainly to escape reality and feel the positive emotional feedback brought to them in the online world. In this process, they will gradually regard Kizunai as someone who has a close relationship with them [16]. When disputes arise between the operation teams behind virtual anchors and capital begins to enter the two-way relationship between anchors and fans, fans feel the power disputes and economic disputes in the real world. This contradicts their values in the virtual world, so they cannot accept it. Moreover, as capital becomes more deeply involved in the relationship, they will treat Kizuna's love as a commodity rather than a natural person. This differs from the identity gap between consumers and consumers created by Kizunai in the live broadcast. It is a passive identity that fans cannot control. Fans cannot continue to have a sense of intimacy and gain with the host in such a delicate relationship, so the importance of identity brought about by building and virtual social interaction cannot continue to be built.

5.2. Missing "People in the Middle"

What disappointed fans was that four companion loves appeared simultaneously, and the original Kizuna love was gradually marginalized. The person in the middle is another crucial point for the virtual anchor to realize the fans' experience. She has established the premise that "the virtual anchor has a real physical existence" among the audience. During the live broadcast, the virtual anchor shows he is no different from an average person. Specialty. The audience can also construct a personal communication experience with the virtual character through communication with the people in it, enhancing the fans' sense of identity in the group. Keep the people away from the fan base; they cannot put their emotions on pure virtual images. It can be seen that the importance of the people in the fan group is self-evident. However, the person he loves has been repeatedly exposed as being suppressed by the company. In the process of enjoying the virtual live broadcast, fans will have extra care and psychological burden for the people involved, and they will have doubts about the authenticity of the virtual live broadcast, thus disappearing their sense of identity.

5.3. Inconsistent Image

During the live broadcast, Kizuna Ai's expressiveness determines how fans perceive her character and is also directly related to whether fans can deconstruct her identity and find relevance. However, due to the company's capital operation, Kizuna Ai's original person was replaced. Kizunai's voice and interaction mode with fans have also changed in many live broadcasts and videos. What is more important is that different people, due to their personalities, embody the image of Kizunai that is different from the idea of Kizunai recognized initially by fans. They cannot create a familiarity with the original fans, and there is no way to achieve a tacit understanding. Due to the lack of a medium that can determine the identity and the personalities of multiple different characters concentrated on

one avatar, Kizunai's original nature was scattered and lacked unity. Due to the lack of symbolic symbols they see in companions, some fans may lose their willingness to participate in live broadcast interactions.

6. Conclusions

Virtual anchors such as Kizuna Ai communicate in real-time through people in the broadcast, allowing fans to feel the emotional value of beauty and gain continuous satisfaction from escaping from the real world. Virtual anchors usually use the image of ignorant and cute beautiful girls, which meets the aesthetic needs of their audience and allows the audience to gain the emotional value of "beauty." The personal elements displayed by virtual anchors during live broadcasts, such as "loving to play games," "ignorant," etc., can enrich their image, allowing fans to find similarities and create dependence. These techniques can help virtual anchors bring a sense of identity to their viewers. If these elements are broken, the subtle connection between virtual anchors and fans will be destroyed simultaneously. In the case of Kizuna Ai, fans who are escaping from reality feel the unfairness of the natural world due to the excessive involvement of capital. The simultaneous appearance of four people made it impossible for fans to tell which companion they were communicating with during the live broadcast, which raised doubts about the authenticity of the live broadcast and contributed to the disappearance of the sense of identity. Moreover, because the people in the broadcast are often replaced, fans cannot structure Kizuna Ai's behavior in the live broadcast and find similarities between them. Therefore, they cannot continue to have a tacit understanding of the anchor, and the sense of identity built by the virtual anchor gradually disappears.

This paper fills this gap by focusing on a virtual anchor and analyzing the identity construction and disappearance process in detail in this case. Moreover, the conclusions drawn can be applied to other studies in sociology. In this case, Kizuna Ai still has the support of a large number of fan groups, and they are still constructing identity with the anchor, so the "disappearance of identity" part here may not explain most of the phenomenon, and more cases need to be found for research and analysis.

References

- [1] Yu Guoming & Geng Xiaomeng. (2020). *On the technical empowerment and simulacra deconstruction of virtual idols in the era of artificial intelligence*. *Journal of Shanghai Jiao Tong University (Philosophy and Social Sciences Edition)* (01), 23-30.
- [2] Zhang Chunxia. (2022). *Research on pseudosocial interaction between virtual anchors and youth online communities* (Master's thesis, Ningxia University).
- [3] Wang Zehua, Zhou Mengyao, Li Gewen, Song Zizhuo, Zhou Jinrui & Zhao Zhengkai. (2022). *Research on the production and consumption of Chinese virtual anchors at Station B*. *New Media Research* (17), 91-99.
- [4] Liu Shaojie (2014-03-21). *Social changes in the network era*. *Chinese Science Journal*, 006.
- [5] Zhou Lingxi. (2018). *Webcast: A research perspective on youth subculture* (Master's thesis, Zhejiang Normal University).
- [6] Song Chenting & Qiu Xiangkui. (2022). *Digital-real interaction and cyber clusters: Identity construction in virtual image live broadcast*. *New Horizons* (06), 54-61.
- [7] Wang Jiali. (2022). *The core of live broadcast space production: On the impression management of network anchors*. *News Research Guide* (18), 7-9.
- [8] Luo Wen. (2022). *Research on embodied communication of virtual anchors from the perspective of technological philosophy*. *Science and Technology Communication* (05), 131-133.
- [9] Liu Yixuan. (2022). *Self-reconstruction and social experience of cultural community virtual images under "interactive immersion"*. *Young Journalists* (24), 110-112.
- [10] Lin Minxuan. (2022). *Consumption and Identity - Analysis of Audience Consumption of Virtual Anchors*. *Shopping Mall Modernization* (18), 7-9.
- [11] Xue Jing. (2022). *"I love, therefore I am": Virtual idols and "emotional realism"*. *Literary Theory and Criticism* (06), 115-126.

- [12] Guo Mengmeng. (2019). *The production and acceptance psychology of two-dimensional virtual idols*. *Media Criticism* (00), 16-31.
- [13] Guan Yating. (2022). *Research on live broadcast interaction of virtual anchors at Station B* (Master's thesis, Beijing Foreign Studies University).
- [14] Lu Peng. (2021). *The encounter between online emotional labor and affective labor: short videos/live broadcasts, online anchors, and digital labor*. *International Journalism* (12), 53-76.
- [15] Wang Yanling & Liu Ke. (2019). *The resonance effect of online live broadcasts: Group loneliness·Virtual emotion·Consumption identification*. *Modern Communication (Journal of Communication University of China)* (10), 26-29.
- [16] Chen Xizi & Liu Tingting. (2022). *Fan differentiation, migration and resistance in the context of the platform "out of the circle": An investigation based on virtual anchor fan groups*. *Journalism and Communication Research* (06), 22-38+126.