Immaterial Labour and Precarity in Cultural Industry: The Case of VTuber Live Streams

Yi Cao[1,a,*]

[1]*Beijing Foreign Studies University, North Xisanhuan Road, Beijing, China*
a. CaoYi20030702@163.com
*corresponding author

Abstract: Since the first virtual Youtuber appeared on YouTube in late 2016, the VTuber industry has become increasingly popular in recent years. While most research focuses on the reasons for VTubers' popularity and the characteristics of virtual YouTubers, this article reveals the possible labour exploitation and the precarious working conditions faced by VTubers. Through the analysis of the immaterial labour produced by the Nakanohitos behind VTubers, this article argues that Vtubers are more likely to suffer from precarious working conditions. With an in-depth case study, it then illustrates the current social context for cultural workers like VTubers, and how precarity is manifested among them.

Keywords: Immaterial labour, Precarity, Virtual Youtuber

1.   Introduction

The term VTuber is an abbreviation of "Virtual Youtuber", which refers to an animated virtual avatar who uploads animated short films or conducts live streams, etc., as a way to perform their characters and grow their popularity.

Technically, a VTuber is jointly run by original computer graphics and a voice actor known as Nakanohito (中の人) in Japanese, who usually work behind their virtual roles [1]. There is also a certain proportion of characters using electronically synthesized voice for dubbing. It typically animates using a webcam and software to capture the Nakanohito's mouth movements, facial expressions, and body movements and then maps them to a live 2D or 3D model [2]. Though the term originated from the video platform YouTube, it also refers to the animated virtual avatar in other platforms like Niconico, Twitch, and Bilibili in a broad sense.

There are two types of management in VTuber operation, respectively hinges upon "personal power", which is run by individual performers, and "corporate power", denoting the performances operated by companies [4]. The biggest advantage of "personal power" is that Nakanohitos are freer to decide what to broadcast and there is no need to have professional teams. Contrarily, the operation of "corporate power" is supported by a professional team. VTubers who debut first will introduce the newly debuted members on their live channel, so the number of fans can grow large enough soon to make profits. Whereas, under such operation mode, the live-streaming contents need to be approved by the company. In addition, the designs of 2D models are mainly controlled by the company rather than the Nakanohitos themselves.

Originated in Japan, VTubers have rapidly rocketed up since the character "Kizuna AI" first appeared on YouTube in late 2016. Kizuna AI has successfully gained over four million subscribers across three YouTube channels and has accumulated one million followers on the Chinese video platform Bilibili till 2021 [5]. Kizuna AI's debut in 2016 showed great market potential. Subsequently, Anycolor Inc., a company that focuses on VTuber Project, founded a VTuber agency Nijisanji in 2018 [6]. Afterward, agencies like Nijisanji and Hololive created branches in China and South Korea, as well as English-speaking regions. As for China, despite the suspension of YouTube, the wave of VTuber still entered the country with the help of video reproduction and official channels set up within the Chinese platform by some virtual YouTubers. In April 2019, Nijisanji and bilibili collaborated to produce a virtual anchor project: VirtualReal [7]. On November 23, 2020, YUE HUA Entertainment, a large domestic multinational entertainment company in China that cooperates with other overseas entertainment and film companies, launched the virtual idol group A-SOUL in cooperation with ByteDance Ltd. co, an Internet company, in China [8].

Psychologically, VTubers are requested to explicitly or implicitly perform themselves to satisfy viewers' needs. Lu et al. studied how audiences interact with VTubers and see through the identities of the Nakanohitos behind the avatar images and gave explanations for their popularity [9]. Specifically, this helped unveil a long-hidden issue behind VTuber businesses – the invisible labor of Nakanohitos which results in the possibility of new forms of labour exploitation and industrial disputes. This is because the fame and emotional attachments are mostly projected to the certain virtual image rather than Nakanohitos. Yet more attention should be paid to explaining how Nakanohitos react to the new form of labour regime. This article highlights the creative labour Nakanohitos provide and examines the role audience play in the interaction process.

2. Literature Review

Up to now, a lot of research has focused on the reasons for VTubers' popularity, the characteristics of virtual YouTubers that make them distinct from traditional live streaming, and the application of virtual YouTubers.Yet what is overlooked amid the prosperity of VTuber's industry is the risk taken by VTubers due to the nature of their work content.

Technically, the VTuber is an important constituent of Virtual idols [10]. A virtual idol is originally known as a virtual music producer. Therefore, their main activities include releasing albums and playing concerts. Meanwhile, VTubers also focus on interacting or chatting with audience on social media. Compared with the VTuber, the virtual idol is a relatively well-known realm. Since the differences between the two are much less than what they have in common, the two notions can be seen as the same.

Research has shown that A-SOUL's ability to rise rapidly in China relies on technologies such as 5G and sensitive motion capture [11]. Apart from technology, other researchers argue that the popularity of VTubers is also based on its adaptability, namely the degree to which people's expectations for novel experiences can be met, which has a lot to do with the development of the ACGN (animation, manga, games, and novels) culture [10]. VTubers not only provide an emotional connection similar to that of real people, but also establish intimate relationships with the audience. This intimacy strengthens the sense of belonging and relieves the social isolation of the audience [14].

Compared with real idols, most virtual idols have relatively higher incomes [10]. They also have more implicit personas with a specific identity. For example, characters like vampires and devils satisfy viewers' expectations while creating a sense of distance [9]. Virtual idols won't age or get ill, which are less likely to generate scandals, thus having a more credible personality than real people [10]. Moreover, the virtual idol and VTuber industry has only suffered little from the outbreak of

the Covid-19, and developed even better compared with social entertainments carried out offline. Therefore, these characteristics of VTubers give rise to the different branches of the business [10].

Some researchers pointed out that it has great potential to be developed into learning media in school education at all stages under the Covid-19 Pandemic, revealing its latent functions [16].

3. Immaterial Labour and Precarity in the VTuber Industry

3.1. Definition of Immaterial Labour and Precarity

This article argues that emerging forms of work in present society will put workers in disadvantaged positions, especially in cultural and creative industries. To further investigate this posit, the concepts of immaterial labour and precarity are adopted here to help frame the key argument in this article.

"Immaterial labour" was firstly brought up by autonomist Marxist Maurizio Lazzarato, which refers to the kind of labor that produces informational and cultural content as final products and commodities [17]. Although workers in these sectors are frequently under technological control and even monitoring, their efforts fail to be recognized as real "work". This is easier to be comprehended when put into the social context where the boundary between work and leisure is increasingly blurred, which is conceptualized as the "social factory". "Social factory" is a concept developed in the 1960s to help analyze how capitalist productive relations are expanded from workplaces to the entire society [18]. Specifically, with the emergence of new techniques and flexible employment, labour is deterritorialized from exact physical workplaces. Under such circumstances, the contribution of cultural workers who work outside of workplace or regular working hours can be categorized as "immaterial labour". Such phenomena have not only brought difficulties in measuring the achievement of immaterial labour but downplayed the potential risks that cultural workers face during their long working hours without proper social and employment securities. Cultural workers commonly have extraordinarily long working hours that often considerably go beyond working-time agreements, which not only affects the social life of workers but also causes harm to their health [19]. One specific form of immaterial labour is affective labour, which refers to the kind of job that creates or modifies emotional experiences of people [20]. Woodcock and Johnson unveil that the striking amount of affective labor in live streaming industry is masked [21]. Indeed, the fundamental logic of cultural industries is to extract value from relational and emotional elements, during which employees are once again put into a rather precarious position[22].

Precarity is a concept generated against the background of late capitalism, neo-liberalism, and globalization [23]. It refers to a situation where workers make a living by themselves, without receiving material and psychological security from the social system [24]. Normally, the financial insecurity is caused by flexible labor contract. For example, short-time or part-time jobs don't provide income that matches the individual effort at work or welfare like pensions and medical insurance. Moreover, workers are exploited both in and out of their work, because the distinction between work and leisure is becoming vague. The short-term labour contract puts workers at the risk of having to seek new job out of necessity. However, no specific written law can provide workers with political and social security. Precarity is such a widespread phenomenon that it has been reflected not only on the life of transnational migrants and factory workers but also from perspectives of feminism and creative industry [26]. The emergence of precarity in creative industry is facilitated by the social conext where Fordism is declining. In the Post-Fordist era, service industries gradually became more predominate than manufacturing sectors [27]. Workers do not stay in one job for their whole life, and the products they produce have changed from the standardized and material products to personalized and immaterial ones.

3.2.   How Are Cultural Workers Put into Precarity

With the development of technology and management, remote work has become increasingly popular, which has given rise to new forms of work, such as immaterial work that does not necessarily take place at specific workplaces. In particular, affective labour is an exemplar of immaterial labour. Though affective labour workers do not produce actual or physical product, they provide emotional services for customers. It is difficult to measure such labour by working hours or workloads, as the service provided is mostly about entertaining the spectators. In other words, it is difficult to measure workers' exact working hours, given the flexible forms of work in this sector. Therefore, the maximum number of working hours per week set by the labour law does not apply to these cultural workers. Hence, the rights and interests of culture workers who take on affective labour are not well protected due to the absence of a well-established management system that can be applied to the culture industry. Therefore, culture workers are more likely to suffer from the problem of precarity, being neglected by the law and suffering the intensive working hours and disproportionate wages. Thus, this article argues that cultural workers are at disadvantaged situation in flexible labour market, and thus are under the risk of being exploited.

As an emerging industry, the VTuber live streaming can surely be categorized into immaterial labour. Though extensive research has explained the growth of the VTuber industry, studies of the immaterial labour provided by VTuber's Nakanohitos (voice actors) are still limited. This suggests a lack in the study of possible labour exploitation and the precarious working conditions faced by related workers.

4.   Case Study of Workers in Vtuber Industry

4.1.   The Work in VTuber Industry: A Type of Immaterial Labour

The present study examines VTubers' working conditions to better understand the current social context for cultural workers and how precarity is manifested among them. One of the main reasons for VTubers' popularity is their abilities to satisfy audience' emotional and recreational needs. In this vein, cultural workers in VTuber industry are all performing immaterial labour, who provide entertaining content and experience as products.

First, the Nakanohitos who voice over the virtual characters perform strictly in consistent with the personality of each character. A character is usually designed with a name, age, height, personality, appearance, interests, and occupation in order to create an illusion that the character really exists somewhere in the world. For example, Selen Tatsuki is a character designed as a sky dragon descended from the moon [3]. Therefore, the Nakanohito of Selen performs the role of a half-human derived from dragon bloodline. She narrates the story with the words like "when I was a little dragon...", "... my long dragon neck" or "we are the long neck dragon family". The Nakanohito also does "dragon roar" in the live streaming in order to act more like a virtual dragon descendant [28].

Compared with non-human or half-human characters, virtual characters that have pure mankind identity may have higher requirements for Nakanohitos. For example, Hyakumantenbara Salome is a human character with natural pink curly hair and special voice. This character is designed as one who often imagines herself as an aristocratic maiden. To make the character more convincing, the Nakanohito always stresses that the pink curly hair is inborn to emphasis how special she is, and that it is reasonable for this character to try to be an noble aristocratic maiden [3]. During the live streaming, the Nakanohito keeps speaking in a high pitch and most of her words end with "de su wa" (ですわ in Japanese, an inflection that makes sentences sound cuter) so as to be in consistence with the character of a noble maiden [29]. But this artificial tone requires a great deal of effort to

maintain. Salome's Nakanohito once accidentally used her original voice when she mourned, and soon apologized for making the "weird sound", so as to maintain the character design and convince the audience that the e-figure is real. Salome's Nakanohito has even experienced oxygen deprivation while playing horror games and singing.

Second, Nakanohitos' not only perform in live streaming but also provide other forms of acting. There are Vtubers singing, dancing and playing games, as well as interacting and chatting with audience during the live streaming. However, there is other work outside the live-streaming time. For the first week of Selen's debut, she had to give a live broadcast every day. As Selen's Nakanohito put during the live broadcast a week after her debut, "There is no break. I feel like I am always on call, and I am always working. There are always programs that I have to prepare for. I have to prepare for the next time, next stream. And there is a social media account that I need to keep up with [30]." As Selen's Nakanohito disclosed in her channel that one of the main activities behind the screen is to be active on Twitter to act like a real person. In addition to communicating with fans in her own community, she also participates in the branch channel of Nijisanji English and other branches.

4.2. VTuber Industry and Precarity

VTubers have to do a lot of preparation and work without proportionate remuneration. Cultural workers like VTubers usually suffer more from the precarious working environment.

In April 2019, a discussion was triggered by a tweet posted on 5channel (a large Japanese internet forum). The content of the tweet was a complaint from a person suspected as a Nakanohito of the Game Club Project, a group of Virtual YouTubers operated by Brave Group [31]. Netizens eventually discovered an incident of bullying against Nakanohitos in the Game Club Project which had been going on for up to a year. The tweets revealed that four Nakanohitos were subjected to various forms of unfair treatment. First, Nakanohitos were forced to work for long and intense hours. In extreme cases, they only took a four-hour break and were forced to work again after a 12-hour live broadcast. Second, there was a dispute over Nakanohitos and the company. Some members filed for labour arbitration to ask for their legitimate rights and interests. Ultimately, in the statement issued on 11 April 2019, Brave group Inc. acknowledged Nakanohito's allegations and apologized for their behavior [32]. The company guaranteed that they would set up a dedicated department to improve Nakanohitos' working environment and reduce their workload. In the following months, the Nakanohitos in the Game Club Project who had been formerly involved in this issue were eventually replaced one by one.

Similarly, in May 2022, a Chinese virtual Youtuber group, A-SOUL, had caught up in a controversial dispute about the distribution of salaries between the operators and the group members. Although the company claimed that no oppression was put on Nakanohitos, there are still obvious problems in the company's official statement. For example, the group's five Nakanohitos once had a dance training where some members end their training at 23:00 or 24:00. In preparation for the member's birthday party, Nakanohitos rehearsed and practised dancing until 1:00am [33]. As for the income, the A-SOUL production committee disclosed the income of the four Nakanohitos, which is comprised of monthly fixed income, bonus, and ten percent of the total income of live-streaming. Nevertheless, the exact income of the members is still confidential [34].

In contrast, Nijisanji has a relatively more diverse salary distribution. Higuchi Kaede, who is a member of Nijisanji company, once explained the components of her income in a live broadcast. Her income comes from both immaterial labour like revenue from the Youtube platform, and material labour including tickets of concerts, promotions fee for certain games and sales of CDs and derivative goods [35]. As Higuchi Kaede said, her own experience does not represent all other peers in this industry. But it is also noticeable that at least now, for VTubers, the source of income is more

from the material goods than from immaterial labour during the live-streaming process. Specifically, their role-play during live-streaming only receives a small share of less than ten percent of the bounty from the live-streaming platform. Besides, they usually run social medias without payment.

These examples reflect some facts in this industry. Firstly, it is not clear how many working hours is reasonable for Nakanohitos. Secondly, a company has the right to interpret whether the working hours of Nakanohitos are reasonable. In addition, VTubers do create material goods including CDs and derivative goods. But the immaterial labour such as live-streaming and communicating on social media account is the core of VTubers' work. VTubers are paid for their material labour, which can't justify the fact that their immaterial labour is unpaid or disproportionately paid. On the one hand, the company is supposed to undertake certain responsibilities for such unequal industrial relations. On the other hand, it is necessary to note that the specific feature of the immaterial labour produced by Nakanohitos also exacerbate the invisible exploitation.

5. Conclusion

This article examines the immaterial labour of VTubers and the precarious working environment they face. The results show that VTubers' work consists of affective labour including role-play during live streaming and on social media. First, it is hard to measure the working time of VTubers because the preparation for the live streaming isn't considered as work and live streaming isn't conventional work form. In this way, Nakanohitos are mostly subjected to the stress caused by excessive working hours since the company has right to define whether staffs are overworked. Second, the labour disputes between VTuber's operating companies and Nakanohitos show the great tension on Nakanohitos' salaries. By stressing that the immaterial labour of VTubers are unpaid or disproportionately paid, the article reveals possible labour exploitation in the VTuber industry at this stage, and encourages live streaming companies to improve the treatment of Nakanohitos.

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