

VTubing: content, entertainment and a comforting sense of reliability

A CONVERSATION WITH YANG LEE AND KEVIN BLUE*

What are VTubers?

Yang Lee: VTubers are virtual YouTubers. They are content creators who present themselves as virtual characters or avatars rather than appearing in front of the camera as themselves. This means they don't show their real faces but use virtual characters to interact with their audience. VTubing is originally from Japan, where the anime, comic and gaming industries are very popular, making it another way for creators to engage with users.

How does a VTuber's streaming process work with that virtual character?

Yang Lee: There are 2 main formats for presenting VTubers: 2D and 3D. For 2D VTubing, we typically use an iPhone as a camera to capture facial movements. This data is then sent to a computer with a mixer and microphone, from which we stream to platforms like YouTube.

Kevin Blue: The streaming process involves the VTuber sitting in the streaming room in our office with an iPhone pointing at them and capturing their facial movements and impressions. This data is then transferred to the computer. They record audio using the platform *Discord* which connects directly to *Google Meet*. For regular YouTube streams, they stream directly from the computer to the platform. That's the overall process.

How is the process different for 3D?

Kevin Blue: For 3D, we use what we call a live 2D model, which may look 3D but moves only on the x-y axes. In

contrast, a true 3D model can move in real time along the x-y-z axes. The 3D process is more technical compared to 2D and requires more than just an iPhone. VTubers often visit a motion capture studio with multiple cameras and wear a motion capture suit that tracks their movements. This data is then transferred to a computer, allowing the model to move in real time.

For 3D, creating a 3D environment is also necessary. We use the game engine *Unity*, though other VTubers might prefer *Unreal*. These engines allow the VTubers to create their 3D environments and settings: If a VTuber wants to be in the ocean, they can put them in an ocean, if they want to appear in the forest, they can put them in a forest.

So, is it possible for VTubers to appear live on screen while the actual human person is in a different room?

Kevin Blue: Yes. In a fully 3D environment, VTubers can interact with the camera, which can move 360 degrees within this virtual environment. Technically, this is similar to traditional video production with a camera operator holding a camera, tracking the VTuber's movements and integrating that data into the computer, into this virtual environment.

In real life, for instance, the VTuber might be holding a small box, but in *Unity* we can put an image onto this box. In the digital environment, it might look like a ball or a little octopus whereas in real life, it's basically just a small box.

How is AI involved in this process?

Kevin Blue: Currently, AI is used minimally, mainly for sound. It acts as a speech interpreter. It picks up what the VTuber says and then controls the shape and movement of the model's mouth to match. It's not like the camera sees the VTuber's mouth move, and then puts it onto his model. The AI system interprets speech rather than relying on visual tracking of facial movement. AI also helps with the technical side of the 3D environment, such as simulating light reflections or waves. It calculates how light interacts with the virtual environment, considering camera placement and movement.

Yang Lee: Since these events are live, we don't have the capacity to draw all the necessary animations or visual effects. AI helps us create the backgrounds we need, saving us time and allowing us to focus on other elements.

What are the origins of VTubing?

Yang Lee: To understand VTubing, we have to mention Hololive, the world's largest VTuber agency, based in Japan. Hololive is a technical company that has been significant in creating many VTuber characters. They have different divisions, including Hololive Production, Holostars (for male VTubers), Holostars English (for male VTubers who speak in English), and Hololive Indonesia, which targets the audience in Indonesia. Hololive has about 80 VTubers, many of whom are very popular. Some have over 1 million subscribers on YouTube. So, they are very powerful and influential.

INTERVIEW

Why do you think the VTubing business works?

Yang Lee: VTubers thrive on the fan economy. They produce vast amounts of content on the streaming platforms, live or VOD formats. Their revenue sources include YouTube advertisements, super chats, and donations, but the biggest source is offline. They host numerous concerts in Japan and in Taiwan. The tickets for these events are very expensive, but despite these high prices, they are sold out every time. You can see, it's very powerful and it's very popular in Taiwan, in Japan, and also in other countries. There's another business model we found; it's the case of *Oshi no Ko*.

What is *Oshi no Ko*?

Kevin Blue: *Oshi no Ko* is a Japanese anime featuring fictional characters voiced by voice actors. One of its marketing strategies involved turning a character from the show, Mem Cyo, into a VTuber. They used the original voice actress, put her behind an iPhone, and transformed the data into a VTuber model. Even during the off-season, Mem Cyo continues promoting the show, keeping the character in the public eye. They chose the character Mem Cyo, because in the anime show, she is an influencer – she's a YouTuber and a TikToker. So they're turning her into a real person in this sort of sense.

The VTuber scene is vibrant and expanding

How many VTubers are there in Taiwan?

Kevin Blue: In Taiwan, there are roughly 800 to 900 VTubers who are actively streaming, and this number keeps growing. Every year, about 100 VTubers debut, similar to the entertainment or K-pop industries, where many new groups are debuting every year. The

VTuber scene in Taiwan is vibrant and expanding.

What kind of content do the virtual YouTubers produce?

Kevin Blue: Typically, VTubers focus on singing, gaming, or what we call "Zatsudan", a term for talking streams where they chat with their viewers on various topics. The main demographic is a younger audience of around 20 years old.

Yang Lee: A survey in Japan showed that the major users of VTubers are aged 15 to 19. So, profiling is very young both in Japan and in Taiwan.

Kevin Blue: At PTS, we aim to reach a younger audience with our VTubers and content. Our VTubers also have Zatsudan streams, they play games and stream. But, as a public broadcaster,

we also want to share more important topics with our audience or with the public. Therefore, our VTubers conduct in-depth interviews with the developers of the games they play and discuss PTS programmes, blending entertainment with educational content. Additionally, PTS has initiated the Golden VTuber Award, a unique award ceremony for Taiwanese VTubers – like the Oscars, but for the VTuber community. Currently, this is the only type of award of its kind in all of Asia. This year marks the second edition, featuring different categories like Best Singer, Best Male VTuber or Best Female VTuber. Besides the professional categories, there are a couple of more entertaining categories like "Best Messy" – for VTubers who often make amusing mistakes during their streams



Ill. 1 and 2: VTuber Kevin Blue as a human (above) or as a little sea angel (below) can show emotions and change outfits and settings in real time

and cause funny situations. These entertaining awards also attract a lot of viewers to come and watch. Through watching the award show, they get to know new VTubers and their content which helps to promote this whole culture. We hope to showcase Taiwanese VTubers, to spread their content and highlight PTS's commitment to this content. The award ceremony itself is held in 3D, with the VTubers performing and singing in their 3D models in a virtual environment.

How is this VTubing content integrated into your programming?

Kevin Blue: Generally, PTS's VTubing content is separate from our regular channel programming. However, we often invite game developers onto streams, and the VTubers interview them, so that the audience members who like and play the game can learn more about the game and its creators. This is the PTS VTubers' speciality in the broad scope of Taiwanese VTubing right now.

PTS's VTuber programme has only been running for about 2 years, so we are still building up our content and audience. Our next goal is to collaborate more with existing PTS programmes, such as *A wonderful word*, a gaming show which revolves around knowledge of Chinese characters. So far, for instance, our PTS VTubers host small segments between the show or give awards to the winners of the show.

How did Kevin Blue become a VTuber?

Kevin Blue: Kevin's case is special. I started as a production manager of the VTuber team and initially appeared as a little cutout of a sea angel plushie with a blue bow tie (Ill. 1 and 2). I talked about the behind-the-scenes side at PTS. Due to positive reactions from the fans, I transitioned into being a VTuber myself, interacting more directly with our audience. The speciality remains providing behind-the-scenes insights into PTS's VTubing operations, allow-

ing the audience to get a different perspective onto VTubing that other VTubers probably can't provide.

Our other VTubers, Haiyuelinlin and Akira, are the performing talents of the PTS VTubing team. They appear during special events or PTS programmes as entertainers and performers.

Has anime influenced VTubing?

Kevin Blue: Yes. I, for instance, have been an anime fan since middle school. The VTuber scene in Taiwan is deeply rooted in Japanese anime culture. If someone is interested in VTubing, VTubers or anime, they are very likely also fans of Japanese animation, comics, and games. So, the influence is very strong which becomes apparent in their appearance, the songs, the games. VTubers often exhibit anime-like characteristics in the way they react or show emotions. Sometimes the characteristics are more exaggerated or comical, but that's also the appeal of them.

Kevin can show a wide range of expressions and emotions, he can change outfits or accessories like glasses, hats, or weapons in real time. All of this is done virtually – something real-life streamers could never do as easily. They can't change costumes or change the decorations in their streaming rooms in one second. This keeps the whole experience very fresh for audiences.

Why don't you stream as a real person?

Kevin Blue: There is a fundamental difference between a VTuber and a real-life streamer. Many VTubers, if not most, have backstories or character designs that add layers of storytelling that the audience can latch onto or find interest in. Kevin Blue, for example, has a "little prince"-like character or persona. He incorporates that into his own story, influencing how he interacts with the audience. This is also influenced by the Japanese culture because a lot of VTuber characters

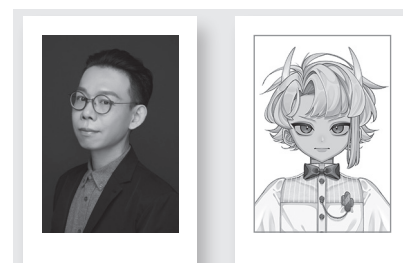
look like characters from anime that people like and are familiar with like angels, devils or cat girls. When viewers connect with a character they like on a TV show, they can continue to engage with that character in real time, even after a show ends.

"It's like having someone there to listen and respond to"

What makes VTubers attractive to their audience?

Kevin Blue: One advantage VTubers have over real-life streamers or idols is that they never get old. They also don't betray their fans, don't get involved in scandals or get cancelled. This gives viewers a comforting sense of reliability.

I'm a big VTuber fan myself. Every day when I get back home from work, I turn on YouTube and find 20 or 30 of my favourite VTubers streaming. I can just hop into their streams and listen to them talk. It's like having someone there to listen and respond to. It's something I can rely on day after day. ■



** Yang Lee is Chief of interactive media section at the Department of Digital Content Operations at PTS, Taiwan.*

Kevin Blue is a VTuber, as well as the team lead of the PTS VTuber team.

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