


Research Article

Tensions and Contestations in VTuber Circles: The “MetaBirthday” Project and/as Self-formation

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Abstract

Virtual YouTubers, also known as VTubers, are entertainers who use two-dimensional (2D) or three-dimensional (3D) computer-generated characters to create entertaining virtual content online. This article explores a group project called the “MetaBirthday,” in which VTubers and their followers collaborated to write lyrics, compose music, design stage outfits, and shoot a music video. Through semistructured interviews with the group’s participants and close reading of their published textual material, this article interrogates how VTubers harness virtual and physical spaces to create a sense of mutual benefit, inspiration, and satisfaction in tension with the everyday realities of these spaces.

Keywords: VTuber; Self-formation; Metaverse; Creativity; Identity

Introduction

“To someone who has never been to the metaverse, this scene may appear quite surreal, as if anime characters are peering into real-world events” (Virtual Girl Nem 2022a: 5).

“Virtual worlds are places of imagination that encompass practices of play, performance, creativity, and ritual” (Boellstorff et al. 2012: 1). Technologies can effectively support, influence, and define contemporary creative processes and enable members of a community to come together in unprecedented ways (Laat and Lally 2004). In the virtual realm, creativity can take the form of stimulating experiments with the formation of self through virtual character representations (Zimmermann, Wehler, and Kaspar 2022). This article focuses on Japanese virtual entertainers who self-organize into groups to perform, project, and sometimes provoke audiences with their collaborations. Since 2016, virtual YouTubers, also known as VTubers (entertainers who use two-dimensional (2D) or three-dimensional (3D) computer-generated characters to create entertaining media content), have become popular online (Hirota 2018). Originating in Japan, the VTuber phenomenon has since expanded beyond East Asia (Tang, Zhu, and Popescu 2021: 128). Among those who call themselves “individual” (*kojin*) VTubers (VTubers who are not affiliated with a company), the virtual characters are

deployed to explore an imagined and ideal self (Todoki 2018). Some “individual” VTubers organize themselves in “circles” (*sākuru*) around their common interests.

As presented in the first lines of the introduction to this special issue, here the “relational creativity” is examined as an activity that arises when multiple individuals work toward similar creative goals and considers the social dynamics and collaborative processes that shape the creative outcomes. This article explores a collaborative music video project called the MetaBirthday, in which Japanese VTubers and their VTuber and virtual world friends came together to write lyrics, compose music, design stage outfits, and project the creative work on a physical screen (a screen that is often used to promote commercial products) in Akihabara, Japan. The particularity of this project is that while its leader understands the virtual world as a utopic wonderland that would enable an escape from “the panoptic space of the social” (Dufourmantelle 2015) where everyone can “become themselves” away from physical sociocultural constraints, the physical world was paramount for the deployment of an imagined identity in this MetaBirthday project. In this article, I interrogate how VTubers harness virtual and physical spaces to create a sense of mutual benefit, inspiration, positivity, and satisfaction in tension with the everyday realities of those spaces. What kind of provocation can be found in the virtual performance and projection of self? What are the external impositions that contextualize and nuance the utopian discourse? What are the creative effects of the activity? By examining MetaBirthday, I propose that creativity is spontaneous and tainted with consumer and commercial pressures.

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Starting in May 2022, the leader of this project, Virtual Girl Nem (a VTuber and self-proclaimed metaverse culture evangelist), had an agenda, a preconceived desire for a specific outcome that was to inform people in the physical world about the unique cultures being developed by those living in virtual spaces (Virtual Girl Nem 2022b). The music video, which Virtual Girl Nem produced together with other VTubers, “metaverse natives,” and a music creator, presents the metaverse, a virtual realm where users interact as avatars with a focus on social and economic connections, as an imagined space of a “new humankind evolution” where “you’ll go on a journey to meet the real you, the one you lost sight of.” MetaBirthday (*MetaBāsudei*), a combination of the word “metaverse” (*metabāsu*) and “birthday” (*bāsudei*), invites its viewers to celebrate their rebirth in the virtual realm. The production group consisted of VTuber Kusaha. El, a lyricist and fashion designer who was recruited during a contest; Kapruit, a self-proclaimed music creator for VTubers, Orange, now a virtual cinematographer and previously an occasional VTuber; VTuber Virtual Girl Nem; and their metaverse and VTuber friends.

The planning of the creative process was discussed on Discord and in virtual worlds. Given the project’s high costs, crowdfunding was launched to secure the funds. Supporters could donate from 1000 to 100,000 yen and, in return, receive a supporter certification, a thank-you video, goodies, or even go on virtual dates with the VTuber group leader. The crowdfunding project aimed to collect 300,000 yen and achieved 454% of that goal, with a total of 1,364,371 yen by July 30, 2022. From October 1, 2022 to January 31, 2023, a 15-second edit of the resulting music video was aired every 30 minutes from 8 a.m. to 10 p.m. daily (Fig. 1). The physical location, the space in front of Akihabara station in Tokyo, is an area where like-minded individuals can meet, known for creative cultural production (Pendleton and Coates 2018). Akihabara is also a “subcultural mecca” for consumer groups such as *otaku* (anime, technology, and manga fans) (Galbraith 2019: 128), an important point given the close relationship of VTubers with the culture (Todoki and Tsukino 2018: 69). Therefore, a utopic imagined virtual space was projected within a utopic imagined physical space.

As mentioned in the introduction to this special issue, “relational creativity” is often linked to activities that provide commercial advantages, overlooking the personal motivations that drive individuals to engage in collaborative creativity in the first place (Coates and Coates 2024: 4). At first glance, the MetaBirthday appears to have been created for commercial advantages. However, by asking ourselves why the individuals decided to come together we can uncover “new ways of imagining or understanding our world(s)” (Coates and Coates 2024: 5). The curated virtual identities of metaverse residents in the music video are deployed by the creators as tools to demonstrate that one can become their “real self” (*honto no jibun*) (Virtual Girl Nem 2022a: 312–3) and live a “real life” (*honto no jinsei*) in the metaverse, far away and liberated from the physical world.

This discourse echoes early cyberfeminism ideas, such as those of Haraway (1991), where technology was seen as a way to transcend the limitations of the body and gender.

Similarly, early academic discussions of the Internet often portrayed online cultures as disconnected from offline realities, positioning them as spaces for liberating social structures rather than as intersections of different cultures (Slater 2002: 533–4). This also mirrors the 1990s excitement in Japan around virtual reality (VR), which promised an escape into anime-inspired fictional worlds (Roquet 2022: 11–13). Subsequently, 30 years later, the rhetoric surrounding the metaverse in Japan frequently presents it as a space for human evolution and the creation of an ideal society, offering an escape from existing social conditions by withdrawing into the virtual realm, as Roquet (2023) highlights. However, it remains doubtful whether the anxieties and frustrations of real life can truly be escaped in the virtual world (Yoshida 2022: 131). In this paper, I acknowledge the criticisms of virtual spaces and respect the utopist and positivist perspectives of my informants that I seek to understand. My aim is to explore the complexity of how individuals are communicating and constructing digital realms (Turkle 1995) and how they collaboratively create “desirable areas and atmospheres” (Coates and Coates 2024: 14) in a late capitalist society marked by precarity and weakened interpersonal relationships (Allison 2015).

The interest in focusing on “individual VTubers” to explore relational creativity is because the activity is highly creative (Todoki and Tsukino 2018: 71). Individual VTubers can engage in personally and ideologically motivated meticulously crafted endeavors, such as promoting the “metaverse” with a provocative ideology. This article understands VTubers and the metaverse as different but inseparable within MetaBirthday: (1) the metaverse is the space being promoted, where the filming and most of the activity occurred, and (2) the VTuber is the idol-like personal that performs in the metaverse.

The majority of articles available in English¹ about the creative aspects of the Japanese virtual worlds or metaverse focus on work environments for learning and education (Yamazaki 2018; Tamai et al. 2011), entertainment (Shirai 2023), the recreation of historical places (Utsugi, Moriya, and Takeda 2001), surveying Japanese companies’ activities (Kahaner 1994), identity experimentations, and identification through avatars (Takano and Taka 2022). Those publications do not explore consumer and commercial pressures nor personal motivations of creative endeavors in the metaverse, a literature gap this article will attempt to fill.

Building on long-term participant observation from 2019 to the present, and on key-informant interviews with group leader Virtual Girl Nem; music producer Kapruit, lyricist and costume designer VTuber Kusaha. El; and videographer Orange, this article explores the motivations, experiences, and challenges of the “MetaBirthday” project. These ethnographic methods are supported by textual analysis of original documentation, including Japanese VTubers’ blogs, making-of videos, Twitter accounts, and Discord discussion logs. My positionality as a researcher is that of a participant observer,

¹ Google Scholar was searched using the words “Japanese metaverse creativity,” “Japanese virtual worlds creativity,” “Japanese virtual reality creativity,” “Japan metaverse creativity,” “Japan virtual worlds creativity,” and “Japan virtual reality creativity” until June 9, 2023.



Figure 1: The image is taken from Virtual Girl Nem Tweet the day the projection started. https://twitter.com/nemchan_nel/status/1576064892188385280.

having been involved in the project as a Japanese and English lyrics translator. My identity as a researcher has been known owing to various previous endeavors with Virtual Girl Nem and clearly stated on social networking service (SNS) media I use to communicate with VTubers as a VTuber myself and a metaverse “resident.” In this capacity, I have been present during the conception and dissemination phases of the project.

Before writing this article, I contacted Virtual Girl Nem and requested permission to conduct this research and interview the production team on Discord. After approval, I contacted other participants, informed them of my article’s intent, asked permission to use our discussions, and had them approve direct citations. I decided not to anonymize participants as they are public figures already using avatars and pseudonyms. Moreover, they agreed to be cited as their official pseudonyms. In addition, owing to the diverse gender performances of Virtual Girl Nem across virtual and “real” worlds, I will use the pronoun “they” to refer to Virtual Girl Nem. To further understand the VTuber culture in Akihabara, I undertook a short period of fieldwork from May 8 to May 22, 2023.

The goal of this article is to demonstrate that consumer, producer, and commercial pressures, as well as personal motivations, are entangled in creative relations that might seem at first glance as spontaneous, free, and open ended. To do so, I first introduce the reader to VTubers and the metaverse. I then explore the “MetaBirthday” project in three parts: the provocative discourse that stems from the leader’s book that provides context to the utopian call, the external impositions (anime conventions, *bishōjo* imagery, and Akihabara taste communities, among others), and the personal motivations and aspirations that effected the tone of the video.

Introducing VTubers and the metaverse: a quest for a new identity

VTubers and the metaverse are distinct yet interconnected concepts—VTubers are virtual entertainers, while the metaverse is a digital/virtual social space. In

MetaBirthday, VTubers perform within the metaverse to promote this virtual environment. This performance blurs the lines between the VTuber and the imagined space they help create. To provide context, I start by introducing VTubers and the metaverse.

VTubers originated in 2016 with the first online entertainer to call herself a virtual YouTuber being Kizuna AI (2018).² She was later chosen as the ambassador for the campaign “Come to Japan” launched by the Japan National Tourism Organization (Roll 2018). The characterization of the “virtuality” of a VTuber generally includes the following three elements: (1) a virtual body, often in contrast to the physical body in appearance; (2) a personal storyline set in the virtual space; and (3) an invented personality that is expressed through the adoption of a 2D or 3D character or avatar (Akatsuki 2018: 115). To express emotions and gestures on the faces of their virtual characters or avatars, VTubers use motion capture and facial-recognition devices to translate their own facial expressions onto the face of their virtual “self” (Kobayashi 2018). At the end of 2017, a VTuber boom took place as technology became more accessible, making it easier for “individual” VTubers to engage in this highly technologized performance activity (Hirota 2018: 48–49). Any individual can now “wear” a 2D or 3D character on social networking websites and live as a “new” version of themselves (Nyalra and Ohisashiburi 2020: 4). The internet and communication technologies have clearly enabled a “new” sense of the body and oneself (Masiko 2018).

According to Suan (2021), through anime-type codified movements and expressions, media, and motion capture technology, VTubers perform and express selfhood. While a VTuber might be just a drawing, the illustration created by the two- or three-dimensional image can stir emotions. In this way, a VTuber’s identity arises from an amalgam of the viewer’s imagination, the VTuber’s voice and gestures, the character, and the awareness of both viewer and performer that there is a real-world person behind the avatar (Umezawa

² Although Kizuna AI is commonly understood to be the first to call herself a “VTuber,” other virtual vloggers existed prior to her.

2008: 10–11). However, those “new” versions of the self tend to share common visual rules. According to Hirota, the managing director of the Panora news website that focuses on VTubers and virtual reality, most VTubers have a “cute/beautiful/pretty girl character (*bishōjo kyara*) appearance and target a predominantly male audience” (2018: 51).

VTubers play a unique role when it comes to Japanese virtual reality and the metaverse more specifically. Japanese virtual reality is imbricated with manga, anime, and game content (see Roquet 2022), which have also been inspired, influenced, and discussed by VTubers. Japanese social virtual worlds tend to adopt VTuber-like visual characteristics (Bredikhina et al. 2020). VTubers inhabit those worlds to create communities, foster unique experiences, and encourage fan creation (Lee and Lee 2023). Owing to the popularity of VTubers, many Japanese companies quickly implemented VTubers in their metaverse and virtual reality-related content (Shirai 2022, 2019). Overall, VTubers have become “one of the hot topics of the metaverse” (Zhao 2022: 330). While VTubers and the metaverse are distinct concepts, drawing a clear line between them overlooks the ways in which these two cultures influence each other.

Virtual Reality Studies, a textbook on virtual reality technology published by The Virtual Reality Society of Japan, defines the metaverse as an online virtual 3D environment where users interact with one another through avatars and can create objects within the space (Tachi, Sato, and Hirose 2010). Here and further on, I will use the term “metaverse” and “social virtual worlds” synonymously because a key interlocutor in my fieldwork, the leader of the group, Virtual Girl Nem, defines social virtual reality platforms such as VRChat or NEOS VR, where the video was shot, as “metaverse” (Virtual Girl Nem 2022a). Following ethnographic principles, I use the emic terms employed by my study participants to reflect their view of their spaces and activities. Japanese metaverse users tend to spend time in small communities (Kawamura, Hasegawa, and Kitamura 2023), and the virtual culture shares some characteristics with Japanese fandom cultures such as knowledge sharing, assistance, and provision of specialized material and otaku culture (Nakao et al. 2023: 145). The current Japanese metaverse has a strong “play” aspect, featuring digital games and VTuber live-streams (Nakao 2022: 70), as well as offering mobile social networking services, digital assets, the selling and purchasing of virtual or digital fashion, and event organization (Shirai 2023).

Tensions and creativity in the VTuber circle “MetaBirthday”

Following contemporary approaches to studying collective creativity that focus on the process rather than the result (Littleton and Miell 2004), this section will examine the articulation of the symbols deployed by the “MetaBirthday” group to project eligible yet provocative identities that follow three agendas: the leader’s agenda as presented in their book, the group’s agenda in terms of projecting a positive image of the “metaverse natives,” and the individuals’ diverse personal motivations.

The Leader’s Provocative Discourse

Hey, you, are you looking for something?

Someday, you’ll go on a journey to meet the real you, the one you lost sight of.

MetaBirthday

On June 26, 2022, Virtual Girl Nem “met” with their friends in VRChat and exchanged ideas regarding a music video project. At the end of the meeting, two significant points stood out: (1) raising awareness of metaverse natives (*metabāsu genjūmin*, i.e., those who live in the metaverse)³ and (2) exploring human evolution in the metaverse (*metabāsu de no jinruinoshinka*). Those two points are also the recurring themes of their recent book “Metaverse Evolution” (*Metabāsu shinka-ron*), used as a reference for “MetaBirthday.” Since the book’s publication, Virtual Girl Nem has been treated as a Japanese metaverse theorist (Daikoku 2022), referenced by educational institutions (Virtual Girl Nem 2023a, 2023b), and offered the possibility to give a keynote speech at the Japan Internet Governance Forum (Virtual Girl Nem 2022c).

As creativity is embedded in the larger sociocultural context of creators and their audiences (Cattani, Ferriani, and Colucci 2015: 90), to understand the latent motivations of “MetaBirthday,” we need to first look at Virtual Girl Nem’s book. According to the author, VTubers, and the metaverse are a revolution in identity formation (Virtual Girl Nem 2022a). Virtual character representations empower individuals to be able to “become the self you want to be” (*naritai jibun ni nareru*), “create the appearance of the self you want to be” (*naritai jibun no sugata o tsukureru*), and “effortlessly wear the self you want to be” (*naritai jibun o kantan ni kireru*) (Virtual Girl Nem 2022a: 140–1). As a result, humankind would achieve an “ideal” (*risō*) appearance and create a more “ideal” society. Virtual Girl Nem proposes that by eliminating various “filters” such as age, gender, and title, which is possible with the metaverse, the creation of an “ideal” society would follow (Virtual Girl Nem 2022a: 201).

To do so, Virtual Girl Nem proposes we adopt a masquerading practice of identity, communication, and economics, commonly known as cosplay—dressing up. Cosplay is the act of putting on an attire of a character with “the desire to alter the functioning identity of the subject through the deployment of the fictional modes of existence that are the creative aspect of cosplay” (Lunning 2022: 67). For Virtual Girl Nem, cosplay in metaverse implies “not something worn by a specific individual but something embraced by society as a whole” (Virtual Girl Nem 2022a: 201). The VTuber urges us to study “metaverse natives,” who already live in the metaverse and have stepped on the path of human evolution. The book promises an embodied escape from the “flesh” (*nikutai*) through the appearance of your choice (Virtual Girl Nem 2022a: 15).

The utopic idea of becoming a “real” self in the metaverse seems puzzling, as identity adapts to interior and exterior stimuli (Goffman 1959). That is because the “self” is created

³ In their book, Nem defines “metaverse native” as “homo metaverse who are adapting to the world as quickly as possible and showing a completely new way of life and culture” (2022a, 16).

under various conditions and “is a process of creation and reinvention out of available resources” (Byrne 2003: 31). The virtual bodily practices are embedded in existing cultural practices (Miller and Slater 2001; Wilson and Peterson 2002), and the metaverse “self” cannot be separated from the physical space “self” (Miyake 2022: 29), as the choice of an avatar, and identity, is influenced by existing gender roles and discourse and is specific to a time in history (Kondō 2022).

Whether Virtual Girl Nem’s point of view is well-founded, it reflects a disjunction with the physical world and a key message in the video. It also resonated with a thriving feeling in the Japanese virtual community that becoming a character has new possibilities for self-realization, self-formation, and becoming an ideal self, or even a more authentic self—the promise MetaBirthday capitalizes on.

Constructing and performing the “metaverse native” identity

VR goggles on the head

Sensors on opposite walls

Pop it, press it, and it’s on

Take a step into the world you dreamt of!

MetaBirthday

VTubers exist because their fans and audience show them attention, interact with them, shower them with affection, and affirm their existence in return for the companionship, recognition, and emotional support that virtual entertainers offer. Because of the importance of the audience for the VTuber’s existence, they tailor their content and virtual characters to please their audience (Bredikhina 2021). As such, we must examine the projection of a “metaverse native” identity or persona as content tailored to Akihabara’s audience. Costume and gesture were used to emphasize the differences between the stereotypical virtual characters and their equally stereotyped creators, in this case, the difference between the virtual “pretty girl” and the reality of the predominantly male user’s audience and fans. In this chapter, I demonstrate that the discourse and its creative representation in MetaBirthday is influenced by familiar symbolic imagery to ensure that the message is both understandable and appealing. To do so, we must investigate how the visual vocabulary of the “metaverse native” and its setting were staged for the Akihabara audience.

Virtual Girl Nem tells me, “Akihabara has a large population inclined towards embracing new cultures, so I believed it would be an ideal place to introduce something novel like the metaverse.” This is an area of Tokyo where anime girl posters and anime music can be found on almost every corner of every street. Notably, it is also a place where VTuber-related events were held (Jieffu 2018: 203). During fieldwork, I noticed the predominance of VTuber “media-mix” content (Steinberg 2012), which included themed-café, VTuber anime-like songs blasting from speakers, collaborations with existing companies, and posters and goodies. Moreover, there is a predominance of cute-looking 2D girly characters such as “bishōjo” (cute, beautiful girl) plastered on

buildings, posters, and vitrines, which is not surprising, given the connection of “bishōjo” to the two-dimensional culture (Matsuura 2022: 64) that Akihabara is known for (Galbraith 2019: 133). As such, the “cute girl” character is a highly commercial image, used to sell everything and anything ranging from fiction to computer tech books to manga and anime. The “bishōjo,” a slim, cute, young, petite female character symbolized by a cute mouth, long and delicate legs, and wide-eyes (Chen 2015: 112) is the only character type that we see in the “MetaBirthday” video, “selling” us the utopic virtual space. With an already “half-convinced audience,” Akihabara was the ideal location for “MetaBirthday.” To fully convince the audience, all that was needed was “impact, to project on the biggest screen in front of the station,” according to Virtual Girl Nem.

While the match between the physical location and the content of the video was clearly important to creators and audiences, understanding the project as simply projecting a video onto a big screen does not account for the labor that constructing a “metaverse native” identity entails. To understand this labor, we must examine the deployment and construction of the “metaverse native” identity presented to the Akihabara audience through the lyrics and audio, clothes, gestures, and scenes. VTuber Kusaha. El wrote the lyrics to be “easy and comfortable to sing,” “celebrating a new ‘birthday’ in the paradise that is the metaverse,” explains Virtual Girl Nem. Kusaha. El chose words to create a “beautiful poem” and “take the hand of everyone in the physical Akihabara through the video screen and lure them into the world of the Metaverse.” The VTuber further explains, “the song is not about self-satisfaction, but about touching the hearts of others . . . The singer is made to look more attractive and emotional.” The song was adjusted by Virtual Girl Nem together with Kusaha. El to invite the listener to go on an adventure to find the “real you” that “you have lost sight of.” In their blog post, Virtual Girl Nem expressed finding Kusaha. El’s perspective of “an older sister daring to invite a beginner into the swamp (*numa*)⁴,” novel (*zanshin*) and perfectly suitable (*pittari*) for this project.

As for the audio, Kapruit explains that it was constructed to “materialize” the identity of a “metaverse native” by adding “many instruments in the song to represent diversity.” He further notes that to create a catchy melody and arrangements that would be “popular with the residents of metaverse” and “a promotion for *Metaverse Evolution* (Virtual Girl Nem’s book),” it was necessary to have an easy-to-sing melody and use instruments that were familiar to the ear. Kapruit explains, “I tried to differentiate the song by arranging it like an anime song, which is a popular genre but not often created by other metaverse musicians.”

The virtual visual appearance was also crucial for the deployment of the “metaverse native” identity. Although not all the “beautiful girls” of the music video were physical women, they could appear as conventionally attractive 2D fictional girls one would encounter plastered all over Akihabara on the screen. To visually communicate their identity as “natives,” Virtual Girl Nem proposed an outfit

⁴ An otaku slang term implying being “addicted” and/or falling in love with a specific work, anime, game, or characters, among others.

concept: “a leafy dress reminiscent of a folk costume that combined ‘wilderness’ (leaves, ethnic costume) and ‘futuristic’ (gaming, electric lights)” and had some gimmicks (lightning, twinkling).” But not too “sexy” (*ecchi*), as Onoden MX Vision could refuse the imagery. Virtual Girl Nem explains in English: “Akihabara vision does not accept erotic content. But the main reason why we avoided erotic elements was because the main purpose of the MV was to convey to the general public the existence of people living in the metaverse. Eroticism would have distracted from the message.” Virtual Girl Nem created a list of visual references ranging from fairies to *mecha* robots to contemporary manga. On the basis of these references, Kusaha. El created prototypes that were tested using Virtual Girl Nem’s avatar. The VTubers felt that the clothes and accessories had to look “kawaii” (cute and loveable) and give off a “gaming feel” (*gēmingu-kan*). Nem argues that looking pretty as a *bishōjo* character is important because no matter one’s physical biological sex, looking like a virtual *kawaii* girl makes one more approachable and expressive (Virtual Girl Nem 2022a: 167). The gaming feeling is further achieved through gimmicks and visual references to metaverse-related hardware as commodities that appear as necessities for the virtual girl’s incarnation and existence in the virtual realm.

In addition to analyzing sound and visual design, I want to briefly address the codified moves deployed by the performers. In the making of the video,⁵ we see Virtual Girl Nem paying attention to their hand and leg movements; swaying their body from left to right with their arms by their side; positioning their legs in an X pose, typically deemed cute within the otaku and VTuber communities; and creating idol-like poses, such as standing on one leg with the other knee bent up and one hand pointing to the sky. Most movements reference “kawaii moves” (*kawaii mūbu*), a common term deployed by Japanese users of the social reality platform VRChat, which was first used in reference to two-dimensional feminine presenting characters (Murakami 2018). The term implies the *kawaii* movement of feminine anime characters and methods to look cute in virtual and digital environments. There are several rules to moving one’s body in a *kawaii* manner using motion tracking technology, such as “making big gestures with hands, waving at the audience, lifting one leg while twisting the body, bringing hands closer to the face, swaying the skirt side to side, and taking the typical *uchimata* pose (standing with feet facing inwards), the epitome of feminine elegance” (Bredikhina 2022). Those movements are deployed to construct the visual image of a *bishōjo*, a common style of dress and expression in Akihabara and the appearance of all the performers in the music video.

Finally, music scenes were paramount for identity projection in the MetaBirthday video. Virtual Girl Nem writes, “I want a lot of impressive scenes to catch the viewer’s eye.” Two worlds were chosen for the music video in NEOS VR: an “ancient temple” that represented the “ruins where

the natives of metaverse live” and the “hidden grotto” world that looked like a “rotting sea at night.” Virtual cute girls run around in a virtual world where nature has taken over what seems to be the ruins of a civilization. Through fashion and technology, the group also worked on realizing and incorporating well-known scenes in anime and manga, such as the main heroine “transformation” (*henshin*) scene, where a female protagonist transforms from her regular outfit into a more magical one. Figure 2 shows one of those scenes: “A *bishōjo* (cute, beautiful girl) character transformation scene of your dreams that you can do within the metaverse,” writes Virtual Girl Nem. In the video, only feminine-looking, *bishōjo* characters are present, playing into the fantasy of becoming a cute girl among otaku. According to Pouppé, Japanese users connect to virtual worlds not to be themselves, with their weaknesses, but to fuse with the body of an ideal character (2009). Virtual Girl Nem tells me in English: “the desire to become *bishōjo* currently only exists among a subset of otaku, but I hypothesize that it might be a latent desire of all humanity. *Bishōjo* is an idolized existence in anime and manga, she is a young and cute being. Thanks to avatars, anyone can incarnate their soul in a *bishōjo* character. As innovation accelerates and traditional values associated with ‘becoming an adult’ are negated, being a *bishōjo* could become a new form of value suitable for humanity, where mutual immaturities are affirmed.” The scene also had the purpose of promoting the wonders of the metaverse. Videographer and occasional VTuber Orange writes: “Nem’s transformation scene was also quite intricate, with beautiful expressions of dancing leaves and gradual costume changes. The fact that all of this was shot while adjusting in real-time within the VR space shows the great potential of the metaverse, does it not?”

In many scenes, we see Virtual Girl Nem appearing alongside 10 other metaverse residents and VTubers who acted as extras. The scene with a large group of people happily chatting, playing, and embracing each other “reminds me of communal living in the metaverse,” writes Virtual Girl Nem—a crucial point given that the music video’s goal is to convince the audience of the possibility and desirability of joining a group of metaverse natives happily living together. Another scene shows Virtual Girl Nem playing *taiko* (traditional Japanese drums) with the rest of the group performing a cheering routine (Fig. 3). The group defined this performance as *ota-gei* (literally “otaku art”) in the making-of video. *Ota-gei* are not specific to the virtual space. Galbraith describes *ota-gei* as loud and wild cheering routines performed by idol fans in Akihabara (Galbraith 2019: 152). The close relationship between VTubers and otaku culture (Matsushita 2018), which would be familiar to the audience of the music video, contextualizes this scene and suggests that audience members could imagine themselves in Virtual Girl Nem’s role, performing skillfully while being cheered on by a friendly and appreciative audience of metaverse natives.

To a novice unfamiliar with the metaverse, the utopia promoted by the VTuber might seem exclusively populated by *bishōjo*. While Virtual Girl Nem emphasizes in their book the diverse gender and visual representations of avatars, the

⁵ 人力♥美少女♥変身【メタバースデイ・メイキング②】 (Human Power ♥ Bishōjo ♥ Transformation [Meta Birthday Making (2)]) <https://youtu.be/M2L6PR0VwCE>.



Figure 2: 【MV】メタバース
デイ/バーチャル美少女ねむ
(Music by Kapruit) 【4K】 [MV]
MetaBirthday/Virtual Girl Nem
(Music by Kapruit) [4K.]
1:13–1:23 min.



Figure 3: 【MV】メタバース
デイ/バーチャル美少女ねむ
(Music by Kapruit) 【4K】 [MV]
MetaBirthday/Virtual Girl Nem
(Music by Kapruit) [4K.] 2:12min.

metaverse “natives” featured in the video are all hyper-gendered, conventionally attractive, slim, young 2D girls (Fig. 3) reminiscent of characters found in Akihabara or in manga,

anime, and games. It makes sense that a group aiming to celebrate and promote the metaverse would choose the most popular appearance, which aligns with the prevalent

aesthetic in Akihabara. Roquet notes that the Japanese side of the metaverse is predominantly a male-dominated space, where male users often adopt this type of feminine characters to gain popularity, accessibility, and reach a broader audience (2022: 154). Within this realm, sexualized anime girl avatars dominate (Brett 2022), and idealized feminine tropes are widely promoted (Chen and Hu 2024). This has raised concerns among feminists about the overt misogyny and sexualization of young girls (Senda 2018; Ito 2021). However, these discussions are beyond the scope of this article.

Exploring metaverse identities as self-fulfilment

“MetaBirthday” and the book *Metaverse Evolution* claim that parallel virtual lives are essential for us as human beings, as they allow us to explore and express modes of identification and performance that are not available to us in the physical world, such as performing in a cute female body when one’s physical body is gendered male, for example. While the metaverse’s implications for humanity are debatable, the impact of the human experiences behind such virtual lives should not be underestimated. The MetaBirthday group project is a very particular example of a group creative effort in that it occurred online between individuals who avoid disclosing their physical world identities. Given that anonymity does not hinder communication (Nozawa 2012) and that without those virtual “parallel lives” people cannot fully explore themselves (Virtual Girl Nem 2019), we have to ask ourselves what the individuals within the group had to gain from this collaboration on both personal, creative, and potentially economic levels. Given that collaborative creative practices can increase participants’ sense of well-being by informing their sense of identity and place within a community (Karpati et al. 2017), we must explore the personal agenda, motivations, and unexpected outcomes of the MetaBirthday project to provide a more humanizing account of the virtual project.

While some group members were motivated by the creative possibilities, conducting discourse analysis on material collected in interviews with the key contributors to the project allowed us to explore their latent individual motivations. VTuber Kusaha. El told me that, “I participated hoping that many people would sing the song with lyrics that carried my feelings.” This suggests that the primary goal for some members of the creative group was to convey private feelings to a wider audience in the hope of receiving some kind of recognition, perhaps in the form of audience participation such as singing and dancing along with the video. For Kapruit, the motivation for participation was closer to professional self-improvement: “I listened to the feedback I received after the release of the demo version and created music that would be ‘popular with metaverse residents.’ Specifically, I changed the melody to one that is easy to sing, used instruments familiar to the ear, and so on.” The collaborative project, therefore, allowed Kapruit to test ideas on a receptive audience and improve his skill in creating music that increases audience participation by using their feedback. As for Virtual Girl Nem, their goal was to

spread awareness of the existence of metaverse natives and “human evolution” in the metaverse through music. We can perhaps understand this goal as close to recruitment or proselytizing, as a successful result would be an increased number of people joining the metaverse, and therefore an increased audience for Virtual Girl Nem’s performances and projects in that world. As for common goals across the membership of the group, the members believe they left a mark on history. Virtual Girl Nem argues that they achieved “communicating the existence of ‘metaverse natives’ and the possibility of ‘new human evolution’ to the world of physical reality through the power of music.” Similarly, the outfit designer and lyricist claims that “MetaBirthday” “has had a huge impact on the world of the ‘Metaverse’ and will become a page in its history.”

Whether these claims are true or not is beyond the scope of this article and would necessitate extended audience and reception study to verify. Instead, through analysis of the MetaBirthday video itself and material collected in interviews with the main creators, we can better understand what a project with such a supposedly “huge impact” could achieve regarding social and commercial mobility, knowledge building, and personal satisfaction. Kapruit explains that thanks to “MetaBirthday,” he had new encounters with people active in VRChat, Cluster, and other platforms, and became more popular in the virtual community, to the extent that he is now approached by other users seeking musical collaborations. Kusaha. El notes that, “The fact that I was then shown on a large monitor in Akihabara for a month, albeit briefly, was also a valuable experience that I might not have had if I had not participated in the project ... Perhaps the trophy of “Grand Prix Winner” will be my future achievement as a lyricist.” For Virtual Girl Nem, it was fulfilling to see people “try virtual reality in the store with which I collaborated.” The popularity of the video also produced professional successes for Nem, resulting in Shosen Book Tower promoting Virtual Girl Nem’s book and the Tsukomo PC main store in Akihabara holding a “MetaBirthday experience event,” during which Virtual Girl Nem could once again promote their newly released book.

Coming together as a group also enabled the project participants to challenge themselves. Orange writes, “I thought this project would be a good opportunity to try out a new tool, so I decided to cooperate.” He created many new features as a result: “I had been working on Sky Camera and Delicious Camera before, but thanks to this project, I was able to add new features and improve the usability.” Virtual Girl Nem fan Kapruit sent them a demo with the hopes of “providing content as a common language to the VR community.” There were also more demanding tasks that certain group members felt challenged their creative skills. For example, Kusaha. El writes, “I listened to the soundtrack many times, playing it in my head and waiting for inspiration in my daily routine. That was challenging but also a lot of fun.”

Participants could access assistance and find support within the group, for instance, when Kusaha. El proposed serving as the fashion designer after hearing that Virtual Girl Nem was having difficulties finding one. Kusaha. El told

me, “I do not think that I acted to bring something to the project, but rather I helped people when they were in trouble and asked for help when I thought I could be of assistance.” When extras for the video were needed, videographer Orange “asked a team called ‘Neos Dressing Up Force’ (*Neos kitsuke fōsu*) to help us with the costumes for the extras.” Virtual Girl Nem found it heartwarming to see “so many people help me to achieve this, including metaverse residents, some stores in real Akihabara, etc.” As a result of the popularity of the “MetaBirthday,” a “MetaBirthday Party” (*Metabāsudei pāti*) was held in the metaverse cluster with the help of Virtual Girl Nem’s VTuber and metaverse resident friends. The event attracted a total of 714 visitors that digitally came to see the live show. Coming together as a group fostered ideas and motivated the participants to try new techniques while finding emotional support, asserting and further establishing one’s fame, and benefiting from potential future economic gains within and beyond the “MetaBirthday” project.

Conclusion: beyond the promised utopia

Through the technology of individualization that is virtual reality (Roquet 2022), MetaBirthday proposes a discourse that legitimizes the existence of individuals living in virtual communities who have achieved their ideal selves. The message of the video could have only been optimistic because Nem, as a VTuber, identifies as a “metaverse culture evangelist,” and the video was designed to promote this creative culture.

Firstly, the music video strategically positioned itself as an essential mode for the metaverse community to assert its presence. Its release timing was well-planned, coinciding with the growing popularity of virtual reality programs on Japanese TV and the release of relevant books. Riding the wave of the metaverse’s increasing recognition as a hot topic in national media, the video capitalized on this trend. Secondly, the project had to meet both the consumer demands of those who financially supported the crowdfunding and the expectations of the metaverse community to avoid backlash upon completion. The video portrayed communal scenes, conventionally attractive and cute anime-like girls doing magical girl transformations, and a cheerful crowd, creating a utopian atmosphere while side-stepping negativity or criticism to effectively persuade the audience to embrace the metaverse. Finally, the project served artistic and philanthropic interests while doubling as a commercial platform to boost Nem’s book dissemination.

Investigating MetaBirthday demonstrated that relational creativity, one that might appear seemingly free and spontaneous, can intersect with artistic endeavors and commercial and consumer demands that result in a promotion of a positivist, optimistic evangelist call that was meticulously crafted for the public that was sensible to the promise.

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Bibliography

- Akatsuki, Yuni 赤月ゆに. 2018. “バーチャルなバーチャルと、ノット。バーチャルなバーチャル [Virtual Virtual and Not-Virtual Virtual].” *ユリイカ [Eureka]* 7月号 特集 バーチャルYouTuber [Special Issue: Virtual YouTubers], 112–16. Tokyo: Seidosha.
- Allison, Anne. 2015. “Discounted Life: Social Time in Relationless Japan.” *Boundary 2* 42(3): 129–41.
- Boellstorff, Tom, Bonnie Nardi, Celia Pearce, and T. L. Taylor. 2012. *Ethnography and Virtual Worlds. A Handbook of Method*. Princeton, NJ: Princeton University Press.
- Bredikhina, Liudmila. 2021. “Virtual Theatrics and the Ideal VTuber Bishōjo.” *Replaying Japan* 3: 21–32.
- Bredikhina, Liudmila. 2022. “Babiniku: What Lies behind the Virtual Performance. Contesting Gender Norms through Technology and Japanese Theatre.” *Electronic Journal of Contemporary Japanese Studies* 22(2). <https://www.japanesestudies.org.uk/ejcs/vol22/iss2/bredikhina.html>.
- Bredikhina, Liudmila, Takayuki Kameoka, Shogo Shimbo, and Akihiko Shirai. 2020. “Avatar Driven VR Society Trends in Japan.” *EEE VRinVR*, Atlanta, 496–503. <https://ieeexplore.ieee.org/document/9090603>.
- Brett, Noel. 2022. “Why Do We Only Get Anime Girl Avatars? Collective White Heteronormative Avatar Design in Live Streams.” *Television & New Media* 23(5): 451–61.
- Byrne, Bridget. 2003. “Reciting the Self: Narrative Representations of the Self in Qualitative Interviews.” *Feminist Theory* 4(1): 29–49.
- Cattani, Gino, Simone Ferriani, and Mariachiara Colucci. 2015. “Creativity in Social Networks: A Core-Periphery Perspective.” In *The Oxford Handbook of Creative Industries*, edited by Candace Jones, Mark Lorenzen, and Jonathan Sapsed, 75–95. Oxford: Oxford University Press.
- Chen, Jin-Shiow. 2015. “Beautiful, Meaningful and Powerful. Explorations of the ‘Bishōjo (Beautiful Girl)’ and ‘Bishōnen (Beautiful Boy)’ in Taiwan’s Anime/Manga Fan Culture.” In *International Perspectives on Shōjo and Shōjo Manga: The Influence of Girl Culture*, edited by Masami Toku, 109–19. New York: London: Routledge.
- Chen, Manting and Rocco Juanlei Hu. 2024. “The Host in the Shell: Constructing Female Identity in the Embodied Animated Media.” *New Media & Society* 0(0): 1–20. <https://journals.sagepub.com/doi/abs/10.1177/14614448231226213>.
- Coates, Jamie and Jennifer Coates. 2024. “Introduction: Performance, Projection, Provocation! Relational Creativity in Contemporary Japan.” *Asia Pacific Forum*, forthcoming.
- Daikoku, Takehiko 大黒岳彦. 2022. “メタヴァースとヴァーチャル社会 [Metaverse and Virtual Society].” *現代思想 [Gendai Shisō]* 50(11): 95–114.
- Dufourmantelle, Anne. 2015. *Défense Du Secret [In Defense of Secrets]*. Paris: Payot.
- Galbraith, Patrick W. 2019. *Otaku and the Struggle for Imagination in Japan*. Durham, NC: Duke University Press.
- Goffman, Erving. 1959. *The Presentation of Self in Everyday Life*. New York: Anchor.
- Haraway, Donna. 1991. *Simians, Cyborgs, and Women the Reinvention of Nature*. New York: Routledge.
- Hirota, Minoru 広田 稔. 2018. “バーチャル化する人の存在：VTuberの来し方、行く末 [The Existence of Virtualized People: The Past and Future of VTubers].” *ユリイカ [Eureka]* 50(9): 45–52.
- Ito, Toshiko 伊藤と&hirasi;子. 2021. “千葉県警「へそ出&hirasi; ミニスカ」キャラクター起用に問題意識なし！！ [Chiba Police Have No Problem Using ‘Navel-Baring, Mini-Skirt’ Character!!].” *goo blog*. 23 August. https://blog.goo.ne.jp/lynmiu_2011/e/48f82cfd168b45b3383e99c40a151617.
- Jiefu じえふ. 2018. “ごく主観的な話 [Very Subjective Story].” *ユリイカ [Eureka]* 50(9): 202–6.
- Kahaner, David. 1994. “Japanese Activities in Virtual Reality.” *IEEE Computer Graphics and Applications* 14(1): 75–8.
- Karpati, Andrea, Kerry Freedman, Juan C. Castro, Mira Kallio-Tavin, and Emiel Heijnen. 2017. “Collaboration in Visual Culture Learning

- Communities: Towards a Synergy of Individual and Collective Creative Practice." *International Journal of Art & Design Education* 36(2): 164–75.
- Kawamura, Aya, Hasegawa Shōichi, and Kitamura Kyohei** 河村 彩, 長谷川 晶一, 北村 匡平. 2023. “メタバースとバーチャルリアリティの現在 [The Current State of the Metaverse and Virtual Reality].” *コモンズ [Commons]* 2: 37–49.
- Kizuna, AI** キズナアイ. 2018. “シンギュラリティと絆と愛——人間とバーチャルYouTuberが会おうとき [Singularity, Bond, and Love – When Humans and Virtual YouTubers Meet]” By Yurika Editorial Department. *ユリイカ [Eureka]* 50(9): 29–36.
- Kobayashi, Nobuyuki** 小林 信行. 2018. “VTuberは、世界に向&hir-aka;つてAIを叫ぶ [VTuber Shouts AI to the World].” *ユリイカ [Eureka]* 50(9): 41–4.
- Kondō, Ginga** 近藤銀河. 2022. “物質となるメタバースと、その不自由——メタバース内外を行き来する身体と空間から考えるジェンダーと政治” [The Materializing Metaverse and Its Constraints: Considering Gender and Politics through Bodies and Space Moving In and Out of the Metaverse].” *現代思想 [Gendai Shisō]* 50(11): 45–55.
- Laat, Maarten and Vic Lally**. 2004. “Creativity and the Net: How Do Researchers Collaborate Creatively Using the Internet.” In *Collaborative Creativity. Contemporary Perspectives*, edited by Dorothy Mill and Karen Littleton, 126–43. London: Free Association Books.
- Lee, Sebin, and Jungin Lee**. 2023. “‘Je T’aime’ My Idol, My Streamer: A Case Study on Fandom Experience as Audiences and Creators of VTuber Concert.” *IEEE Access* 11: 31125–42.
- Littleton, Karen, and Dorothy Miell**. 2004. “Collaborative Creativity: Contemporary Perspectives.” In *Collaborative Creativity. Contemporary Perspectives*, edited by Dorothy Miell and Karen Littleton, 1–11. London: Free Association Books.
- unning, Frenchy**. 2022. *Cosplay: The Fictional Mode of Existence*. Minneapolis, London: University of Minnesota Press.
- Matsuura, Yuu** 松浦優. 2022. “メタファーとしての美少女——アニメーションの誤配によるジェンダー・トラブル” [Bishōjo as Metaphor: Gender Trouble through Animated Misalignment].” *現代思想 [Gendai Shisō]* 50(11): 63–75.
- Matsushita, Tetsuya** 松下 哲也. 2018. “キャラクター・ギークカルチャー・バーチャル [Character – Geek Culture – Virtual YouTuber].” *ユリイカ [Eureka]* 50(9): 181–88.
- Masiko, Hidenori**. 2018. “Life on the Small Screen: Japan’s Digital Natives.” In *Being Young in Super-Aging Japan: Formative Events and Cultural Reactions*, edited by Christian Galan, Patrick Heinrich, and Christian Galan, translated by Yuka Ando, 150–65. Abingdon, Oxon; New York: Routledge.
- Miller, Daniel and Don Slater**. 2001. *The Internet: An Ethnographic Approach*. London: Routledge.
- Miyake, Youichiro** 三宅陽一郎. 2022. “メタバースによる人の意識の変容 [Transformation of Human Consciousness through Metaverse].” *現代思想 [Gendai Shisō]* 50(11): 20–34.
- Murakami, Masumi** 村上万純. 2018. “紳士のた&hiras;なみ? VR界の謎ワード「kawaiiムーブ」とは (男性記者も練習中) [A Gentleman’s Etiquette? What is the Mysterious Word in the VR World ‘Kawaii Move’? (The Male Reporter is Also Practicing It)].” *ITmedia News*, April 23, 2018. <https://www.itmedia.co.jp/news/articles/1804/23/news116.html>.
- Nakao, Yuna** 中尾優奈. 2022. “メタバースの本質は何か? 仮想空間の『遊び』か、それとも仮想空間に進出した『現実』社会か [Metaverse, What is the Essence? Is It the ‘Play’ of Virtual Space, or the ‘Real’ Society that has Advanced into Virtual Space?].” *日本デジタルゲーム学会 第12回年次大会 予稿集 [Japan Digital Games Research Association 12th Annual Conference Proceedings]*, Japan, 70–3. https://www.jstage.jst.go.jp/article/digraiproc/12/0/12_70/_article-char/ja/.
- Nakao Yuna, Horiuchi Hiroaki, Machida Daiki, and Matsui Yuuki** 中尾優奈, 堀内博皓, 町田大輝, 松井勇起. 2023. “メタバースにおける「キヤズム」とその克服可能性 バーチャルYouTuber との「遊び」概念を用いた比較から [The ‘Chasm’ in the Metaverse and Its Possibility of Overcoming It: A Comparison with Virtual YouTubers Using the Concept of ‘Play’].” *日本デジタルゲーム学会 第13回年次大会 予稿集 [Japan Digital Games Research Association 12th Annual Conference Proceedings]*, Japan, 143–8. https://www.jstage.jst.go.jp/article/digraiproc/13/0/13_143/_article-char/ja/.
- Nozawa, Shunsuke**. 2012. “The Gross Face and Virtual Fame: Semiotic Mediation in Japanese Virtual Communication.” *First Monday* 17(3–5). <https://firstmonday.org/ojs/index.php/fm/article/view/3535>.
- Nyalra and Ohisashiburi** にやるら, お久しぶり. 2020. 承認欲求女子図鑑 ~ SNSで出会ったヤバイ女子たち ~ [Approval Seeking Girls Field Guide – Terrific girls I Met on SNS]. Tokyo: Sansai Books.
- Pendleton, Mark and Jamie Coates**. 2018. “Thinking from the Yamanote: Space, Place and Mobility in Tokyo’s Past and Present.” *Japan Forum* 30(2): 149–62.
- Poupée, Karyn**. 2009. “Robots et Mondes Virtuels : Les Nouveaux Alliés des Japonais [Robots and Virtual Worlds: The New Allies of the Japanese].” *Hermès, La Revue* 55(3): 39–45.
- Roll, Dale**. 2018. “Popular Virtual YouTuber Kizuna AI Selected as Ambassador for New ‘Come to Japan’ Campaign.” *Japan Today*, 8 March. <https://japantoday.com/category/features/travel/popular-virtual-youtuber-kizuna-ai-selected-as-ambassador-for-new-%27come-to-japan%27-campaign>.
- Roquet, Paul**. 2022. *The Immersive Enclosure: Virtual Reality in Japan*. New York: Columbia University Press.
- Roquet, Paul**. 2023. “Japan’s Retreat to the Metaverse.” *Media, Culture & Society* 45(7): 1501–10.
- Senda, Yuki** 千田有紀. 2018. “ノーベル賞のNHK解説に「キズナアイ」は適役なのか? ネットで炎上中 [追記あり] [Is ‘Kizuna AI’ a Suitable Choice for NHK’s Commentary on the Nobel Prize? Online Backlash [Updated]].” *Yahoo! ニュース [Yahoo News]*, 3 October 3. <https://news.yahoo.co.jp/expert/articles/1312b555d4b27eeadedd4cc8782028340d657b39>.
- Shirai, Akihiko** 白井暁彦. 2019. “VR 4.0-リアルタイムバーチャルキャラクターが牽引するVR残業における基礎研究 [VR 4.0 – Fundamental Research in the VR Industry, Which Is Driven by Real-Time Virtual Characters].” *DHU* 6: 82–92.
- Shirai, Akihiko** 白井暁彦. 2022. “Avatar Driven Research and UXDev in REALITY, a Metaverse Company Born in Japan.” Presented at the Birds of a Feather in ACM SIGGRAPH 2022 ‘Metaverse and Interverse Research Development in CG and Interactive Techniques in SIGGRAPH2022,’ Vancouver, 11 August.
- Shirai, Akihiko** 白井暁彦. 2023. “文化・技術・研究史で読み解く令和のメタバースの研究開発 [Research and Development of the Metaverse of the Reiwa era – Read the History of Culture, Technology and Research Around 2022].” *電子情報通信学会 通信ソサイエティマガジン [The Institute of Electronics, Information and Communication Engineers Communication Society Magazine]* 16(4): 285–94.
- Slater, Don**. 2002. “Social Relationships and Identity Online and Offline.” In *Handbook of New Media: Social Shaping and Consequences of ICTs*, edited by Leah A. Lievrouw and Sonia M. Livingstone, 533–46. London: Sage.
- Steinberg, Marc**. 2012. *Anime’s Media Mix*. Minneapolis: University of Minnesota Press.
- Suan, Stevie**. 2021. “Performing Virtual YouTubers: Acting Across Borders in the Platform Society.” In *Japan’s Contemporary Media Culture between Local and Global: Content, Practice and Theory*, edited by Martin Roth, Hiroshi Yoshida, and Martin Picard, 187–223. Heidelberg; Berlin: CrossAsia-eBook.
- Tachi Susumu, Makoto Sato, and Michitaka Hirose** 館 暁, 佐藤 誠, 廣瀬 通孝. 2010. *バーチャルリアリティ学 [Virtual Reality Studies]*. Tokyo: Virtual Reality Society of Japan.
- Takano, Masanori and Fumiaki Taka**. 2022. “Fancy Avatar Identification and Behaviours in the Virtual World: Preceding Avatar Customization and Succeeding Communication.” *Computers in Human Behavior Reports* 6(May). <https://www.sciencedirect.com/science/article/pii/S2451958822000100>.
- Tamai, Michiru, Mitsuyuki Inaba, Koichi Hosoi, Ruck Thawonmas, Masayuki Uemura, and Akinori Nakamura**. 2011. “Constructing Situated Learning Platform for Japanese Language and Culture in 3D Metaverse.” 2011 *Second International Conference on Culture and Computing*, Japan, 189–90. <https://ieeexplore.ieee.org/document/6103255>.

- Tang, Man To, Victor Long Zhu, and Voicu Popescu. 2021. "AlterEcho: Loose Avatar-Streamer Coupling for Expressive VTubing." 2021 *IEEE International Symposium on Mixed and Augmented Reality (ISMAR)*, Italy, 128–37. <https://ieeexplore.ieee.org/document/9583837>.
- Todoki, Uka 届木ウカ. 2018. "個人バーチャルYouTuberという「自身のアイデア」：自己の再出産と魂の交歓 [The Individual Virtual YouTuber as 'One's Own Idea': Rebirth of the Self and Exchange of Souls]." *ユリイカ [Eureka]* 50(9): 61–8.
- Todoki Uka and Tsukino Mito 届木ウカ, 月ノ美兎. 2018. "委員長は美少年の夢を見るか? [Does the Chairman Dream of Bishōnen?]." *ユリイカ [Eureka]* 50(9): 69–78.
- Turkle, Sherry. 1995. *Life on the Screen: Identity in the Age of the Internet*. New York: Simon & Schuster.
- Umezawa, Kazuki 梅沢和木. 2008. "キャラクター、現代美術、VTuber [Character, Contemporary Art, VTuber]." 青春へら ver.7 「VTuber新時代」 [Seishun Hera Ver.7: 'The New Era of VTubers'], 大阪大学感傷マゾ研究会 [Osaka University Sentimental Masochist Research Society], 6–16. Japan: Ōsakadaigaku kanshō mazo kenkyūkai.
- Utsugi, Kei, Toshio Moriya, and Haruo Takeda. 2001. "Making of a Virtual World of Heijokyo from Historical Knowledge." *Proceedings Seventh International Conference on Virtual Systems and Multimedia*, USA, 299–308. <https://ieeexplore.ieee.org/document/969684>.
- Virtual Girl Nem バーチャル美少女ねむ. 2019. 仮想美少女シンギュラリティ [Virtual Beautiful Girl Singularity]. Amazon Kindle.
- Virtual Girl Nem バーチャル美少女ねむ. 2022a. メタバース進化論——仮想現実の荒野に芽吹く「解放」と「創造」の新世界 [Metaverse Evolution Theory — The New World of Liberation and Creation Thriving in the Wilderness of Virtual Reality]. Tokyo: Gijutsu Hyoronsha.
- Virtual Girl Nem バーチャル美少女ねむ. 2022b. "「メタバースデイ」デブリーフィング【メタバースで生きていく】[‘MetaBirthday’ Debriefing [Living in the Metaverse].]" ノート (Note). 18 November. https://note.com/nemchan_nel/n/n829a5733d8b6.
- Virtual Girl Nem バーチャル美少女ねむ. 2022c. "バーチャル美少女だけど国連フォーラムで基調講演&hirasi;てみた! 【日本インターネットガバナンスフォーラム2022】 [I Am a Virtual Bishōjo, but I Gave a Keynote Speech at the UN Forum! Japan Internet Governance Forum 2022]." ノート (Note). 20 November. https://note.com/nemchan_nel/n/n260004227e22.
- Virtual Girl Nem バーチャル美少女ねむ. 2023a. "高校教材に『メタバース進化論』『メタバースの定義』掲載! 【日本文教出版 情報最新トピック集2023】 [‘Metaverse Evolution Theory’ ‘Definition of Metaverse’ Published in High School Teaching Material! Nihon Bunkyo Shuppan, Latest Information Topics 2023]." ノート (Note). 13 April. https://note.com/nemchan_nel/n/nd401f1032d89.
- Virtual Girl Nem バーチャル美少女ねむ. 2023b. "『メタバース進化論』入試問題になる【大阪芸術大学 芸術計画学科】 [‘Metaverse Evolution’ Becomes an Entrance Exam Question [Osaka University of Arts, Department of Art Planning].]" ノート (Note). 1 June. https://note.com/nemchan_nel/n/nbbe5d6c46293.
- Wilson, Samuel M. and Leighton C. Peterson. 2002. "The Anthropology of Online Communities." *Annual Review of Anthropology* 31(1): 449–67.
- Yamazaki, Kasumi. 2018. "Computer-Assisted Learning of Communication (CALC): A Case Study of Japanese Learning in a 3D Virtual World." *ReCALL* 30(2): 214–31.
- Yoshida, Takehiko 吉田健彦. 2022. "宇宙の修理とメンテナンス——メタバースは私たちの生きる宇宙にな&hirari;得るの&hiraka; [The Repair and Maintenance of the Universe: Can the Metaverse Become the Universe We Live In?]." 現代思想 [Gendai Shisō] 50(11): 125–33.
- Zhao, Ziyu. 2022. "The Live Commerce of VTuber." *Proceedings of the 2022 5th International Conference on Humanities Education and Social Sciences (ICHESS 2022)*, China, 324–31. <https://www.atlantis-pess.com/proceedings/ichess-22/125983217>.
- Zimmermann, Daniel, Anna Wehler, and Kai Kaspar. 2022. "Self-Representation through Avatars in Digital Environments." *Current Psychology* 42: 21775–89.

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