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Virtual Theatrics and the Ideal VTuber Bishojo

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Abstract

This paper focus on Virtual YouTubers (VTubers) who are virtual *anime* live-entertainers in Japan. The goal of this research paper is to analyze VTubers in terms of traditional Japanese theater art forms and character narrative. Fifty-five VTubers were interviewed and the results showed that not only are there similarities between traditional Japanese theater and VTubers, but also VTuber performances are shaped by different socio-cultural values that come into play as they perform their virtual characters. This research contributes to our understanding of a broader Japanese socio-cultural context behind the masquerading practice of VTubers.

Introduction

Japan has a blooming anime industry (Condry 2013) from which emerged Virtual YouTubers (VTubers) in 2016 with Kizuna AI, a Japanese VTuber who now has over four million subscribers. Kizuna AI is a Virtual YouTuber, she looks like an anime girl and considers herself to be an Artificial Intelligence (AI). She is voiced by a real woman and is used to create a sense of intimacy with fans by responding to their questions as a virtual character (Lufkin 2018). VTubers are 3-D or 2-D computer-generated (CG) virtual characters (avatars) embodied by the users who control them. VTubers are virtual entertainers who take on anime-like visual characteristics and broadcast entertaining content. The VTubers' goal is to produce creative content shared among their viewers (fans/subscribers). The primary difference between YouTubers and VTubers lies in the masquerading aspect of VTubers. With VTubers it has become possible to express one's own feelings and share personal messages while transcending the physical body, as individuals are no longer limited to their physical appearances and can take on any form or shape. As liveentertainers, VTubers perform and manipulate their anime avatars to produce live-entertainment content. The goal of this paper is to review VTubers in terms of traditional Japanese theater forms and character narratives as a way of viewing this virtual live-entertainment practice.

Before diving into the theoretical framework and the findings from this paper's research survey, an explanation of the origin of and the technology behind VTubers is given. Hatsune Miku is sometimes described as the VTuber

predecessor (Yoshinobu 2019). Hatsune Miku, translated as "the first sound of the future" first appeared in 2007 as a vocal synthesizer software created by Crypton Future Media, employing the Yamaha's software engine called "Vocaloid" (Guga 2014). Miku's voice was created from the voice samples of Japanese voice actress, Fujita Saki. A decade later, "Kizuna AI" was born. Kizuna AI has a 3-D *anime*-like appearance. She is voiced by a human voice actor and identifies as a super artificial intelligence called "VTuber." She became popular almost instantly and sparked a VTuber boom in Japan. Thus far, in 2020, the number of VTubers exceed 10,000 (Minoru 2020).

In regard to the technology behind the anime-like characters that talk like people, several VR (virtual reality) contents (location, social game, etc.) led to the development of VTubers (Shirai 2019). At the same time, game character designs contain similar elements to VTuber character designs: modeling, rigging, physics simulation for hair and clothes, shades, facial expressions, optimization for real time, and costumes (Shirai 2019). One could say that VTubers are the product of research and development (R&D) in the VR, gaming, and entertainment industry. VTubers use hardware and software that capture body motions, facial expressions, virtual clothing movements, and that lip-synch a user's voice to his or her virtual character's mouth—all in real-time (Bredikhina et al. 2020). To become a VTuber, individuals can use a webcam and software that transforms their movements onto the virtual character, or an HMD (head-mounted display system). For those working for a company or having access to such facilities, a motion-tracking suit, and real-time rendering,



such as UnrealEngine4, is used. The end result is always an *anime*-like character voiced by a human being.

Methodology

This paper uses four different methodologies: a survey of 38 questions, archived discussions on Twitter among VTubers, personal discussions with surveyed VTubers, and eight months ethnographic research. Only ten questions out of the total 38 were chosen for this paper. The other questions focused on the technical aspect of VTuber persona (type of equipment and programming used), the content of their videos (type of audience and content), their social media addresses, relation between their virtual identity and physical, and the concept behind their VTuber character was also inquired. Those questions served as a base for understanding VTubers. Out of fifty-five VTubers fifteen were interviewed personally. Those fifteen were based on the time they spent in the VTuber community (those with longer years of experience were preferred to those who have begun the activity only since a couple of months). VTubers were contacted via Twitter direct messaging service and interviewed in Virtual environment platforms VRChat and Virtual Cast. Interviews in those social platforms allowed for direct voice-to-voice interactions and for VTubers to be present in their virtual body.

The survey was conducted from June 15, 2020 to July 1, 2020. The survey was conducted with a Google Form and made accessible from PC, Mac, or any smartphone. Google Form is provided by Google. Google Form was distributed among the VTuber community via Twitter and sent by direct messages to VTubers. VTuber reposted the survey URL on their Twitter account. It was not possible to control who re-tweeted the URL. VTubers were found based on a Twitter search with the hashtag #VTuber.

The Google survey form asked VTubers:

- 1. Age
- 2. Biological sex
- 3. Professional occupation
- 4. Country of origin
- 5. Explain the appeal of VTuber activities
- 6. Explain if their VTuber character is a persona, ideal persona, or similar to their existing identity
- 7. To state what their goals as VTubers are

- 8. To give their reasons for choosing a virtual character of the same gender as theirs or a gender opposite their own
- 9. To discuss what being a *bishōjo* meant for them

A total number of 55 replies from Japanese-speaking VTubers were collected. The majority of VTubers who participated in this survey were amateurs or semi-professionals. The majority of questions were open-ended questions, and answers were grouped together based on similarities noted in the replies. Additional extensive ethnographic fieldwork was conducted between January 2020 and August 2020. Blogs posts, Twitter discussions, and broadcasts conducted by the surveyed VTubers were also analyzed.

The anonymity of replies was guaranteed. The use of anonymous survey assured privacy for what could be viewed as a vulnerable population. The survey was made available in Japanese as the cast members only spoke Japanese. The survey answers were checked for missing data, such as unanswered questions. No unanswered questions were found. The survey responses were then translated by the author from Japanese to English.

The author conducted a narrative analysis. Narrative analysis is useful for uncovering the ideologies and the larger culture that is embedded in participants' answers. Storytelling structures were examined, communication, and meaning in relation to Japanese social context were analyzed. Narrative analysis was the preferred methods for understanding VTubers and what larger culture and ideologies were embedded in participants' virtual activities.

Participants

The majority of VTubers who participated in this survey were relatively young. The following is the distribution per age group: ages 15-19 (9.3%); ages 20-24 (25.9%); ages 25-29 (40.7%); ages 30-34 (14.8%); ages 35-39 (7.4%); and ages 45-49 (1.9%). Professions included office workers, engineers, or worked in IT-related professions or in visual communications departments. Other professions included: voice actors, housewives, psychologists, part-time workers, actors, teachers, caregivers, telephone operators, anime creators, or business owners. Of the participants, the majority (75%) were male, 23.2% were female, and 1.8% were transgender. All 55 participants were Japanese.

Theoretical Frameworks

This section will focus on traditional Japanese theater and Japanese anime characters which are interconnected to the themes of VTuber live entertainment of the overall manuscript. According to Grosz (2001, 175), "the virtual is the space of emergence of the new, the unthought-of, the unrealized, which at every moment loads the presence of the present with supplementarity." The author stresses that the virtual space has a point of contact with the real, and doubles it as parallel universes where the unthought-of and the unrealized can take place and re-incarnate into "universes that might have been" (Grosz 2001, 175). Grosz (2001) further explains that writing, theater, and other forms of art are, by definition, virtual, as they express that which is not part of the actual.

The Doll Theater — Doll Play and Doll Narrative

One of the traditional Japanese performance arts is the doll theater. The doll theater in Japan is referred to as *ningyō shibai* (doll play) and *ningyō jōruri* (doll narrative), commonly known as *bunraku* since the 20th century (Elzey 1987, 115). *Ningyō jōruri* developed during the Edo period (1603-1868) as a popular art form of live entertainment in the commercial urban culture of Japan (Bolton 2018). The doll theater originated from the conjunction of two art forms: storytellers and marionettes (Tschudin 2015).

In ningyō jōruri, three elements are visible to the audience: the narrator and shamisen player, the puppet as the "live actor," and three performers (puppet manipulators). The puppets are approximately 90-140 cm high; their heads represent stock character types (young boy, samurai, beautiful maiden (a bishōjo), and are attached to a rod. Sometimes strings are added to manipulate facial expressions. The rod is then attached to piece of fabric to which are attached puppet's hips in the form of a bamboo hoop. The puppets hands and legs are attached to the piece of fabric by strings. The narrator is separated from the puppet. He sings and provides all the voices for the puppets while being accompanied by a shamisen player. The performers (puppet manipulators) manipulate the puppets based on the narrator's story (Mori 2002, 81).

The puppet is, at the same time, the actor, and nothing more than a puppet, because it is acted upon by the performers (Kott and Boleslaw 1976, 100). The audience takes part in the play as they decide to perceive the play as being almost real. *Ningyō jōruri* mixes reality and

unrealism (Suan 2013) by creating an illusion that the puppet moves and speaks freely on its own (Kott and Boleslaw 1976). Ningyō jōruri balances realism and stylization: the characters are not played by humans, but by puppets, and yet they imitate human movements (Suan 2013, 172). Performers breve life and animate the puppets in order for the characters to appear as having emotional realism. According to Chikamatsu Monzaemon, a famous ningyō jōruri playwright, the artificial nature of the puppets enables them to be expressive because they can express emotions that could never come out of a real person's mouth, allowing the puppets to reveal the true emotions (Keene 2007, 388). In summary, ningyō jōruri plays on a constructed reality by creating an interplay of what is there, what is not there, and what is made to believe to be there, and puts into constant tension the real and the make-believe by making the inanimate come alive through animation (Alland 1979, 7-10).

Kabuki Theater

Unlike the puppets in *bunraku* that strive to imitate human-like movements, the actors of *kabuki* theater strive for artificial movement, an almost puppet-like stylization of expression and body language (Alland 1979, 10). The emotions are emphasized by the heavy make-up and exaggerated facial expressions, appearing mask-like on human faces. The human face, body, and movements are highly stylized, but representative enough to be understood as specific characters in a play (for example, a beautiful maiden, a *samurai*, a ghost, etc.).

Kabuki is an all-male theater performance where men perform both the female and male roles. Those performing female roles are referred to as onnagata. The men performing female roles create a hyper-feminine image, which the audience consumes as being such, while being aware that it is a man underneath the exquisite kimono (Suan 2013, 202). As Keene (1978, 62) says, it is the "rejection of reality in favor of an unearthly, stylized beauty that can dazzle audiences into believing that an old man with a heavy powdered face is a miracle of feminine loveliness." Onnagata do not perform biological women per say but re-enact and re-construct an image of purified femininity carefully observed by several generations of onnagata actors (Kott 1976; Leiter 1999; Tschudin 2011). Onnagata perform an idealized image, rather than any gestures from the real world (Tschudin 2015). However, as Daniellou (2015) and Tschudin (2011) stated, onnagata

perform a conservative femininity, because that femininity extends back to pre-constructed and assimilated notions of common feminine element (not related to the biological female sex).

The performativity of onnagata and the enactment of a certain notion of femininity can be understood through the perspective of gender performance. Gender expression and its performativity were most discussed by Judith Butler (1988) and Eve Kosofki Sedgwick (1995). Butler (1988) defined gender as a stylized repetition of an act or a performance where gender can be staged, changed, and can disrupt the division of masculine and feminine gender order. Gender is something that is performed, something "that one does" (Butler 1988, 525). Sedgwick (1995) theorized gender as the "n-dimensional space," where masculinity, femininity, and other genders intersect. In other words, femininity and masculinity can exist to a certain extent within an individual and can be used to perform a variety of gender identities. Gender has often been thought of as an integral part of the physical body, however, in the age of digital content and virtual reality, characters can also have their own gender identities.

Ningyō jōruri and kabuki plays are constructed on narratives and characters. In Japanese theater, the actor plays a character for the audience, but the character is an abstract concept internalized by the audience (Mori 2002, 87). Both art forms rely on character archetypes, "each accompanied by corresponding expectations, breaking or following through with them to create the drama" (Suan 2013, 203). It is not uncommon to link ningyō jōruri with anime character analysis (Bolton 2018; Suan 2013). Nozawa (2013) argues that characters are creatures of "inbetween-ness" which are fantastic beings that are virtual and real at the same time. As we have seen in the case of kabuki and ningyō jōruri, characters are played by puppets or actors and are real in the virtual space of the play. Nozawa (2013) coined the term "characterization" as a semiotic modality, a transformation into a character by individuals that causes them to experience being the fantastic beings of "in-between-ness." This is most relevant to kabuki, where actors transform into characters.

Characterization and Avatars

Characterization is similar to avatars: individuals are in between the physical world on their human body and the avatar world, engaging in "in-between-ness" by performing or enacting characters avatars. This paper would like to slightly digress from the main thread and briefly explain what avatars are. Avatars are 2-D or 3-D computer-generated (CG) characters that provide individuals with a "clean slate onto which to construct their desired virtual identities" (Nagy and Koles 2014, 279) and create desired narratives of themselves. Avatars are virtual or digital "masks" that individuals use online to interact with others. Avatars serve as mediators of physical experience (Morie 2007), provide forms of identity for social life (Taylor 2002), and allow individuals to rethink their relationships with one another and society (Moore 2012).

The virtual identities of avatars provide users with narrative agency: they can narrate themselves differently from their physical lives (Webb 2001, 589). Avatars are not completely freed from the socio-cultural production, as they are often found to be in close relation "to pre-existing, off-line cultural phenomenon" (Webb 2001, 561). This mostly refers to what Bourdieu (2016) calls *habitus*, a number of socially ingrained habits through which an individual perceives the social world and reacts to it.

Bishōjo (Beautiful Girl)

Going back ningyō jōruri and kabuki, both have certain character archetypes that are used in plays for their repertoire. One type of archetype character in anime relevant to VTubers, and also found to some extent in kabuki and ningyō jōruri, is bishōjo (beautiful girl) and their kawaii repertoire. Bishōjo have stylish hair, big eyes, delicate eyebrows, small mouths, slender bodies, and are young-looking (Jin-Shiow 2015, 112). Japan has the greatest number of cute characters (Galbraith 2019a, 94), which opens up ways of seeing and being in the world, as they create spaces where fans, regardless of their gender, can transcend, for a brief moment, their daily gender expectations and roles (Nakamura and Matsuo 2005). Cute is often referred to as kawaii, an adjective meaning adorable, lovable, and cute, and can be attributed to people, objects, or animals (Burdelski and Mitsuhashi 2010; Kinsella 1995). Kawaii appeals to adults, as its childish cuteness heals the soul and provides a release from adult socio-cultural responsibilities (White 1994). Kawaii can also be re-contextualized and adopted by different groups of individuals in different contexts, transforming into a form of play that produces kind, gentle, and powerful youth culture (Yano 2009, 686). Kawaii is a "rebellion or refusal to cooperate with established social values and realities"

(Kinsela 1995, 243) and a powerful expression of zeitgeist (May 2019, 9).

Bishōjo characters came to be regarded as the leaders of kawaii and were transformed into an abstract concept detached from productive and reproductive discourse and gender obligations (Greenwood 2014; Saito 2014; Treat 1995). Bishōjo echoes "a world of dreams, transformation, and possibility" (Galbraith 2019a, 38) that serves as a base for imagining alternative social worlds and relationships. Feminist scholars tend to view female characters as a reflection of physical women, gender norms, and sexual politics, because they look like biological women (Saito 2014, 143). However, it is not because 2-D characters look human that they are realistic representations of humans (Nozawa 2013, 9).

Anime characters are easily recognizable as unreal because of their strange hair and facial proportions, but, at the same time, they signify human characteristics, such as the general appearance of their body shape, which makes them what Suan (2013) calls "recognizable representations of humans." Lamarre (2009) named this paradox of real unreality the gap between actual girls and transformative performance of the bishōjo image. Bishōjo characters can be seen as are a form of "new configuration of gender that wield its power in its youthfulness and cuteness" (Saito 2014, 161). Bishōjo are "detached from the productive economy of heterosexual reproduction" (Nakamura and Matsuo 2005, 69) and do not have age or gender restrictions when it comes to their consumption (King 2019). When boys cross-dress into bishōjo characters, they disrupt the categories of sex (Saito 2014; Sugawa 2019). By interacting with manga and anime characters, individuals engage in a "celebration of possibilities of living life otherwise" (Galbraith 2019b, 7).

Findings

Producing a Historical Narrative

As of 2020, there are approximately 10,000 VTubers, according to the Japanese website ¹ that references everything that is happening in the VR world of Japan. Japan has a blooming *anime* production, and it is not a surprise that VTubers have developed as a new, popular, art form of live entertainment. *Ningyō jōruri* originated from

combining storytelling and marionettes, and VTubers are not much different. They originated from the conjunction of two forms: YouTubers (storytellers) and game engines with their VR equipment (the technical aspect of marionettes). Just as *ningyō jōruri* and *kabuki* are liveentertainment and performance arts, VTubers are a new form of live-entertainment technology and performance art. Instead of three performers manipulating the puppet and a narrator voicing all the characters, individuals manipulate their virtual puppet (character/avatar) and narrate stories. *Ningyō jōruri* balances realism and stylization, just as VTubers balance stylized *anime* appearances and signified human movements.

As the puppets in *ningyō Jōruri*, VTubers are not real actors, but are virtual puppets controlled by individuals who perform virtual characters. As the technology (performers and the technical construction of the puppet) of ningyō jōruri create an illusion that the puppet moves and speaks freely on its own, the technology behind VTubers (such as VR equipment, game engines, and motion tracking software) enables them to create the illusion that the virtual character moves and speaks freely on its own. Instead of strings, bamboos, and rods that constitute the puppets' body, manipulated by the performers, the virtual VTuber puppet is manipulated with motion tracking devices and controllers attached to hands, feet, and hips, and to the HMD (head-mounted display system used for VR immersion). In the case of some VIVE headsets, regular HMD headsets allow only for hands and head tracking. Instead of the puppet performer manipulating the hands, face, body, and legs of the puppet, VTubers manipulate the same "body parts" of their virtual puppet by moving their own body. If the VTuber does not have an HMD, desktop software and a webcam can be used to motion track hands and facial expressions. Because of the technology, there is a form of emotional realism as an individual narrates the virtual character and gives immediate emotional responses in any given situation. Just as in ningyō jōruri, VTubers make the non-living alive through animation.

One of the surveyed VTubers referenced different discussions on her blog about the similarities between *ningyō jōruri*, *kabuki*, and VTubers². Whilst the majority of the discussions highlighted the point discussed in the previous paragraph, some others were mentioned as well.

https://panora.tokyo/archives/4247

² https://www.nemchan.com/2018/07/japanvabiniku.html

Just as with ningyō jōruri, the existence of the performer (puppet manipulator) is known to the audience: VTuber fans are aware that VTuber characters are controlled by individuals and are not real autonomous anime characters. As with *ningyō jōruri*, the audience participates in a makebelieve practice; the audience knows that the *anime* VTuber characters are not real and are controlled by individuals, but they consume VTuber content as if those anime characters were real. For example, when a man uses a bishōjo character, the audience participates in the make-believe practice that the bishōjo VTuber they see is not a man but a real bishōjo character. Some of the archived discussions linked the male practice of using bishojo characters to onnagata. Just as onnagata plays a notion of femininity and not of biological women, those male VTubers play a kawaii concept linked to the bishojo culture and not to biological women. Similar to onnagata, those male bishōjo VTubers perform a kawaii femininity that extends back to preconstructed and assimilated notions of common kawaii elements that are not related to the beautiful female biological body, but to the exterior cultural elements of the so-called *kawaii bishōjo* performance. Just as *ningyō jōruri* perform utilizes puppets, VTubers perform through their virtual avatar characters.

One respondent from the survey stated, "I [became a bishōjo VTuber because I] like the idea of a story where a 3-D character moves and talks. I just happened to want to create a character that looked like a bishōjo." The respondent found it interesting that a 3-D CG character (VTuber) can be presented as being real to the audience, and with it the narrative capacity that such a performance has.

VTubers are character-driven stories and storytelling performed by virtual characters. In other words, VTubers are a virtual or digital form of *ningyō jōruri*-style live-entertainment. Based on the gathered information from various discussions, VTubers produce a historical narrative that links their practice to a longer Japanese history of performance art, going as far as to call VTubers a new form of traditional Japanese art. *Ningyō jōruri* grew in popularity as the technology behind the puppets and their body movements advanced. More and more VTubers are "born" everyday as the technology behind this form of live entertainment becomes more accessible. HMD are more affordable than they were a couple of years ago, and other open-source software allow for facial and body tracking for those who do not have the income to buy an HMD. With

VR technology, the *ningyō jōruri* and *kabuki* stage is no longer physical, but virtual and accessible to fans all over the world, given they have an internet connection.

Origins of the Archetype Form

Since VTubers can be regarded as a new form of ningyō jōruri (performers manipulate their virtual puppets/characters), it is necessary to understand what form, shape, and gender VTubers decide to adopt for their characters. Just as puppets are necessary for a ningyō jōruri to take place, and without characters to play, kabuki cannot exist, VTuber's activities cannot exist without a character in the form of a virtual puppet. Due to the avatar nature of VTubers, their form can be easily manipulated. As one participant said, "It [being a VTuber] allows me to transform into a character that I can create and shape myself." As creators and narrators of their content, they can choose whatever appearance they want their VTuber character to have, resulting in the quest for an ideal form. The ideal form of VTubers is not that different from the idealized image that the *onnagata* perform. Both strive for a virtual concept rather than a copy-and-paste image from the real world.

Ningyō jōruri and kabuki rely on character archetypes, "each accompanied by corresponding expectations, breaking or following through with them to create the drama" (Suan 2013, 203). The character archetype most found among VTubers was the bishōjo character (Kobayashi 2018), which also happened to be the desired ideal form for live entertainment. For example, one respondent said, "My idealized image is a bishōjo." Another respondent explained, "For me, the ideal is one, a well-defined face (big eyes, small face) and, two, cute and cool; I like girls (You can make your own avatar as long as it is an avatar.) and bishōjo equals kawaii/cool. This is why I said that a bishōjo is an ideal."

Becoming an ideal *kawaii bishōjo* in the virtual world is important for the surveyed VTubers for reasons such as popularity, freedom, *kawaii* existence, and personal preference for the *bishōjo* characters. Surveyed VTubers explained that in order to be recognized, that is, to become popular as virtual entertainers, *bishōjo* provides them with an eye-catching appearance. A respondent explained, "VTubers are born when people start to recognize them, so it's only natural that many of them choose an eye-catching appearance [that is the one of a *bishōjo*]." Another one

confirmed, "People are more likely to watch videos with bishōjo characters."

From the two statements it becomes clear that VTuber entertaining content with *bishōjo* characters gets more views and has a larger fan base than content without such appearance. In other words, individuals prefer to choose a *bishōjo* appearance because it is more popular on the web than other VTuber characters. It would then appear that the so-called ideal form of the VTuber *bishōjo* appearance is governed by trends and fan demand, rather than an individual choice or on market demand. However, it would be rather simple to stop at this point and consider a VTuber's character form to be determined only by market demand. Once again, as with *ningyō jōruri* and *kabuki*, character archetypes are accompanied by expectations, and *bishōjo* VTuber characters are no exception.

As it has been described in the theoretical framework, bishōjo are kawaii. The bishōjo appearance is desired due to its kawaii repertoire, but also because bishōjo as a kawaii existence has liberating and healing powers. The concept of kawaii described by Yano (2009) and Kinsella (1995) is reflected in a discussion with two surveyed VTubers: "I was able to exist as a bishōjo character, and I felt that I was healing myself and the people around me," and "The most important reason was it seemed the best way to get a lot of people to listen to me, because bishōjo is an existence that is attractive and harmless to almost everyone."

First of all, by entering the world of *kawaii*, that is that of *bishōjo*, the participants felt transformed by becoming *kawaii*. Secondly, by engaging in an existence that is dissociated from the socio-cultural difficulties that they feel they are facing in everyday life, they enter a harmless, safe, and attractive, pretend world. And lastly, this distancing from the physical world and its difficulties implies a freedom that *kawaii* and *bishōjo* are associated with, as they are not directly linked with productive and reproductive societal norms. As one of the participants said, "I wanted to experience the freedom of a *bishōjo*."

We can conclude that the character archetype of a bishōjo comes with two expectations. One is the healing and soothing power of kawaii. Second is the popularity that comes with bishōjo characters. While VTubers say that one of the greatest benefits of being a virtual character is the ability to take on any form or shape, implying a transcendence of the human body. In reality, virtual characters became commodities and were limited in their visual expressions due to market (fan) demands. VTubers

understand that if they want to be popular and have a large fan base, which is important as virtual live entertainers, they should opt for a *bishōjo* appearance. At the same time, as VTubers' *bishōjo* become more and more popular on social networking services (SNSs), their visual aesthetic comes to be regarded as an ideal form for performing VTuber content. By consequence, when VTubers perform *bishōjo*, they participate in the value production of *bishōjo* characters: to become popular, they know that the *bishōjo* appearance is better, making it more valuable and ideal than any other visual form. This has resulted in the *bishōjo* persona being the most popular character archetype encountered among VTubers.

The Onnagata of VTuber

While the link between onnagata and male VTubers with bishōjo might appear as evident, this section would like to digress and have a look at what other historical narratives male VTubers with bishōjo characters produce. This paragraph will be based on the testimonies collected by VTuber participants. According to male VTubers with a bishōjo appearance, their practice is similar to that of Ki no Tsurayuki, the author of the Tosa Diary, a journal written by a man as a woman. The Tosa Diary uses only kana characters typically used by women, while men use Chinese characters and kana. By writing as a female narrator, thus only using kana, Tsurayuki could focus on the aesthetics and poetry of the Japanese language, expressing feelings he could not with the male style of writing. This reminds us of what Chikamatsu Monzaemon said about the artificial nature of the puppets, which enables them to be expressive because they can express emotions that could never come out of a real person's mouth, allowing the puppets to reveal the true emotions (Keene 2007, 388). What could not have been done by the physical body of the narrator was expressed and overcome by the virtual body of a bishōjo. Tsurayuki and VTubers are similar; what has changed since the Tosa Diary is the technology behind the masquerading is that the diary and waka poetry became Twitter, YouTuber, VR, and HMD.

While *onnagata* and the *Tosa Diary* all have strong narrative agency, some male *bishōjo* VTubers associate their practice to something less humane. Male *bishōjo*

VTubers³ consider that their activities are similar to the symbolic nature of Japanese Zen gardens. Natural elements of stones, rocks, and pebbles are used to symbolically represent earth, water, wind, and mountains (Grotenhuis 1995). In other words, it is nature's masquerade and makebelieve of something that is not there to be signifying something that is supposed to be there. While Zen gardens are not human, the symbolic nature is similar to onnagata and the masquerading aspect of VTubers. Both are makebelieve cultures that make others believe that something that is not there is brought to life. There is no water in the Japanese Zen gardens, but spectators are made to believe that there is some by making use of the symbolic nature of stones and rocks. There is no woman or bishojo behind the male bishōjo VTuber, but spectators are made to believe that there is a bishōjo by making use of the symbolic nature of bishōjo characteristics.

Viewing performance in terms of traditional Japanese theater forms and character narratives as a way of seeing VTubers, the survey results of this research revealed that 75% of the VTubers participants were male and, out of those 75%, 64.3% used bishōjo characters. During a Twitter discussion with one of the participants, one VTuber explained that VTubers consider bishojo as a symbol (ideal) far removed from the concept of the physical female sex. Just as onnagata signifies femininity and not biological women, virtual bishōjo VTubers signify bishōjo and not biological women. In order to perform femininity, onnagata transform their appearances and mannerisms using wigs, make-up, and gestures as part of their repertoire. In the case of male bishōjo VTubers, it is not only the physical appearance of characters that creates the illusion, but also the voice in some cases. One participant said, "In fact, their [male VTubers with a bishōjo character] "kawaii move" or changes in the voice are not an imitation of real women, but an attempt to get closer to their idea... They want to be bishojo, not women... what they want is freedom from all social gender roles, not only male, but also female... what they want in bishojo may differ from one another, but one thing I believe is bishojo is the closest expression of their idea and it's not the same as real women."

There are several things that are going on in the last statement. First, is a confirmation that male VTubers who use *bishōjo* characters do not aspire to be women or to perform as biological women, just as *onnagata*. Second,

becoming a bishōjo is considered to be a freeing experience from societal expectations that the surveyed VTubers feel they face in their daily lives. Other male VTubers voiced similar opinions when it came to the liberating capacity of bishōjo characters. Two respondents said, "As a man, I found it painful to 'tweet' as a man, and the gestures I was expected to make by society and the people around me as a man, and the gestures I wanted to make were very confining. When I found out about VTubers, and, in the process, learned about people tweeting using bishojo icons, I decided to give it a try!" And the second, "The concept of a bishōjo without a physical body is very freeing... I believe that a bishōjo is a person who is bound by her own body and sought out by society. I want all people to experience the feeling of being able to dismiss the roles that society expects of them, when they are bound by their physical bodies, by becoming a bishōjo." Bishōjo echoes "a world of dreams, transformation, and possibility" (Galbraith 2019a, 38) and a liberation from constructed hegemonic social gender norms. One VTuber went as far as to propose a "Humanity bishōjo plan." According to him, if everyone is a bishōjo, then there is no more differentiation based on sex and gender, as well as no more societal pressure and hegemonic social regulations to act a certain way-all leading to a liberating, fulfilling experience of being a bishojo.

Up until now this paper has been using the term "male bishōjo VTubers" to describe men who use virtual bishōjo characters for their VTuber activities. While some male VTubers just call themselves "virtual bishōjo," others use a different term—babiniku. In Japan, バ美肉 babiniku (virtual, bishōjo, incarnation) are people who use bishōjo characters and consider themselves being virtually reborn as a bishōjo (Bredikhina 2020; Editorial Department 2018; Netorabo 2019; Yamada 2018). The term was created by the VTuber community and is not restricted to men, however, in this survey only men engage in this activity. Babiniku has strong liberating agency, as one VTubers says, "Once the shell of the physical body is shed, the individual can enjoy activities as an unfettered soul4." Not all men who use a bishōjo character call themselves babiniku; some use the term babiniku-ojisan (babiniku middle-aged man). According to the surveyed VTubers, each term implies a different meaning. Virtual bishojo is used by men who want to stress that they are a virtual bishojo. The term babiniku-

³ https://nlab.itmedia.co.jp/research/articles/4816/amp/#outline_3

⁴ https://grapee.jp/en/144615

ojisan is used to signify that it is a middle-aged man who is playing the part of the bishōjo. The audience is then conscious that it is a middle-aged man performing as a lovely, energetic, young bishōjo. What Keen (1971, 62) said regarding onnagata, "rejection of reality in favor of an unearthly, stylized beauty that can dazzle audiences into believing that an old man with a heavy powdered face is a miracle of feminine loveliness," also applies to babinikuojisan and to babiniku in general, as the majority of viewers consider babiniku to be of male sex in the physical world.

The term babiniku stresses the idea of a previous physical existence attached to a physical body and the current reincarnation as a bishojo, signifying the dualistic nature of babiniku existence. The main difference between a babiniku and a virtual bishōjo is the reattachment to a previous existence, in the case of a babiniku, and the autonomous entity of a virtual bishojo. The "incarnation," or rather "re-incarnation," is a key word in the babiniku narrative. Re-incarnation implies a gap between the previous physical body and the new soul of the bishojo character. While the desire to become a babiniku seems like an escape from reality; babiniku VTubers are conscious of the instability of their virtual existence. A babiniku VTuber⁵ explained the complex nature of *babiniku* as, "To the public, the man appears as a bishōjo, however, the man moves back and forth between the virtual figure of the bishōjo and his male body. The movement is back and forth because, while the man is a bishōjo in the virtual world, once he stops performing as a bishōjo, he goes back to his physical male body. The virtual bishojo is performing as an autonomous entity in the eyes of the public, but is also being performed by the man, resulting in the dualistic nature of babiniku, as they are real and unreal at the same time. In other words, babiniku are the onnagata of virtual live-entertainment."

VTubers' testimonies confirm that bishōjo "creates spaces where both female and male fans, regardless of their sexual orientations, can temporarily transcend their everyday gender expectations and roles" (Nakamura and Matsuo 2005). Just as kawaii, becoming a bishōjo character is a form of resistance, a way to communicate with others, and a way of expressing oneself outside of the dominant social codes that the participants felt pressured by. Virtual bishōjo are a bishōjo "gender performance" (Butler 1988),

a masquerading practice for creating live-entertainment content, a way to rethink how individuals want to portray themselves in a society, and how they want that society to be (in the case of "humanity bishōjo plan"). Bishōjo allow people to envisage new ways one wants to be outside of the dominant model of gender roles that VTubers felt obliged to follow in Japanese society. However, just as the femininity that is performed by onnagata is conservative and portrays pre-constructed and assimilated notions of common feminine elements, the bishōjo that is performed by babiniku or by virtual bishōjo VTubers, portrays pre-constructed and assimilated notions of kawaii and bishōjo.

We attempted to understand babiniku approach and grasp its transgressive dimension by studying their practices through the prism of the arts from which they claim to draw inspiration, not reference in terms of actors' jobs, and elevate to a digital version. While the babiniku appearance is stereotypical, they challenge the hegemonic social gender narratives and act outside of dominant male values. The hegemonic male figure collapsed in the post-Bubble of the 90's and has since allowed other masculinities to emerge (Dasgupta 2009). However, negative traits are still attributed to certain men (Shoji 2011). Babiniku, thus, create a gap between the kawaii avatar and the man standing behind: Beauty and the Beast (Nakayama 2018). Babiniku could be a form of societal revolution that challenges hegemonic social norms under the disguise of entertaining activity. We suggest that babiniku consciously craft a notion of virtual femininity that is a powerful expression of contemporary Japanese zeitgeist.

Future Perspectives

This paper examined VTubers from the perspective of traditional Japanese performance arts, however, in future research, VTubers can also be seen from the point of view of "idol culture," which has a higher percentage of female performers. Japanese VTubers often consider themselves to be virtual idols, following in the steps of Hatsune Miku⁶, a popular vocaloid software whose *bishōjo* was a *moe* anthropomorphic teenage girl with very long, turquoise ponytails. VTuber idol shows are broadcasted on Japan's

GVvX3dhdGNoX3BsYXlsaXN0X3VwbG9hZGVkIiwidXNlcklkIjo0ODkwNTc3fQ

https://www.nicovideo.jp/watch/sm36826212?playlist=eyJpZCI6InZpZ

⁶ https://stripeless.booth.pm/items/2013638

national station, NHK⁷; the majority of famous VTubers have their own songs and sing at concerts. Some even virtually meet-up with their fans to shake hands. ⁸ Are VTubers just another form of idols, or is there a difference between a physical and a virtual idol? The author would like to propose a hypothesis based on fieldwork observation: "The participatory culture among VTuber *idols* is stronger than that between physical *idols*, changing the relationship between the *idol* and its fans."

Conclusion

Taking the origins and conceptual inspirations from kabuki and ningyō jōruri, VTubers developed as a new and popular art form of live entertainment, that combined storytelling and virtual puppet manipulation technology. The technology behind VTubers (such as VR equipment and motion-tracking software) enables a user to create the illusion that their virtual character moves and speaks freely on its own, making the non-living alive, while, in fact, it is just a puppet manipulated and animated by a human, resulting in a new form of ningyō jōruri. The creativity of VTuber performances is shaped by different values that come into play as they perform their virtual characters, such as kawaii repertoire, bishōjo existence, and personal desires. The character archetype of a bishojo, commonly found among VTubers, brings soothing powers, the experience of freedom from societal expectations, and the kawaii existence, thus the *bishōjo* is very popular amongst viewers. At the same time, bishōjo that is performed by VTubers extends back to pre-constructed and assimilated notions of kawaii and bishōjo elements. This paper has proposed similarities between Japanese performance arts and VTubers. As this paper begun examining the symbolism behind virtual puppets and characters, it became clear that there is a greater socio-cultural habitus behind the masquerading practice of VTubers. Just as with ningyō jōruri and kabuki, VTubers redraw lines between the performer, the actor, the signified character, and gender.

References

Alland, Alexander. 1979. "The Construction of Reality and Unreality in Japanese Theatre." *The Drama Review: TDR* 23 (2): 3–10. https://doi.org/10.2307/1145211.

- Bolton, Christopher. 2018. "Puppet Voices, Cyborg Souls: Ghost in the Shell and Classical Japanese Theater." In *Interpreting Anime*, 95–136. University of Minnesota Press. https://doi.org/10.5749/j.ctt20fw7d7.7.
- Bourdieu, Pierre. 2014. *La Domination masculine*. Édition revue et augmentée. Points.
- Bredikhina, Liudmila. 2020. "Designing Identity in VTuber Era." Edited by Simon Richir. *ConVRgence (VRIC) Virtual Reality International Conference Proceedings*, April, 182–85. https://doi.org/10.20870/IJVR.2020...3316.
- Bredikhina, Liudmila, Takayuki Kameoka, Shogo Shimbo, and Akihiko Shirai. 2020. "Avatar Driven VR Society Trends in Japan." In *IEEE VRinVR*. Atlanta: IEEE.
- Burdelski, Matthew, and Koji Mitsuhashi. 2010. "'She Thinks You're Kawaii': Socializing Affect, Gender, and Relationships in a Japanese Preschool." *Language in Society* 39 (1): 65–93.
- Butler, Judith. 1988a. "Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory." *Theatre Journal* 40 (4): 519–31. https://doi.org/10.2307/3207893.
- ——. 1988b. "Performative Acts and Gender Constitution: An Essay in Phenomenology and Feminist Theory." *Theatre Journal* 40 (4): 519. https://doi.org/doi:10.2307/3207893.
- Condry, Ian. 2013. The Soul of Anime: Collaborative Creativity and Japan's Media Success Story. Durham: Duke University Press.
- Daniellou, Simon. 2015. "De l'onnagata Du Kabuki Aux Acteurs Transformistes Du Cinéma Japonais : Convention Conservatrice et Distanciation Subversive." In *Esthétique(s) "queer" Dans La Littérature et Les Arts : Sexualités et Politiques Du Trouble.*, edited by Muriel Plana and Frédéric Sounac, 295–307. Éditions universitaires de Dijon. https://hal.univ-rennes2.fr/hal-02374014.
- Dasgupta, Romit. 2009. "The Lost Decade of the 1990s and Shifting Masculinities in Japan." *Culture, Society and Masculinities* 1 (1): 79–95. https://doi.org/10.3149/csm.0101.79.
- Editorial Department. 2018. "バ美肉 Babiniku." V ティーク V-Teek, November 10, 2018.
- Elzey, John M. 1987. "Awa Ningyō Jōruri: Provincial Puppet Theatre." *Asian Theatre Journal* 4 (1): 115–21. https://doi.org/10.2307/1124439.
- Galbraith, Patrick W. 2019a. "Moe. An Affective Response to Fictional Characters." In *Otaku and the Struggle for Imagination in Japan*, edited by Patrick W. Galbraith, 76–126. Durham: Duke University Press.
- ——. 2019b. "Otaku and the Struggle for Imagination in Japan." In *Otaku and the Struggle for Imagination in Japan*, edited by Patrick W. Galbraith, 1–20. Durham: Duke University Press.

⁷ https://www6.nhk.or.jp/anime/topics/detail.html?i=9721

⁸ https://t.livepocket.jp/e/shabefes-a2p

- Greenwood, Forrest. 2014. "The Girl at the Center of the World: Gender, Genre, and Remediation in Bishōjo Media Works." *Mechademia* 9: 237–52. https://doi.org/10.5749/mech.9.2014.0237.
- Grosz, Elizabeth, and Peter Eisenman. 2001. *Architecture from the Outside: Essays on Virtual and Real Space*. Cambridge, Mass: The MIT Press.
- Grotenhuis, Elizabeth Ten. 1995. "The White Path Crossing Two Rivers: A Contemporary Japanese Garden Represents the Past." *The Journal of Garden History* 15 (1): 1–18. https://doi.org/10.1080/01445170.1995.10412512.
- Guga, Jelena. 2014. "Virtual Idol Hatsune Miku." In *Arts and Technology*, edited by Anthony Lewis Brooks, Elif Ayiter, and Onur Yazicigil, 145:36–44. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering. Cham: Springer.
- Jin-Shiow, Chen. 2015. "Beautiful, Meaningul and Powerful. Explorations of the 'Bishojo (Beautiful girl)' and 'Bishonen (Beautiful Boy)' in Taiwan's Anime/Manga Fan Culture." In *International Perspectives on Shojo and Shojo Manga: The Influence of Girl Culture*, edited by Toku Masami, 109–19. New York; London: Routledge.
- Keene, Donald. 1978. *Landscapes and Portraits*. Tokyo, Palo Alto Calif.: Kodansha America, Inc.
- ———, ed. 1994. Anthology of Japanese Literature: From the Earliest Era to the Mid-Nineteenth Century. New York: Grove Press.
- King, Emerald. 2019. "Sakura Ga Meijiru—Unlocking the Shōjo Wardrobe: Cosplay, Manga, 2.5D Space: Exploring 'Girl' Practices in Contemporary Japan." In *Shōjo Across Media*, edited by Jaqueline Berndt, Kazumi Nagaike and Fusami Ogi, 233–60. https://doi.org/10.1007/978-3-030-01485-8_10.
- Kinsella, Sharon. 1995. "Cuties in Japan." In *Women, Media and Consumption in Japan*, edited by Lise Skov and Brian Moeran, 220–54. Honolulu: University of Hawaii Press.
- Kobayashi, Nobuyuki. 2018. "VTuber は、世界に向かって AI を叫ぶ VTuber wa, sekai ni mukatte AI o sakebu [VTuber shouts AI to the world]." In ユリイカ 2018 年7 月号 特集=バーチャル YouTuber Yuriika 2018-nen 7 tsuki-gō tokushū = bācharu YouTuber [Eureka July 2018 Special Feature], 41–44. Tokyo: Seido.
- Kott, Jan, and Boleslaw. 1976. "Bunraku and Kabuki, Or, About Imitation." *Salmagundi*, no. 35: 99–109.
- Kontake. 2019. "やっぱりリアルよりネットの世界だな! 新しい自分になれるかもしれない「バ美肉」とは Yappari riaru yori netto no sekaida na! Atarashī jibun ni nareru kamo shirenai babiniku to wa [I Knew It Was More Online than Real Life! Babiniku" Could Be a New You!]." ねとらぼ. March 2019.
 - https://nlab.itmedia.co.jp/nl/articles/1903/04/news082 .html.

- Lamarre, Thomas. 2009. *The Anime Machine: A Media Theory of Animation*. Minneapolis, Minn.: University of Minnesota Press.
- Leiter, Samuel L. 1999. "From Gay to Gei: The Onnagata and the Creation of Kabuki's Female Characters." *Comparative Drama* 33 (4): 495–514.
- Lufkin, Bryan. 2018. "The Virtual Vloggers Taking over YouTube." BBC. October 3, 2018. https://www.bbc.com/worklife/article/20181002-the-virtual-vloggers-taking-over-youtube.
- May, Simon. 2019. *The Power of Cute*. Princeton; Oxford: Princeton University Press.
- Minoru, Hirota. 2020. "Yūzārōkaru, bācharu YouTuber no 1 man-nin toppa o happyō 9000-nin kara 4-kagetsu de 1000-nin-zō ユーザーローカル、バーチャル YouTuber の 1 万人突破を発表 9000 人から 4 ヵ月で 1000 人増 [User Local Announces 10,000 Virtual YouTuber Breakthroughs Increase from 9000 to 1000 in 4 Months]." *PANORA* (blog). January 15, 2020. https://panora.tokyo/archives/4247.
- Moore, Henrietta. 2012. "Avatars and Robots: The Imaginary Present and the Socialites of the Inorganic." *Cambridge Anthropology* 30 (1): 48–63. https://doi.org/doi:10.3167/ca.2012.300106.
- Mori, Mitsuya. 2002. "The Structure of Theater: A Japanese View of Theatricality." *SubStance* 31 (2/3): 73–93. https://doi.org/10.2307/3685479.
- Morie, Jacquelyn Ford. 2007. "Performing in (Virtual) Spaces: Embodiment and Being in Virtual Environments." *International Journal of Performance Arts and Digital Media* 3 (2–3): 123–38. https://doi.org/10.1386/padm.3.2-3.123_1.
- Nagy, Peter, and Bernadett Koles. 2014. "The Digital Transformation of Human Identity: Towards a Conceptual Model of Virtual Identity in Virtual Worlds." *Convergence* 20 (3): 276–92. https://doi.org/doi:10.1177/1354856514531532.
- Nakamura, Karen, and Hisako Matsuo. 2003. "Female Masculinity and Fantasy Spaces: Transcending Genders in the Takarazuka Theatre and Japanese Popular Culture." In *Men and Masculinities in Contemporary Japan*, edited by James E. Roberson and Nobue Suzuki, 59–77. Routledge.
- Nakayama Kako. 2018. "おじさんの「かわいい」生存 戦略 ー老いに関するフェミニスト老年学的視座 からの一考察 Ojisan no 'kawaī' seizon senryaku oi ni kansuru feminisuto rōnen-gaku-teki shiza kara no ichikōsatsu [Uncle's 'Cute' Survival Strategy-A Study from a Feminist Gerontological Perspective on Aging]." *Gender and Sexuality*, no. 13 (March): 61– 84.
- Nozawa, Shunsuke. 2013. "Characterization." *Semiotic Review*, no. 3 (November).
- Saito, Kumiko. 2014. "Magic, Shōjo, and Metamorphosis: Magical Girl Anime and the Challenges of Changing Gender Identities in Japanese Society." *The Journal of Asian Studies* 73 (1): 143–64. https://doi.org/10.1017/S0021911813001708.

- Shirai, Akihiko. 2019. "VR 4. 0 -
 - Riarutaimubācharukyarakutā ga ken'in suru VR zangyō ni okeru kiso kenkyū 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 Journal* 6: 82–92.
- Shoji, Kaori. 2011. "Whose Fault Is the Rise and Fall of the Japanese Ojisan?" *The Japan Times* (blog). August 22, 2011. https://www.japantimes.co.jp/life/2011/08/22/languag
 - e/whose-fault-is-the-rise-and-fall-of-the-japanese-ojisan/.
- Suan, Stevie. 2013. *The Anime Paradox: Patterns and Practices Through the Lens of Traditional Japanese Theater*. Leiden; Boston: Global Oriental.
- Sugawa, Akiko. 2019. "Shōjo in Anime: Beyond the Object of Men's Desire: Exploring 'Girl' Practices in Contemporary Japan." In *Shōjo Across Media*, edited by Jaqueline Berndt, Kazumi Nagaike and Fusami Ogi, 181–206.
- Taylor, T. L. 2002. "Living Digitally: Embodiment in Virtual Worlds." In *The Social Life of Avatars*, edited by Ralph Schroeder, 40–62. London: Springer. https://doi.org/10.1007/978-1-4471-0277-9_3.
- Treat, John White. 1995. "Yoshimoto Banana's Kitchen, or the cultural logic of Japanese consumerism." In *Women, Media and Consumption in Japan*, edited by Lise Skov and Brian Moeran, 274–99. Honolulu: University of Hawaii Press.
- Tschudin, Jean-Jacques. 2011. *HISTOIRE DU THEATRE CLASSIQUE JAPONAIS*. Toulouse: ANACHARSIS.
- Webb, Stephen. 2001. "Avatarculture: Narrative, Power and Identity in Virtual World Environments." *Information, Communication & Society* 4 (4): 560–94. https://doi.org/10.1080/13691180110097012.
- White, Merry. 1993. The Material Child. Coming of Age in Japan and America. First Edition edition. Free Press.
- Yamada, Yūsuke. 2018. "あゝ、狂騒のコンテンツ時代よ。バーチャル YouTuber の勃興は 2018 年に何をもたらしたか Ā, kyōsō no kontentsu jidai yo. Bācharu YouTuber no bokkō wa 2018-nen ni nani o motarashita ka [Ah, the Mad Age of Content. What the Rise of the Virtual YouTuber Has Brought in 2018]." December 31, 2018.
- https://www.gizmodo.jp/2018/12/vtuber-2018.html Yano, Christine R. 2009. "Wink on Pink: Interpreting Japanese Cute as It Grabs the Global Headlines." The Journal of Asian Studies 68 (3): 681–88.
- Yoshinobu, Tanji. 2019. "Kizunaai wa naze Hatsune Miku o 'senpai' to yobu no ka キズナアイはなぜ初音ミクを「先輩」と呼ぶのか [Why Does Kizuna AI Call Hatsune Miku 'Senior'?]." Bōkaroido ongaku no sekai ボーカロイド音楽の世界 [The World of Vocaloid Music] 4: 86–94.