

Artificial Intimacy: Gynoid and Artificial Intelligence in Japanese Character Intimacy Game Software

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Abstract

Within Japanese video game production, video games centered on developing intimate bonds with characters depict artificial intelligence in gendered fashion. *Kikaijikake no Ibu -Dea Ex Machina-* is one such work, featuring romanceable gynoid characters juxtaposed with a science fiction narrative. This paper provides an exploration of the game, with particular attention to the affordances exerted by the marking of characters as gynoids, providing perspectives regarding modes of depicting artificial intelligence within a niche Japanese game culture. A.I. is articulated as gynoid (maid robot) characters, filling gendered roles emotionally complementary with the user's own position, highlighting overarching tendencies of living with and interacting intimately with technology. How does artificial intelligence fit into games of intimacy? What kind of relations it engenders with users? Through close reading of *Kikaijikake no Ibu -Dea Ex Machina-*, this paper highlights the effects of a gendered media culture on representations of artificial intelligence as gynoids. This places the AI into a submissive position. At the same time, users are in a subservient position with both technology and its gendered character embodiment.

Introduction

Within Japanese video game production, and in particular video game works in continuity with anime and manga, “visual novels” and “romance adventure games” (Saito 2021) are iconic in featuring imagined intimate interactions with anime-manga characters. The focus of such video games is on establishing, developing, and fulfilling intimate relationships with one or more anime-manga characters, with sexual intimacy depicted in erotic and pornographic fashion, serving as a reward for player progress (Miyamoto 2013, 24). Most of these works of interactive software are centered in consuming software in passive fashion, featuring limited ways of altering the game's overall outcome, together with a restrictive range of mechanical affordances (cf. Hichibe 2006, 70; see also Koyama 2020 [2016], 218-219). Players read prose text, enjoy visual illustrations, and listen to aural performances, “bridging the gap” existing between prose, visuals, and sound with their imagination (Galbraith 2021b, 134). Visual novels and romance adventure games are intended for personal engagement and, except for recent online-centered works oriented towards female audiences (cf. Giard 2019; Ganzon 2017). They elicit private

consumption, while communal engagement is deferred, with a strong ethic of appropriate time, appropriate place, and appropriate company – which might be no company – for playing (Tosca and Klastrup 2019, 184; Galbraith 2019, 84; Au Yeung 2008). Visual novels and romance adventure games, although still developed with a Japanese audience in mind, declining as it might be (Galbraith 2021b, 20; Yano Research Institute 2014, 2), are undergoing a growing global diffusion (Galbraith 2021a).

In visual novels/romance adventure games intimacy is the fulcrum of video game traversal. Players move from an initial state where they – as an avatar character – possess little to no intimacy with the game's cast of romanceable characters, towards success states where an intimate relationship with one or more characters is fulfilled. Players, by navigating through the game story, gravitate towards characters of their choice, progressively gaining intimacy until the character's storyline is concluded. The storylines of romanceable characters are deeply personal, opening the inner world of the character for players to experience. A few works play with the multiplicity of perspectives on the game's plot that comes with having multiple character storylines, rewarding players with a true conclusion only when they complete



some (or all) character storylines (Tosca and Klastrup 2019, 179-182).

Visual novels/romance adventure games are part of a specific niche of the Japanese media landscape, where the connection between anime, manga, and video game/gēmu (cf. Hutchinson 2019, 2 and Picard 2013, n.p.) is significantly more pronounced than within mainstream media production. Such a niche is connected with tangible and virtual contexts of content production and reception such as Akihabara and Otome Road (Galbraith 2021b, 77-115; 2019, 97-139; Morikawa 2012, 139-141; 2008 [2003], 81-101). Contexts such as Akihabara/Otome Road feature the presence of distinct and semi-formal systems, aesthetic and narratological, for content production and reception. They are in effect before and beyond the affordances of individual media forms (Galbraith 2021b, 170-171; Santos 2020, 6-8; Bruno 2019, 42-47; Azuma 2009 [2001], 34-56; 79-81; 2007; 67). Exemplar of such systems is the emergence of so-called database/moe elements (Azuma 2009 [2001], 39-42 and 2007, 41-45): free-floating, discrete templates for character design, the combination of which not only grounds character identity as a sequence of recognizable elements (Iwashita 2016, 166-167). This not only allows the creation of new content in continuity with existing practices, but also allows creation of new content for existing characters, maintaining character recognizability (cf. Nozawa 2013, np.) and diminishing the influence of authorial intention (Azuma 2009 [2001], 80-83).

Knowing how to read/parse these semi-formal systems (cf. Iwashita 2016; Kacsuk 2016, 277) is fundamental for stories produced within contexts such as Akihabara and Otome Road to make sense (Azuma 2007, 36-49), implying the existence of emergent media literacies (Galbraith 2021b, 134; Kagami 2010, 131). Cultural critic Azuma Hiroki envisions phenomena such as those revolving around Akihabara and Otome Road as “imaginative environments” [*sōzōryoku no kankyō*] (Azuma 2007, 36-41, 196), recognizable contexts of media production and consumption highly aware of their internal affordances. The environment encompasses multiple media formats such as animation (anime), printed matter (manga, light novels [*raito noberu*]) and video game genres such as visual novels/romance adventure games. The imaginative environment also expresses multiple avenues for social practices in physical and virtual spaces (Dit Alban 2020, 2016, Baffelli and Yamaki

2018; Sugawa-Shimada 2020; 2019; 2015; Steinberg and Ernest dit Alban 2018; Steinberg 2015; Sharp 2014; Morikawa 2012; 2008 [2003]).

Azuma’s approach to imaginative environments is part of a wider discourse, highlighting a progressive fragmentation of Japanese media production into niches with distinct audiences, affordances, and practices (cf. Ōtsuka 2014; 2004, Ōtsuka and Steinberg 2010 [1987]; Saitō 2014; 2011 [2000]; Azuma 2009 [2001]; 2007; Azuma, Saitō and Kotani 2003a; 2003b). Beyond interactive and static media, characters arraying a sequence of recognizable templates represent a “basic unit of narrative” (Azuma 2007, 45), a sort of minimum common denominator that signals that the affordances internal to the imaginative environment are in effect (Bruno 2019, 38). There are hundreds of discrete templates and a proportional number of combinations (Galbraith 2021b, 128-130; Kagami 2010, 131). Some can be single pieces of visual design, such as ribbons or costumes, other keywords refer to [archetypical plots] (Galbraith 2021b, 130). Some provide visual distinctiveness, such as hairpins or elements of a character’s clothes, or some hair styles. Other include character archetypes such as the maid (visually identified by her uniform) or the *Ojōsama* [noble daughter]/*Onzōshi* [noble son] specular archetypes, which point at characters raised in wealth and luxury. While comprehensive classification of design elements is well beyond the scope of this paper, each offers a spectrum of potentialities that influence the arrays of expectations elicited in users.

One template referring to entire scenarios originates in so-called ‘robot maid’ [*meidorobo*] characters, which first emerged within the *ToHeart* (Leaf 1999-2008) series of visual novels/romance adventure games (*Pikushibu hyakkajiten* [Pixiv Encyclopedia] 2021). Works focused on gynoid-maid characters include the *Mahromatic* transmedial franchise (Nakayama Bunjūrō 1998-2004, GAINAX 2001; 2002-2003), *ToHeart* (Leaf 1999), which featured, respectively, the characters of Andō Mahoro and Multi. Visually, gynoid characters can be recognizable via explicit visual signifiers such as antennas in place of ears, features such as mechanical wings protruding from the character’s back or segments of skin suggesting a mechanical body in place of an organic one. Whereas there is no immediate visual signifier, the character will present the capability to change into a super-powered form, or to deploy mechanical parts at will.

Robot maids, as characters within the imaginative environment of Akihabara/Otome Road and Japanese niche video game culture, are featured across a range of characters in Japanese character intimacy games and associated media (anime, manga, figurines etc.). Gendered as female, robot maids evolved into a multitude of characters, all arraying an archetypical storyline calling for specific, complementary roles for both player and character.

While the presence of a gynoid in an otherwise present-day setting is usually deployed as a way of providing humorous situations, there are also character intimacy games which place human (player)-gynoid interaction at their forefront. Intimacy is emotional and physical, with the capability to develop feelings employed as a trope to signify her closeness to humanity. Her depiction under erotic and pornographic circumstances, on the other hand, calls for specific roles for both humans and gynoids. In turn, this exposes views on the role of A.I. in a niche segment of Japanese and, with the global diffusion of character intimacy game software (cf. Galbraith 2021b), Japanese-aligned gaming cultures. *Kikaijikake no Ibu -Dea Ex Machina-* [Clockwork Eve -Dea Ex Machina-] (Ninetail 2006) is one such work.

The archetypical roles played and elicited by robot maid characters, as gynoids, artificial intelligences gendered as female, reveal underlying currents in the culture of visual novels/romance adventure games in Japan. They reveal an underlying vision of human-robot relationships and how artificial intelligence, grounded as gynoid, may relate to human users and partners. Articulating an exploration of gynoid characters in Japanese visual novels/romance adventure games, this paper will first define intimacy in gamic terms, and subsequently provide an overview of robot maid characters, using *Kikaijikake no Ibu -Dea Ex Machina-* as a case study for gynoid characters in Japanese niche gaming culture.

Games Of Intimacy, Characters For Intimacy: Towards 'Character Intimacy Games'

Within visual novels/romance adventure games, romanceable characters represent the fulcrum of the in-game experience. Self-evident as the statement may be, it highlights the role of romanceable character in software traversal and the overall creation of the in-game experience. Romanceable characters in visual novels/

romance adventure games produced in Japan and Japanese-contiguous contexts are not just entities confined to the video game text. As outlined in the introduction to this paper, they call upon wider, emergent media literacies beyond individual video game works. Character here is not intended as one singular character with a distinctive identity, or at least not yet. Rather it is intended as pointing to a class of characters in visual novels/romance adventure games, *bishōjo* [female cutie] and *bishōnen* [male cutie] where the usage of shared design templates is synonymous with their descriptor. *Bishōjo*, rooted in *chara-moe* aesthetics (Sasakibara 2004, 16-26), are female characters, characterized by the juxtaposition of neotenic cuteness and hyper-sexualization (Nagayama 2014, 134-136). *Bishōnen*, drawing from the aesthetic continuum of *shōjo*, *josei* and *BL/yaoi* works (cf. Shamooin 2012), juxtapose gender-fluid androgynous youthfulness (Sihombing 2011, 151; McLelland 2010; Welker 2006, 865–866) with “heterosexual romance stereotypes and common heteronormative expectations such as trust, fidelity” (Andlauer 2018, 173). Such entities can be seen as interactors (Galbraith 2019, 89) eliciting users towards imaginative action. By structuring recognizable templates for character design into a character identity, *bishōjo* and *bishōnen* characters anticipate possible stories, user-character interactions (actual, in-game and imagined) and narrative situations, regardless of narrative genre or themes, geared towards depicting intimacy and providing archetypical templates for creating and imagining intimate relationships.

This comes into play during visual novels/romance adventure games, as the player is presented with what is an ensemble of incomplete information across linguistic, visual and aural channels: prose text is usually written in the first person, without extensive descriptions; character and locale visuals, except for specific ‘reward images’, are not tied to the current scene (Bruno 2019, 43-47; Miyamoto 2013, 24); aural performances do not encompass all characters – the player character is usually left unvoiced – or the totality of their lines. Knowing how to parse character designs is therefore necessary to enjoy the experience of visual novels/romance adventure games, as players are called to produce their own personal rendition of the narrative. Players, as they encounter characters, are not mere recipients of narrative content; rather, they are called to what is a process of co-creation (Galbraith 2021b, 134; 2019, 40-42) in which they

imaginatively (re)assemble the constituent parts of the character identity, (re)contextualizing them into narrative situations as they come into the narrative. In other words, players are given a set of instructions to compute into situations, rather than the free-flow imagination stemming from prose untied to imaginative environments.

By extensively relying on player imaginative prowess to “fill in the blanks” (Galbraith 2021b, 134) in guided fashion and by setting their focus on romance and intimate relationships, visual novels/romance adventure games elicit players toward intimacy in a wider sense: intimacy with the character and intimacy with the commonality of practices involved in producing and receiving character content. For the purposes of this paper, ‘intimacy’ refers, broadly, as “the disclosure of emotions and actions which the individual is unlikely to hold up to a wider public gaze” (Giddens 1992, 138). Intimacy is “a matter of emotional communication, with others and with the self, in a context of interpersonal equality” (Giddens 2013, 94). Guo Freeman, Jeffrey Bardzell and Shaowen Bardzell (2016) augment this definition by referring to Ethel Spector Person’s (1980) explication of such disclosure as “a conduit of sexuality, which symbolizes union with the loved object (in a broader sense, including friends, kinship, lovers, etc.), especially in those cultures in which so many other expressions of physicality are proscribed” (Freeman et al 2016, 4326).

For Shaka McGlotten, intimacy is “a feeling of connection or a sense of belonging; embodied and carnal sensuality, that is, sex; and that which is most inward or inmost to one’s personhood. Intimacy is also a vast assemblage of ideologies, institutional sites, and diverse sets of material and semiotic practices that exert normative pressures on large and small bodies, lives, and worlds” (2013, 10). Intimacy is born, first and foremost, into one’s imagination and subsequent emotional states. It is “an aspiration for a narrative about something shared, a story about both oneself and others that will turn out in a particular way. Usually, this story is set within zones of familiarity and comfort: friendship, the couple, and the family form, animated by expressive and emancipating kinds of love” (Berlant 1998, 281).

In the case of visual novels/romance adventure games, intimacy is first and foremost the articulation of an interactive experience centered on a growing closeness between two or more actors, one of which is player-controlled, through a combination of narrative and

mechanical frameworks. No matter the intended audience, the sexual orientation of involved characters and players, themes, or plots, engaging with one or more character is a movement towards union with the character as a loved object. It is, at the same time, diegetic – part of player characters’ role in a romanceable character’s story – and non-diegetic – part of players’ engagement with that character. The sense of intimacy towards characters is virtual, born out of players’ capability to imaginatively contextualize the design templates composing character identity into the situations depicted within games. On the one hand, visual novels/romance adventure games are video games of intimacy, providing players with romantic and intimate interactions. On the other hand, entities like bishōjo and bishōnen, by featuring overarching systems for content production and reception centered on imagining intimacy with characters, are arguably ‘characters you can get intimate with’.

Although romance and sexual intercourse depicted in pornographic fashion are the most evident forms of character intimacy in visual novels/romance adventure games, the scope should be wider, beyond what may be suggested by the visual novels/romance adventure games descriptor. Expanding the sense of intimacy to include, but also go beyond romance and sexual intercourse, calls for the consideration of familiar bonds and emotional-physical states such as illness and grief forcing closeness upon actors within a relationship. In her examination of representation of intimate acts and relationships in contemporary literature, Jennifer Cooke argues that intimacy in such a wider sense can “bring us into intimate contact with strangers or alter the shape and experience of our existing intimacies” (2013, 3). Examples of intimacy in a wider sense in visual novels/romance adventure games include works such as *Kana ~Imōto~* [Kana Little Sister] (D.O. 1999) or *Enzai -Falsely Accused-* (Langmaor 2002). In *Kana ~Imōto~*, players fill the shoes of Tōdō Takamichi, whose adopted little sister Kana is suffering from late-stage chronic renal insufficiency which will likely end up with her dying very soon. *Kana ~Imōto~*, while featuring an explicit para-incestuous relationship between Takamichi and Kana, calls players to use the developing intimate bond to face the impending tragedy. More importantly, they are not called on to save Kana, rather, to interface with her suffering. In *Enzai -Falsely Accused-*, players fill the shoes of Guys, a young man thrown into jail for a crime they didn’t commit. In

interacting with fellow male inmates, players as Guys experience various forms of forced sexuality, contiguous with *BL/Yaoi* aesthetics. To solve the mystery connected to his incarceration, Guys is faced with having to make the most of deepening intimate bonds. These might turn ‘serious’, with several endings having guys escape with one romanced character. These relationships may also end with Guys’ death. As argued by Mimi Okabe and Jérémie Pelletier-Gagnon, “*Enzai* is an exploration of the Yaoi condition and mental space where on the one hand, pleasure is derived from the production of Yaoi cultural products (through the enthusiasm associated with *asobigokoro*), but that same pleasure works as a form of self-inflicted violence against the Self as it renders producers of Yaoi at the margins of society” (Okabe and Pelletier-Gagnon 2019, 49).

Critic Sasakibara Gō also emphasizes the focus on responding to the character’s action as the focus of character intimacy games [*bishōjo* games]: to bear responsibility for the character’s emotional responses, which are what influences her life in a variety of ways (2004, 164–166) – with *Kana ~Imōto~* being a seminal example. If players make the correct choices, the outcomes are positive; if players choose incorrectly, the outcomes are negative, for both player characters and for *bishōjo*.

Intimacy in a wider sense may therefore be both the means and the end of games falling under the visual novels/romance adventure game label, requiring a different descriptor. There are in-game contexts providing avenues for imagining intimacy – in the wider sense of the word – with characters and establishing, developing, and fulfilling character-based intimacy. At the same time, there are overarching, semi-formalized systems for producing and receiving content acting in conjunction with software code proper in the game. This renders video game software like visual novels/romance adventure games ‘character intimacy games’. Such a descriptor expands emphasis from reading and passive content consumption in general (cf. Hichibe 2006, 70) and romance (Saito 2021) into intimacy in a wider sense. ‘Character intimacy game’ highlights that intimacy is not solely romance, as it’s not solely sexual intercourse, and does not restrict examination of mechanical frameworks to reading as it happens in the case of visual novel. It also highlights the need for actors – players and characters – within imagined intimate relationships and the role that they might play.

Consequently, this paper approaches *Kikaijikake no*

Ibu -Dea Ex Machina- and maid robot characters as, respectively, a character intimacy game and as ‘characters you can get intimate with’. Through their examination, it seeks to explore depiction and conception of artificial intelligence in Japanese character intimacy games. It offers a perspective on how artificial intelligence might be rendered in the imaginative environment of Akihabara/Otome Road, and how, as *bishōjo* characters, A.I. can be gendered within niche Japanese video game culture.

Sex Toys Ex Machina

Kikaijikake no Ibu -Dea Ex Machina- places players in the shoes of the software development department of Soichirō Honma Electronics (SHE), whose work leads to the development of artificial intelligence, to be deployed in gynoid bodies. Masaya is disturbed when SHE decides to deploy their newly developed artificial intelligences for military purposes, electing to flee with two gynoid A.I.s by the name of Tierra and Fam, which are the game’s two main romanceable characters. The trio are rescued by a rival company by the name of McCoy, setting the stage for a fight to stop SHE’s nefarious plans. Now a researcher with McCoy, Masaya develops an everyday life with Fam and Tierra. As they fight against SHE, the three develop affection for each other, and it’s up to Masaya to see this tale through to the end.

Differently from other character intimacy games of the period such as those in the Leaf Visual Novel Series (Leaf 1997-2003) or works such as *Fate/Stay Night* (TYPE-MOON 2003) to name but a few, *Kikaijikake no Ibu -Dea Ex Machina-* does not limit player interaction at making choices at specific points during the game’s narrative. It combines character interaction in visual novel form with a time and resource management component and a role-playing/card game system for depicting battles between A.I. characters and a variety of enemies affiliated with SHE. It is not Masaya taking the field, it is either Tierra or Fam that are tasked with fighting, explicating their position as *sentō bishōjo* [beautiful fighting girl] (Saitō 2011 [2001]), female characters tooting deadly weapons and possessing a mysterious allure, who nevertheless are subservient to a (mostly) hapless young man, who nevertheless loves them dearly. While decisions impacting whenever Masaya will romance one character or another – and by extension, which of the video game ending players are going to see – are left within the visual novel framework, scenes of intimacy rewarding player

progress are offered within the game's resource management component.

Said segments task players with controlling Masaya as he assists McCoy's personal care department in the development of sex toys. Each segment simulates R&D and product placement, accounting for the challenges of releasing new products at the right time based on market trends and fluctuation. The reward for successfully developing a sex toy is a narrative scene depicting intimate intercourse between Masaya and one (or more) of the game's romanceable characters as they test the product. Pornographic, ironic, and humorous intents of the developer notwithstanding, designing, developing, and then employing sex toys during the game's resource management segments establishes material connections outside software proper, into the wider space of otaku culture, where similar toys may circulate. It connects to what Agnes Giard calls a "search for new forms of sensuality and sexuality with nonhuman partners" (Giard, Grimaud, and Taylor 2019, 368) in Japan.

Technologizing the encounter with the imaginary lover, Giard refers to "augmented loves" [*amours augmentées*], calling forth the superimposition of multimedia elements onto physical matter (2021, 9). Augmented love is a way of augmenting the environment through the superimposition of erogenous zones – elements of sexual pleasure on points of [epistemic] "friction", taking from Dominique Lestel (2021, cit. in Giard 2021, 9). Giard advances the hypothesis that sexual practices directed at imaginary non-human lovers are "specific forms of engagement aimed at revealing the underlying properties of virtual objects in relation with human beings". Relationships "during which, ignorant of what or who they are interacting with, human beings allow someone who is also something to seduce them (and vice-versa)" (Giard 2021, 9).

By presenting development and testing of sex toys with the game's cast of romanceable characters as fundamental segment of its in-game experience, *Kikaijikake no Ibu -Dea Ex Machina* explicates the artificiality of the intimate bonds that may develop between players as Masaya and the rest of the game's cast of characters. The in-game focus on sex toys – ranging from female masturbators to bizarre contraptions capable of simulating tentacle-based pornography – juxtaposes virtual character-based intimacy with the "imagined affordances" (Nagy and Neff 2015) of and around sex

toys, the "concretization of users' perceptions, emotions, and experiences into the qualities or features of media technologies" (5). Juxtaposing sex toys development and marketing with character intimacy produces an ulterior emphasis on the artificial, virtual nature of character intimacy in Japanese character intimacy games. Tierra and Fam, the game's two main characters, are *bishōjo* characters gendered as feminine gynoids. They feature visual signifiers that mark their connection with the imaginative environment of Akihabara/Otome Road. Tierra is a robot maid, sporting technological devices on her body together with a maid uniform. Fam is not visually marked as a robot maid, but still retains technological signifiers on her visual design. Both follow prototypical narratives calling for a progressive movement from a state of non-knowledge and extreme naiveness about the world to one where they acknowledge themselves as persons on par with their human counterparts.

As players interact with Fam and Tierra – characters established as man-made lifeforms deployed into female-gendered bodies capable of feeling physical and mental sensations up to and including sexual pleasure – they are called to superimpose the imagined but physical affordances derived from sex toys onto the virtual characters. The affordances derived from Fam and Tierra's identity as characters in otaku media – *sentō bishōjo* – are in turn superimposed onto sex toys depicted within the game. Following Agnes Giard's position, this double engagement exposes the underlying properties of virtual objects in relation with human beings. Within the imaginative environment of the imaginative environment of Akihabara/Otome Road and character intimacy games such as *Kikaijikake no Ibu -Dea Ex Machina-*, the commonality of templates for character design and their subsequent emergent media literacies can be thought as formalized processes for superimposing erogenous zones on virtual objects in a given imaginative environment.

Fam and Tierra are *bishōjo* characters, oriented towards male audiences, and geared towards being 'characters you can get intimate with'. During the game, the relationship between Masaya – and by extension, players – and the two gynoids is – following Freeman, Bardzell and Bardzell's (2016) position – one of increasingly open emotional communication with others and with the self, in growing interpersonal equality. Sexual intercourse symbolizes growing communion between Masaya and Fam and Tierra and is marked as a reward for

player progression.

The process of growing intimacy, although open and allowing for growing interpersonal equality, bestows specific roles for players and characters. Players initiate the process of budding intimacy, towards which characters can only exert an imagined response, itself regulated by the emergent media literacies necessary to parse otaku content. The process is a superimposition of erogenous zones onto the environment, aided by the imagined affordances connected to sex toys and character identity. To produce this superimposition, however, players and characters are not free to do as they please; the imaginative environment specific roles to both the user as their avatar character and the character entities that drive the experience of imagined intimacy.

Submissive AI, Subservient User: Player / Gynoid Relations in Male-Oriented Character Intimacy Games

In *Kikajikake no Ibu -Dea Ex Machina-*, Tierra and Fam play assume the role of *sentō bishōjo* and could be collocated as such without further discussion. They both possess world-ending destructive potential, they both are in a position that is submissive to Masaya – and players. As argued in the previous section, players as Masaya cannot act as they please towards Tierra and Fam, exerting their will unconditionally. Such limits are reflected by how the superimposition of erogenous zones onto virtual characters is not free; rather, the virtual character, an arrangement of discrete templates, invites superimposition across predictable lines. While this feature is by no means unique of *bishōjo* gynoid characters in Japanese character intimacy games (cf. Galbraith 2021b, 104-106; Greenwood 2014, 239), they explicate underlying visions and perceptions about artificial intelligence in Japanese niche gaming cultures such as those connected with Akihabara/Otome Road.

As *bishōjo* gynoids subjected to player imagination, Tierra and Fam are in a subservient position, that is, imaginatively subordinate and responsive to external stimuli. To engage with Tierra and Fam, however, players must attune to the character's array of design templates. In the case of Tierra and Fam, players must assume a role intersecting warden, lover, substitute father and heroic inspirational figure rescuing the gynoid AI from a life of violence inflicted and sustained. They cannot simply do as they please, as the imaginative action derived from parsing

character design would not work otherwise. At the same time, the visual novel framework prevents players from enacting actions outside of the game's prose – no alternate path outside of what is written is possible or accounted for. Outside game software, imagining intimacy with *bishōjo* characters, that is parsing their assemblage of character design and superimposing erogenous zones onto it, is contingent on abiding by the implicit procedures expressed through character design. Abiding by the system of design templates arraying character identities, interaction and stories is necessary for the entire assemblage to function, and more generally, for *bishōjo*-based narratives to make sense (Azuma 2007, 67).

Outside game mechanics proper, players are elicited to abide by a prototypical narrative. In the case of *Kikajikake no Ibu -Dea Ex Machina-*, Tierra and Fam shift from beings not capable of independent existence to beings that are, for all intents and purposes, the equivalent of flesh-and-blood humans. As intimacy between the user and the gynoid progresses, so does the gynoid's capability to feel emotion, and ultimately, reciprocate love. From a metafictional perspective this an ironic statement, as the android character becoming more and more human in a way that suits the user communicates the fictive status of the experience, that is, non-representative of tangible reality (cf. Galbraith 2021b, 183-194).

Kikajikake no Ibu -Dea Ex Machina-, in featuring Tierra and Fam as its main romanceable characters, juxtaposed with pornographic depiction of sex toys usage, reveals underlying properties of player/gynoid relationships in the wider imaginative environment of Akihabara/Otome Road. By playing such games, and by extension, engaging with *bishōjo* characters – and in the case of *Kikajikake no Ibu -Dea Ex Machina-*, gynoid *bishōjo* characters, users accept character affection, superimposing erogenous zones on the character's assemblage of design templates in response. In producing such a response, players are in what can be envisioned as a subservient position: they enact their imaginative action, but at the same time such action is at the 'mercy' of the array of interactions and stories produced by the sequence of design templates composing the character's identity (cf. Iwashita 2016, 166-167).

The resulting imagined intimacy produces a double entanglement, where characters in submissive positions entangle with players in subservient roles. Within character intimacy games, artificial intelligence is

grounded as gynoid, is emotional and/or learns to feel emotions, is gendered as feminine, relating with a male, depicted as human counterpart which is ultimately subservient to her. Together they build an intimate relationship in which the two sides are depicted as fulfilling reciprocal but separated and heavily gendered roles. Such a double entanglement produces in turn a vision for specific roles of players and characters in character intimacy games and, by extension, the imaginative environment of Akihabara/Otome Road. Within Akihabara, artificial intelligence appears to be gendered as feminine, visualized as gynoid, romanceable in the context of character intimacy games. Artificial intelligence, as maid robot gynoids, assume therefore a specific, semi-formalized set of affordances, dictating how the intimacy with her should be imagined by players. Players, in turn, acquire their own personal array of potentialities through media literacy, which allow the superimposition of erogenous zones onto characters to make sense, given the appropriate context (TPO – Time, Place Occasion, cf. Au Yeung 2008, 147-148). In relating with gynoid *bishōjo* characters, players expose the underlying properties – semi-formalized as design templates and archetypical plots – of characters as objects of affection. In doing so, players attach the properties communicated within character design to artificial intelligence, in turn developing a specific, gendered vision of artificial intelligence.

Concluding Thoughts

This paper has produced an examination of video games centered on character intimacy within the imaginative environment of Akihabara/Otome Road, with a focus on *Kikaijikake no Ibu -Dea Ex Machina-* and its rendering of gynoid characters. It has argued for a shift in descriptors, from visual novel/romance adventure games towards character intimacy game, accounting for a wider range of intimacies, beyond romance and sexual intercourse. It has subsequently produced an examination of the roles that players and characters play in the construction of imagined relationships in character intimacy games, highlighting how the encouragement of imagination is never meant as a metaphorical free-for-all. Rather, it is an effort that channels imaginative actions by way of semi-formal procedures and regulations, gendering character roles and actual characters in an entanglement of subservience and submissiveness.

In *Kikaijikake no Ibu -Dea Ex Machina-*, *bishōjo* gynoid characters are juxtaposed with the materiality of sex toys in what is a re-digitalization of a materialization of character entities. While this cannot be said to be a direct link towards the development of interactive computerized personal assistants or other similar computational machines geared towards co-existing with human beings – they are certainly more spectacular in their appearance and deployment in everyday life – investigating the early roots of such development through the analysis of software works is arguably another avenue of for future academic engagements with AI in Japanese gaming cultures. At the same time, A.I. in character intimacy games is envisioned as female, that serves a male man, which in turn is subservient to her in what is an ideal male-oriented relationship. However, gynoid characters also are also the marker that the experience the player is living is completely fictive, not even fictional. It is an ideal relationship, and that's why it's a fictive experience. How much of the ironic statement of fictiveness should be taken seriously in scholarly approaches?

In games such as *Kikaijikake no Ibu -Dea Ex Machina-*, artificial intelligence, although depicted as possessing the potentiality to be equal to humans or even surpass them, is gendered as feminine, grounded as a gynoid, and articulated as a romanceable character within a character intimacy game. At the same time, authorial intent in *Kikaijikake no Ibu -Dea Ex Machina-* genders institutional actors as female - Soichirō Honma Electronics/SHE – an entity that physically creates gynoids, the female/motherly portion of a diptych where Masaya/the player is the father figure. The story provides a level of infantilization of AI, grounded as gynoids and *sentō bishōjo* and at the same time makes monsters of institutional actors (SHE) gendered as female/motherly. While it is very easy to focus on infantilization/monstering of female-gendered entities – AI and institutional actors – considering recent perspectives on character intimacy games in Japan paints a more complex picture (cf. Galbraith 2021b, 43-76): where infantilization of female AIs may be part of a wider rejection of dominant Japanese social mores, and the monstering of institutional actors could be seen as another side of such a rejection. At the same time, the depiction of institutional actors privileging AI for violence rather than intimacy may also tie to the post 9/11 zeitgeist of the time and Japanese populist pacifism. The boundary between repetition of design

elements in character creation and genre mannerism – including pacifist outlooks and gendering of roles – makes practices of close reading challenging and makes the above hypotheses uncertain.

While character intimacy games in Japan still represent a mostly underexplored niche for research, made more problematic by increased public scrutiny towards male-dominated video game cultures, they still represent a potentially fruitful way of engaging with Japanese and Japanese-contiguous niche gaming cultures. Its challenges are also problematic, as engaging with such culture, especially male-oriented ones, requires dealing extensively with explicit content which may feature sexually explicit and graphic violence, requiring “ethical encounters” (Galbraith 2021b, 139-148). Approaching character intimacy games also requires straddling between layers of irony – how ‘fictive’ characters may be and the conduct they engage in? How does this affect players? (149-152). There is much to gain, but also much to overcome.

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