The Impact of Telepresence on Cultural Transmission through Bishoujo Games

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ABSTRACT

Japanese bishoujo videogames take on the characteristics of highly detailed "choose your own adventure" novels. The current case study seeks to present a series of "classic" bishoujo videogames and explain how they function to orient the Western player to the culture of modern Japan through the phenomenon of telepresence. Aspects of telepresence that include transportation and immersion are considered toward the end of offering the player a degree of access to some aspects of modern Japanese culture. It is suggested that, by experiencing a sense of telepresence through inhabiting a Japanese avatar, the non-Japanese player has the potential to obtain a heightened level of competence in negotiating Japanese culture.

1. Background

Videogames have become a popular subject for researchers concerned with both the positive and negative effects of interactive media. Investigations into aspects of videogame play that include addiction (Phillips, Rolls, Rouse & Griffiths, 1995; Rosenfeld, 2001; Soper & Miller, 1983) and violence/aggression (Anderson & Dill, 2000; Fleming & Rickwood, 2001; Funk, Buchman, Jenks & Bechtoldt, 2003; Gentile, Lynch, Linder & Walsh, 2004; Panee & Ballard, 2002; Uhlmann & Swanson, 2004) have documented some undesirable peripheral effects of playing videogames (particularly with regard to children) that include decreased empathy, increased violence, diminished academic accomplishment and poor development of interpersonal skills.

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Conversely, videogames have also been explored for their potential to provide desirable effects such as therapy, including pain and stress relief for cancer patients undergoing chemotherapy (Kolko & Rickard-Figueroa, 1985; Redd, Jacobsen, Die-Trill & Dermatis, 1987; Vasterling, Jenkins, Tope & Burish, 1993) and cognitive training for individuals suffering from attention deficit disorder (Kwan, 2002).

Videogames have also been researched for their potential to act as aids to education (Rosas, Nussbaum, Cumsille, Marianov, Correa, Flores, Grau, Lagos, Lopez, Lopez, Rodriguez, & Salinas, 2003). Specifically, research has demonstrated the potential for videogames to assist in violence prevention and education (Fontana & Beckerman, 2004), improvement of spatial skills (Subrahmanyam, 1996), increased proficiency in visual multitasking skills (Greenfield, deWinstanley, Kilpatrick & Kaye, 1994, 1996), development of AIDS awareness (Cahill, 1994), improved computer literacy skills (Greenfield, Camaioni, Ercolani & Weiss, 1994) and increased reading speed and comprehension (Radencich, 1984).

As the increased sophistication of technology and social themes in videogames begins to change the role that they occupy in society, both negative and positive potentialities will increase multifold. It is the responsibility of media scholars to understand the evolution of videogames and continue pointing out the potentially helpful and harmful effects associated with them. We begin here with a short discussion of the relationship between technology and social themes with respect to contemporary videogames.

It has recently been observed that innovations in videogame hardware, software and components have made some gaming experiences seem to converge with the experience of watching film (Crowson, 2005; Gnatek, 2004; Hebert, 2004). This trend can be witnessed in the overlap that has come to exist between professionals in the videogame industry and professionals in the movie industry. Hebert (2004) specifically comments that, "The creative people who conceive and develop games often do similar work – under similar titles – as their film counterparts. And it becomes more true as technology lets games become more complex and lifelike" (World of Video Games…). This complexity and true to life quality has even caused some to compare certain gaming experiences to the fictional "holodeck" of *Star Trek* (Enderle, 2005; *Gizmag*, 2004). Mike Fortier and Kit McKittrick of Holo-Dek Gaming® have even gone so far as to invest millions in videogame theaters that bring the most advanced technology in gaming to the consumer at a reasonable price (*Gizmag*, 2004).

Other advances in videogame systems have created associations with the world of virtual reality. Popular games that are already available, such as *Dance Dance Revolution*, bring the environment of the game off of the screen and into real space. Similarly, the "BigBen Bodypad Virtual Fight Simulator" makes use of sensors to transform fighting games such as Tekken from exercises in thumb coordination to exercises in total body coordination (*I4U*, 2005).

Development of videogames has not, however, been circumscribed to advances in technology. Storylines and characters within videogames have developed to make full use of subtler and more detailed virtual interactions. Hebert (2004) asserts that, "More games are featuring complex plot lines and actual character development, rather than relying on nothing but nonstop action" (World of Video Games…). Game designer Richard Rouse (2005) also notes the trend in modern gaming toward using technology to allow players control over their own stories.

One form of videogame, the Japanese bishoujo game, has been particularly eager to embrace thematic complexity within the medium. Yukino (2000) comments that, "the later nineties wasn't just about technology revolutionizing the [bishoujo] industry. [Fans] wanted good, mature themes, and vivid characters. They wanted a visual and aural experience. They wanted games that could make them think, laugh and cry" (PC Bishoujo Games…).

As themes in bishoujo games have become more intricate, culture has come to play an increasingly important role in mediating the gaming experience. A close look at several key bishoujo games will illuminate how this mediation works.

2. Bishoujo Games

To begin with, the Japanese word bishoujo (or bishojo) translates to "pretty girl" and bishoujo games have been defined as "a type of Japanese video game centered around interactions with attractive anime-style girls" (TheFreeDictionary.com, n.d.). In terms of appearance, these games are unique in that many of them have three distinguishing features in common: (1) a large square box in the center of the screen for images, (2) a horizontally oriented rectangular box (located just below) for text, and (3) a background that encompasses both the image box and text box and extends to the edges of the screen (see Figure 1).

Fig. 1: An illustration of the game interface from *May Club*.

As a product, Bishoujo games are extremely popular in Japan. *Bishoujo Gaming News* (n.d.) reports that, "Over 25 percent of software in Japan are interactive adult games of some kind" (Japanese Dating-Sim Game Report). It has also been estimated that approximately fifty new bishoujo titles are released every month in Japan (Peach Princess, 2004). Many of these can be classified under more specific subgenre headings such as "dating simulation" games, "ren'ai" (romantic) games, "hentai" (pornographic) games, and more.

The advent of bishoujo games came about in 1982 with the Japanese release of *Night Life*, a PC adventure game. NEC's PC 88, PC98 and early DOS PCs were the platforms of choice for early bishoujo designers (*Bishoujo Gaming News*, n.d.). However, bishoujo gaming did not come to fruition until the late nineties when Widows 95 and CD-ROM technology were able to support vastly improved sound, imagery and storage capacity (Yukino, 2000).

Eventually, bishoujo games were manufactured (in Japan) for game consoles such as Sega Saturn, Sega Dreamcast and Sony Playstation (TheFreeDictionary.com, n.d.; Yukino, 2000). Such popular enthusiasm has not been the case in the United States where bishoujo games are unavailable to consoles and the influx of games has been lukewarm even for the PC market. Despite this, however, companies such as JAST USA, Peach Princess, G-Collections and Himeya Soft have persevered in distributing these games to the West and, as a result, 2003 and 2004 were relatively prosperous years for bishoujo game translators and distributors in the United States. This success

is in part do to the popularity and acceptance of other Japanese entertainment products such as anime and manga (TheFreeDictionary.com, n.d.).

In an effort to better understand the current and potential future impact of these unique, complex and culturally mediated games, the theoretical perspective of telepresence will be addressed.

3. Telepresence

In a detailed concept explication, Lombard and Ditton (1997) define the general concept of presence (referred to here as telepresence) as "the perceptual illusion of nonmediation" (Concept Explication). More specifically, they identify two types of telepresence that are of central concern to the study of videogames. These are "presence as transportation (you are there)" and "presence as immersion" (Concept Explication).

"You are there" transportation occurs when "the user is transported to another place" (Lombard & Ditton, 1997, Concept Explication). Defined in this way, "you are there" transportation becomes a fundamental concept to understanding how videogames in general, and bishoujo games in particular, constitute a sense of telepresence. Put simply, the goal of most game designers (with the likely exception of puzzle/strategy game designers) is to transport the player to another place: the world of the game. Highlighting the objective of game designers, Retaux (2003) explains: "As a person cannot be geographically present in two places at the same time, you must see to it that he believe that he is physically in an environment that in actual fact he isn't present in" (p. 286).

A second aspect of telepresence that is of key importance to the videogame experience is known as immersion. Both Lee (2004) and Lombard and Ditton (1997) use Biocca and Delaney's (1995) definition of immersion: "the degree to which a virtual environment submerges the perceptual system of the user" (p. 57). Slater (2003) provides further elaboration, writing that "The more that a system delivers displays (in all sensory modalities) and tracking that preserves fidelity in relation to their equivalent real-world sensory modalities, the more that it is 'immersive'" (Immersion and Presence).

This understanding of immersion, referred to specifically as perceptual immersion by Lee (2004) and Lombard and Ditton (1997), is unsatisfactory when conceived of as the exclusive way that telepresence can be constituted. There are many examples of telepresence experiences that do not rely on numerous sensory channels or high

perceptual fidelity. Schubert (2002) in his discussion of the "book problem" points out that "Immersion is only the source of stimuli from which the users creates [sic] a mental model of the virtual environment and his relation to it" (p. 1). Thus, it can be asserted that even relatively iconic and unrealistic stimuli are capable of provoking presence since they are merely source material for what the user constructs cognitively.

The difficulty with applying a purely perceptual (as opposed to psychological) theory of immersion to bishoujo games is that their content tends to be highly iconic (see Figure 2) and the player is unlikely to have the sensation of being immersed in the game, at least as compared to other technology such as virtual reality. An alternative approach to understanding how these games immerse the user is psychological immersion.

Fig. 2: An illustration of iconicity in *Season of the Sakura.*

Lee (2004) and Lombard and Ditton (1997), in their respective concept explications, draw from Palmer (1995) in describing psychological immersion as the quality of feeling involved with, absorbed in, and engrossed by a virtual environment. This description of immersion takes into account the active role of the player in constructing the virtual space of the game. Schubert describes this construction process by noting that "[t]he content presented in the media is only the raw source of the mental model building, not a direct determinant of the presence experience" (2002, p. 3). Klimmt and Vorderer (2003) similarly point out how players make use of memory and previous experience in order to mentally simulate an environment based on stimuli that may not be highly immersive.

Because the construction of memory and experience can be construed as a profoundly social phenomenon, popular culture plays an important role in mediating perception. Especially relevant to this discussion is the experience of international and intercultural encounters. Fontaine (1993) reports participant experiences of telepresence (including "realness" and "vividness") in this context, demonstrating the potential to experience a sense of "being there" across the gap of cultural difference. Further, Mantovani and Riva (1999) make special note of the impact culture has on presence experiences, explaining that "[s]peaking of mediation means speaking of culture, i.e., a network of instruments making up the everyday reality in which we live" (p. 541). This understanding of the relationship between culture and telepresence is exhibited in Peter Payne's description of bishoujo gaming: "You're reaching out and touching a little piece of Japan in the game – you really feel like you're experiencing love and life vicariously through the game characters" (*Bishoujo Gaming News*, n.d.).

In what follows, an effort will be made to dissect the process by which telepresence is experienced through the lens of culture in six particular bishoujo games. Attention will be paid to aspects of transportation as well as perceptual and psychological immersion, in an effort to understand how translations of Japanese bishoujo videogames work to transmit cultural knowledge about Japan.

4. Case Study

The games presented in this case study are titles currently available through JAST USA, a company specializing in the distribution of English translations of bishoujo games. Selection of games was guided by the intention to include games that were "classic," or popular and representative of some of the major subgenres of bishoujo gaming.

The following six games compose the cases that are examined in terms of their strategies for evoking telepresence cross-culturally:

1. *Runaway City*
2. *Season of the Sakura*
3. *Three Sisters' Story*

These three games were selected because they were each included in the *JAST USA Memorial Collection* which is described on the CD-ROM cover as a "collection of three classic Japanese love-sim games." Due to the fact that these games were compiled on

one disc and are among the earliest English translations, they were deemed appropriate for inclusion.

    4. *Nocturnal Illusion*
    5. *May Club*

These two games were included based on their belonging to the *Milky House Memorial Collection* that is similarly described on the CD-ROM cover as a "collection of three bishoujo classic titles." One title, *Borderline Collection vol. 1,* was excluded from examination on the basis that is a picture gallery and not an actual game. Similar to the JAST USA collection, these are early English translations of bishoujo games.

    6. *Little My Maid*

This game was included because it is among the newest releases available in English translation and distributed in the United States. In addition, this game has received a great deal of attention from distributors leading up to the time of its actual availability.

As a customer of JAST USA and Peach Princess, and as a member of the J-List listserv, I received much information about this hotly anticipated title: "…our long-delayed title Little My Maid has gone Golden Master and is being duplicated right now" (Peach Princess, 2004, Bishoujo Gaming Update), "We're extremely happy to announce that Little My Maid, the long-awaited dating-sim game from Peach Princess is finally in stock and shipping now" (J-List, 2004, Greetings from J-List), "For the hundreds who have waited patiently for Little My Maid for so long, we are happy to announce that the game is in stock and shipping now!" (JAST USA, 2005, What's new at JAST USA?).

While these cases cannot claim to be representative of all English-translated bishoujo games, they are arguably important titles based on popularity and availability.

5. Strategies

5.1 Transportation

5.1.1 Transportation through demystifying reflexivity.

"You are there" transportation is defined above as the transportation of the user to another place that is, for our purposes, the world of the bishoujo game. Beginning with

this definition, I start by exploring how some of these bishoujo games transport their users to another place through a strategy that I will call *transportation through demystifying reflexivity*.

Informed by Stam (1985) and Ames (1997), Jones (2005), in an examination of reflexivity in comic art, defines demystification as "the act of revealing the mechanisms of production responsible for creating the particular text" (p. 276). It could be said that, in this way, the nature of the text as an artificial construction is revealed. But is this truly the case? By revealing the falseness brought to life through the production process, a world-within-a-world scenario unfolds because the mechanism acting to reveal the production process simultaneously disguises its own production process. As Ames (1997) points out with respect to Hollywood movies:

> *"When movies about the movies reveal cinematic fakery or show, they generally put forward an alternative reality that contrasts with the illusion of the movies. But because the entire film inevitably is trapped in the cinematic realm for the viewing audience, the identification of genuine truth about Hollywood becomes paradoxical" (p. 6).*

Similar to this, in terms of "you are there" transportation, demystifying reflexivity within some bishoujo games acts to situate the player in the world of the game through comparison with a virtual or fantasy world that is embedded within the game. This is to say that, by comparison to the world within the game world, the game world itself becomes less removed from the player's own reality. This is particularly the case when the player moves from the game world proper to the world within the game world because the sense of transportation is made doubly apparent: on the one hand the player is transported into the game by playing the game, and on the other, he/she has been transported once again by entering a realm that exists within the larger space of the game world.

Perhaps the most obvious example of this concept occurs in the virtual reality simulator game titled *May Club* – a dating simulator game wherein the player enters a separate virtual world through the initial virtual world of the game.

May Club's story, as presented in the instruction manual, reads as follows: "In the year 2023, the "final" communication method became reality with the creation of the May Club VR system, a virtual world in which ever [sic] aspect of reality is recreated by computer control" (Milky House Memorial Collection Readme File ver. 1.0, 2003). This

description, of course, neglects to mention that the encompassing virtual world of the bishoujo game itself is placed in a position that supplants the "real" world existing not only outside of May Club (the virtual reality simulator), but also outside of *May Club* (the bishoujo game).

As a consequence of the separate worlds within *May Club*, transported telepresence plays a critical role as Hajime Kudo (the player) is perpetually moving between the May Field virtual world and the "real" world within the context of the game. In control of Hajime's actions, the player moves from his bedroom to the "May Club center" to May Field, back to his bedroom in a continuous loop of transportation.

Potentially the most effective aspect of transported presence within *May Club* is due to the absolute similarity between the games' representation of the real world, and its representation of May Field. In fact, the exclusive difference between these realms is a logo in the lower right portion of the screen that reads "VR May Club" in stylized lettering. So when the player moves from one world to the other, the transition is all but imperceptible. It is the imperceptibility of this transition that the game relies on in order to, in the end, provide the player with a feeling of transported telepresence. One potential game outcome, for example, finds Hajime (the player) and Keiko (his romantic partner) exiting May Field together and entering the game's "real" world where they make love in a scene that occupies the entire screen. In this example, the player's sense of being transported to the world of the game is made very powerful by its contrast the less elaborate environment of May Field.

Other games develop based on the premise that the protagonist is transported to a fantastic or mysterious world where the events of the game unfold. One example of this occurs in *Nocturnal Illusion* when our character (Shinichi) is swept away by a typhoon and, upon regaining consciousness, finds himself in a strange place inhabited by people who don't remember their past. Similarly, *Little My Maid* begins with Ohji (our character) being transported over the sea and through a dense fog to a mansion on the water. When he arrives, the mistress tells him "This place is a world of dreams where the sad, transient real world can be forgotten."

In these examples, the player is transported from the "real" world that is associated with the game to a virtual or fantasy world that exists only within its context. In games where the player is not made conscious of a world-within-a-world scenario, this strategy is obviously inapplicable.

5.1.2 Transportation through the homunculus and external retina.

Beyond the transportation between worlds discussed above, there is also a transportation that occurs between avatars. In *May Club*, for example, the protagonist (Hajime) who serves as our avatar in the game must also inhabit his own avatar when he transports himself to May Field (the virtual reality world in May Club). Thus, in a literal sense, when Hajime enters May Field, the player has the status of being transported not just into an avatar, but also into an avatar of an avatar. Before continuing, however, it should be qualified that the avatars referred to here are not avatars in the sense that they are conventionally thought of in the telepresence literature (e.g. Lok, Naik, Whittan, & Brooks, 2003; Slater & Usoh, 1993; Usoh, Arthur, Whitton, Bastos, Steed, Slater & Brooks, 1999). Specifically, Lok et al. (2003) define the self-avatar as "the user's virtual representation" (p. 616). For the games included in this case study, it is relatively rare (although not unheard of) for the player to actually see his/her virtual representation. Instead, players are embodied in such a way that, although they inhabit a different identity, they see the game-world directly through the avatar's eyes, and, in this sense, the avatar's body is experienced first-hand as their own. Thus, to elaborate on the functioning of this unique type of avatar, I turn to the concept of the homunculus.

According to TheFreeDictionary.com, the homunculus is "a tiny fully formed individual that (according to the discredited theory of preformation) is supposed to be present in the sperm cell" (www.thefreedictionary.com/homunculus). When used to describe visual perception, however, the homunculus is the metaphorical "little man (or woman) in your head" who interprets incoming sensory stimuli.

Although Gibson (1979) articulates good reasons as to why the metaphor of the homunculus is incorrect in its application to visual perception, we will use it here in the special circumstance of the videogame because, as players, we literally do inhabit avatars and interpret/respond to sensory stimuli that they encounter in the game. Thus, when we play videogames that require the use of an avatar, we are acting as homunculi to our avatars.

During the player's occupation of the homunculus position within the avatar, the screen serves as an external retina used to interact visually with the virtual environment. Whatever happens to the screen simultaneously happens to the player's eyesight in the virtual world.

Demonstrating thorough understanding of this concept, some bishoujo game developers have used various techniques to impact the player's external retina so that

a sense of actually being transported into the avatar is experienced. To illustrate, the screen will flash (*Season of the Sakura, Three Sisters' Story*) or shake (*Nocturnal Illusion*) if the avatar experiences an impact in the game. Similarly, a black screen is used to indicate covered eyes (*Runaway City*), sleep (*Season of the Sakura*), and unconsciousness (*Little My Maid, Nocturnal Illusion*).

In terms of sound perception, perhaps speakers can be considered external eardrums. Pitch, timbre, range and directionality play an important role, not only in transporting the player to the world of the game, but immersing him/her in the world of the game.

With this last point on the subject of transportation, the concept of immersion becomes prominent because, once the player has been transported into a virtual world, there must be something perceptually or psychologically compelling if he/she is to stay. This is not to say that the experience of telepresence necessarily derives from the experience of immersion (or vice versa), only that transportation and immersion are two distinct components of the experience and that (at least in the context of these bishoujo games) transportation seems to be a necessary, though not sufficient, prerequisite to both immersion and telepresence experience.

5.2 Immersion

One strategy used to visually immerse the player in the world of the game relies upon different levels of image focus. Three particular games, *Runaway City, Season of the Sakura*, and *Three Sisters' Story* employed this strategy by designing the all-encompassing box of the background screen to be a soft-focus extension of the picture in the image box. This effect imitates the natural behavior of the eye in perceiving objects that fall into the periphery of vision less sharply than objects that occupy the focal point of vision. Because this visual interface mimics our natural tendency to focus on what is straight ahead, the softness of the encompassing image has the effect of enveloping the player in the world of the game and fixing vision on the action.

As briefly mentioned above, sound is an important ingredient in facilitating a sense of immersion in the game. Both *Little My Maid* and *Nocturnal Illusion* make use of sound effects that correspond to physical actions in the game.

Little My Maid, by far the most sophisticated of the six games, went further still to include voice and synchronized lip movements. In this sense, it can be said to be the most perceptually immersive of the cases that were explored because it provides the most sensory channels with the largest variety of stimuli.

Although, as stated previously, perceptual immersion is responsible only in part for the presence experience, it plays an important role in giving foreigners an access point into this uniquely Japanese product. After all, we share the same perceptual system regardless of culture.

5.2.1 Psychological immersion.

There are several ways that the perceptual information provided by these bishoujo games is supplemented by psychological factors. For one thing, the bishoujo characters with whom the player interacts are less realistic representations than they are iconic signs. Furthermore, character movement is limited to the occasional eye blink, changing facial expression or gesture. These qualities indicate that the realism of bishoujo characters rely heavily on the player's ability to imagine them.

Exaggerated postures and expressions speed recognition of character feelings and dispositions while the action described at the bottom of the page shapes the player's fluid conception of the character icon. In other words, the iconic image presented onscreen requires the player to mentally reconfigure the depiction in the service of imagining events as they occur and are described in the text at the bottom of the screen. Bishoujo games bear a clear resemblance to comic art in this regard and have an especially strong relationship to manga (Japanese comics) due to closely related sets of stylistic conventions. It might even be said that some bishoujo games serve as an interactive extension of manga, permitting the player to assume the identity of a character similar to those he/she is already familiar with.

Hearing (in bishoujo games that lack sound effects and voice) is also highly iconic. Most frequently, enclosing an onomatopoetic word in asterisks indicates sound effects. For example, *squish*, *slurp*, *splat*, *splooch*, *splurch*, *crash*, *gong*, etc. all represent non-speech sound effects that, in combination with onscreen depictions and previous experience with the physical world, permit players to conjure sounds internally.

For games that lack voice sounds, players must imagine what characters sound like based on their appearance. However, even in the most sophisticated of games (such as *Little My Maid*), the voice of the player is necessarily missing. Instead of being a drawback, though, it brings about one of the strongest examples of psychological immersion possible because, when the player responds to audible voices with a silent line of dialog at the bottom of the screen, he/she brings his/her voice into the game

through reading. This interaction between audible character voice and silent player voice creates the natural back and forth rhythm of conversation.

3. Cultural Implications

By providing a protagonist/avatar with a Japanese identity through which the player is able to interact with a distinctly Japanese world, these bishoujo games offer access to a level of cultural knowledge that is unsurpassed by other media forms. This is attributable to bishoujo games' ability to transport and psychologically immerse the player, providing the potential for creating a sense of telepresence.

In a certain respect, these bishoujo games attempt to offer a level of cultural access and understanding that even travel and live interpersonal communication cannot: an intimate perspective on another culture. Stepping into a Japanese identity, but retaining the ability to make decisions permits a sense of belonging and identification that would be impossible in the flesh.

The six games that were the subject of this case study offered a wealth of cultural knowledge that was accessible on the deep level that only a telepresence experience can provide. This knowledge can be partitioned into four categories that include language, cultural events, stories and media.

Beginning with language, common Japanese terms necessarily become part of the player's vocabulary. Words such as "Oniichan" (big brother) are defined through the context of gameplay. An even more advanced understanding of language can be gained from games that make use of character voices. In such games, the Japanese speech presented in conjunction with translated subtitles in the dialog box serves as a tutorial for both vocabulary and pronunciation.

Beyond language, elements of traditional and popular culture intermingle; giving the player what Peter Payne of JAST USA refers to as "a snapshot" of Japan (*Bishoujo Gaming News*, n.d.). In one game in particular (*Season of the Sakura*), the player experiences one full year of Japanese secondary school where various holidays (such as Golden Week) and events (such as the Sakura Dance, White Day and the Christmas party) are played out. Here it is interesting to see how traditional elements coexist with newer Western traditions.

Another domain in which Japanese and Western traditions coexist within bishoujo games is in the realm of stories and legends. Often, to situate action within the game, common narratives are referenced to provide context. These narratives, however, are drawn from both Japanese and Western culture. For example, in *Little My Maid*, when

Ohji first finds himself at the mansion on the sea, he compares what has happened to the Japanese *Legend of Urashima Taro* and the Western story of *Alice in Wonderland*. Other references, such as *The Little Mermaid* (mentioned in *Nocturnal Illusion*) draw from a common exposure to an emerging global culture formed from entertainment media.

Along these same lines, popular manga that have become increasingly available and in demand worldwide are frequently referenced in bishoujo games. This phenomenon provides non-Japanese players with a sense of expanded cultural understanding and commonality because those who play bishoujo are also particularly likely to read manga. Thus, this sort of intertextuality forms the foundation of an intercultural common ground based on popular media.

A final category of cultural transmission and learning that should be mentioned with respect to these bishoujo games includes sexual culture. This should come as no surprise given the erotic content of many bishoujo games. Japanese establishments such as the "soapland" (erotic public bath), the "ran-pabu" (lingerie pub) and the "love hotel" (specialized hotel facilities where people go to have sex) are just a few of the many examples of sexual culture that populate bishoujo games. A separate investigation that specifically addresses the intercultural transmission and representation of sexuality in bishoujo games would be a worthy and informative undertaking that would illuminate the understanding of how culture impacts sexuality and sexual practices. For one thing, it might be observed that the initially lukewarm popularity of bishoujo games may be due to different attitudes toward sexuality, the body and women.

Lastly, it should be noted that the small companies responsible for the majority of bishoujo translations in the United States and other Western countries actively pursue intercultural leaning as an objective. For example, JAST USA occasionally provides parenthetical notes that explain certain cultural differences to players. In one instance (in *Season of the Sakura*) the class stands up to greet the teacher. Beneath it is noted: "(Japanese students do this every day when the teacher enters the classroom.)"

Other examples of intentional efforts to educate the Western player in Japanese culture are evidenced by the inclusion of "linear notes" in the readme files of some games and optional membership to the J-List listserv. Linear notes explain in detail the cultural references and nuances found in the game, and the J-List listserv sends out periodic emails that offer interesting facts and news events related to Japan.

In closing, bishoujo gaming represents an excellent example of how psychology, technology and popular culture can work together to bring about a shared understanding between and among diverse populations. As previously stated, the utilization of telepresence-provoking technologies have the potential to give these bishoujo games a particular advantage in providing the player with a more intimate perspective in experiencing and understanding cultures that might not otherwise be accessible.

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