# Making sense of gender from digital game play in three-year-old children's everyday lives: An ethnographic case study

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**Abstract**

*This study explores very young children performing and talking about game characters in their everyday life. In this study, young children's digital game play is considered as a hybrid and complex site for the children to meet popular culture and their everyday family experiences. This article represents a case study of six three-year-old children and their families, which combines ethnographic methods (spending time with the families, being a participant observer) and critical perspectives analysis with Bakhtinian perspectives to construct analyses that have the potential to understand how young children make sense of their everyday roles as a boy or a girl through their game play. This study shows that young children do not directly receive ideological messages from the game media, but they make sense of the messages by decoding and interpreting the game media based on their own theories of everyday life.*

**Keywords**
*Gender performance, digital game, young children, everyday practice, ethnographic case study*

## Introduction

This article is a part of my dissertation that focuses on six three-year-old children playing digital games on a daily basis and their families. In this paper, I explore how very young children perform and talk about game characters in their everyday lives and how it is

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related to their gender identities. In this study, I consider young children's digital game play as a hybrid and complex site of interaction between children, popular culture, and their local experiences with their families. I combine ethnographic methods (spending time with the families, being a participant observer, and informal interviewing) and *critical analysis with Bakhtinian perspectives* to construct analyses that have the potential to contribute to the understanding of young children and how they make sense of their identities as a boy or a girl through their game play.

There have been many studies addressing gender differences in children's game selection, use, and play performance (Cooper 2006; Dill and Thill 2007; Goldstein 1994, Kafai 1998; Lucas and Sherry 2004; Walkerdine 2006). In the early years of video game studies, most studies tended to focus on the differences between boys and girls in access to technology; the issue of the digital divide between boys and girls has often been mentioned in digital game studies (Cooper 2006; Provenzo 1991). Similarly, the male-dominated digital game market and underrepresented female game characters in most popular video games have often been discussed in these studies (Jansz and Martis 2007). The grounded assumption in these studies is that females are deficient at using technology and considered to be lacking interest in digital game play in comparison to their male peers.

However, the emerging pink markets in digital industries disprove these traditional views on girls' game play and question the simple comparison between boys and girls in terms of technology use (Kafai 1998; Cassell and Jenkins 1998). 'Girls are not uninterested in video games or interactive technology; they are simply interested in other features.' (Kafai 1998: 110) Walkerdine (2006) also states that girls are also active game players who take pleasure from winning and mastering game skills in order to achieve their goal, just as boys do, but they do not give up on displaying their femininity while they play games, thus forming the basis for defining fundamental differences between boys and girls in their game play.

Current game studies have shown more of a focus on digital game media effects on young children's gender socialization. A great deal of research has viewed digital game media as a site for reproducing stereotyped gender roles in children (Dill et al. 2005; Leonard 2003; Williams et al. 2009). For example, by using content analysis of video game characters Williams et al. (2009) argue that the appearance of game characters might affect game players' perceptions of gender, race, and age. Also, Leonard (2003: 1) sees digital games as 'sophisticated vehicles inhabiting and disseminating racial, gender, or national meanings.' Dill and Thill (2007) point to the important role of video games as agents of socialization by analyzing game characters in video game magazines and advertisements. Overall, these views tend to explain the potential harm of digital games on young children by analyzing game media content, not by examining what happens while young children are playing (Walkerdine 2006). This results in describing young children as passive victims of digital media.

According to Buckingham (2007), with new digital technology and interactive media, young children are no longer passive audiences; they are able to make and remake their own media by using digital contents. Tobin and Henward (2011: 2) argue:

'a growing area of media research is on how young people not only consume commercially produced media, but also creatively use the content and genres of mass media texts to re-mix and in other ways produce their own media products'.

To overcome traditional views on young children's digital game play, researchers are attempting to examine the interrelations between digital games and young children as they take in consideration the context in which the children play games. Tobin (2000) includes the voices of young children talking about digital media as an analytical tool, seeking to understand the global discourses found in many types of digital media. According to Tobin (2000: 30), children do not passively accept ideological messages from digital media by imitating game characters, but rather they make sense of the messages through 'the complex interplay of media content with children's preexisting knowledge, concerns, and anxieties as mediated by their social interactions in specific local communities.' This means that the number of digital equipment or violent game content alone do not explain the meaning of performing gender in young children's game play.

West and Zimmerman (1978: 130) point out that doing gender, the act of creating gender differences, is "an ongoing activity embedded in everyday interaction." Mass media delivering popular culture might be a source of displaying or performing gender, but doing gender requires that individuals interpret and apply gender to their everyday lives, thus developing a framework for being through the lens of gender.

Following Tobin, West and Zimmerman, I see digital games as more than just a medium for delivering global meaning to players, but rather as a site where young children make sense of their everyday lives by interplaying with the messages from the games. To shed light on and move beyond the current issues of the digital divide and digital game media's effects on children, I discuss the interplay between the male and female game characters that are presented in digital gaming media and the effect that these meanings have on the three-year-old children and their parents.

To understand the children's conversations and behaviors related to their digital game play, I used Tobin's Bakhtinian text mapping (2000), an extended application of Bakhtinian theories. Tobin (2000) points out that as we trace out children's conversations, it is possible to understand not only how children make sense of digital media, but also to paint a picture of people's tensions in the context of a larger society. In this paper, I will show the various ways in which the children talk about games while also exposing the double-voiced discourse present in these situations, which may be 'a text composed of citations, allusions, and repetitions of the words of others.' (Tobin 2000: 143)

**Theoretical framework**

To understand the ideological messages circulating in digital games, but given meaning by the local boys and girls, theoretically and methodologically this study employs Bakhtin's notion of heteroglossia (1981), and Tobin's Bakhtinian text mapping.

Joseph Tobin (2000) in his book *Good Guys Don't Wear Hats*, discusses how local children are surrounded by globally circulating media products. According to Tobin, children draw on their everyday life experiences and local knowledge to understand the global culture coming through digital media. 'The global media culture, as cultural critics point out, is powerful and potentially homogenizing. But this global culture is consumed and given meaning locally.' (Tobin 2000: 149).

The translocal media discourse can also be explained using Bakhtin's notion of heteroglossia. For Baktin (1981: 291), heteroglossia is double voiced discourse that represents 'the coexistence of socio-ideological contradictions between the present and the past, between differing epochs of past, between different socio-ideological groups in the present … and so forth.' Digital game culture, therefore, can be understood as a place that meanings meet and become hybrid.

Digital games not only can leave their media and transform themselves into various genres such as films, advertisements, and magazines but also encompass double meanings that are co-created by the game maker and the player. In heteroglossic digital game culture, the players are not passive consumers but meaning makers.

> 'The word does not exist in a neutral and impersonal language (it is not, after all, out of a dictionary that the speaker gets his words!) but rather it exists in other people's mouths, other people's contexts, serving other peoples intentions: it is from there that one must take the word, and make it one's own.' (Bakhtin 1986: 293-294)

To analyze young children's double-voiced discourse, Tobin uses what he calls 'Bakhtinian text mapping.' The researcher (2000: 143) points out that as we trace out 'citations, allusions, and intertextual associations' in children's conversations, we can reveal not just the children's thoughts about digital media, but also people's tensions, concerns, and world views in the larger society. Mapping children's words is way to understand both the immediate and wider social context in which a particular child speaks. In doing so, children's words, which often seem trivial and not important, become meaningful.

## Research design and methods

### Ethnographic case study

This study is an ethnographic case study of six three-year-old children playing digital games on a daily basis as well as of their families. I observed three-years-old children for my study because much research indicates that three-year-old is critical age to start video games (e.g., Liberman et al. 2009; Ostrov et al. 2006; Vandewater et al. 2007; Verenikina and Kervin 2011). Also, gaming and entertainment companies have products that are targeted at preschoolers (Huh 2014). As I observe the three-years-old children in this study, I can show how digital games affect young children making sense of their gender.

My focus is on the three-year-old children and their families, but I have also included the children's conversations and play with their peers that are related to their game play.

I refer to this study as an ethnographic case study because I have attempted to understand young children's digital gaming as a part of contemporary culture through six cases. According to Tobin and Henward (2011: 2), young children's digital activity is a site where various cultures such as young children's culture, popular culture, and domestic culture intersect. Young children's digital gaming is 'not a self-contained culture, but rather one local site in a complex larger society.' (Tobin 2000: 12). By studying the children's digital game play, I can show how it becomes young children's culture in modern society.

All of the six families live in Riverside, California, but I selected six families with various sociocultural backgrounds (e.g., race, socio-economic status, religion, and immigrant status). My intention here is not to generalize about the families in terms of ethnicity or socio-economic status, but rather to explore the various families' practices and relations in conjunction with young children's digital game play and to introduce questions about how different family factors (ethnicity, income, parents' education level, and other factors) interrelate and interplay within young children's digital game play.

I applied the following ethnographic methods in conducting this research: participant observation and informal interviews. According to Varjas et al. (2005: 244), by 'using ethnographic methods […], researchers can expand existing theoretical understandings to reflect both universal and culture-specific (local) aspects of a phenomenon.' By utilizing ethnographic methods in this study, I can show how young children make sense of digital game media containing global messages by using the local knowledge that they have gained from their everyday family lives.

### Methods

I observed six children playing digital games six times each, by shadowing their routines (e.g., grocery shopping, playing with peers, seeing a doctor, or playing at home). During each visit, I stayed with the child for at least 4 hours to observe their daily routines and digital gaming activities. These routines were documented through field notes, photography, and videotaping. Also, in order to understand the context in which the children play and talk about their games, I held informal conversations with the parents, asking questions about the children and their thoughts on their children's game play.

The transcripts produced through participant observation, individual interviews, and field notes were coded and then analyzed using Bakhtinian text mapping (Bakhtin 1981; Tobin 2000) that identifies multi-vocal and double-voiced meanings. To analyze the transcripts by using interpretative analysis, I applied the coding development process used by the Child Crossing Border study, which is a multi-sited ethnography (Tobin et al. 2013). I first developed my initial codes based on an etic view (dominant and universal views on young children's digital gaming), and then I recreated the codes and developed subcodes based on my reflections on my observations and interviews. According to

Varjas et al (2005: 244), using both etic and emic views a researcher can ensure 'cultural specificity while maintaining focus on universal elements'.

**Findings**

In this section, I have carefully selected a few conversations, interviews, and events with four children (Chan, Amy, Lin, and Mia) and their mothers (Eunsook, Hwa, and Kelly) as representations of young children performing gender during their game play. In the descriptions of the conversations and events, I trace out the words spoken by the particular children and their mothers living in a local community but affected by the larger societies by following the insiders' point of view (emic), not by systemically organizing or categorizing them.

As a starting point for understanding the children performing game characters in their everyday family life, I illustrate the mothers' views on digital games and how these views are different from their children's views in order to initiate discourse questioning the contemporary digital divide discourse. I also present a selection of events that I observed during which the young children talked about and performed their game characters in order to understand how they make sense of their everyday roles as boys or girls through their game play.

**Talking about digital divide: Stories of Eunsook and Lin**

> You know . . . I have learned . . . you know . . . my major was food and nutrition in college. So, I had to learn some family studies, too. From that experience, in my mind, I came to conclude that, 'Hmm, games are not good for education.' It came from my education in Korea. So, I grew up with that kind of thinking . . . I cannot talk about games because I do not know anything about them. I don't know about games at all, but . . . My husband often tells me, 'This game is fun. The boys should play like this. Playing with a sword . . .' But um I feel it looks . . . violent. (Interview with Eunsook, May 30, 2012)

Following Bakhtin, Tobin (2000) points out that the meaning of every discourse is contextual. This means that understanding the context is essential for a researcher to understand the meaning of the discourse made by a participant. This includes not only understanding the moment in which the utterance is made but also understanding the participant's past experiences that may have contributed to the participant's thoughts and identity. Eunsook is an immigrant parent from South Korea. Different from her children (Both Chan, age 3, and Jun, age 7, were born in the United State), most of her childhood memory and educational experiences were made in Korea.

As Eunsook repeatedly spoke the words "you know", in the beginning of her conversation, she invited me to get into the context that we share. It was her utterance, but once I shared in the conversation, the phrase took on a co-created meaning, involving both of our shared experiences. Having a similar cultural and educational background as Eunsook, I was able to empathize with her and understand her thoughts

on digital gaming. Even as a researcher of young children's digital games, I often find myself asking my husband to stop his gameplay, saying, "Do not play the game that long! It's not good for you and our son's education." Eunsook has learned that digital games are bad, but she has barely had the chance to play digital games or to figure out what might make digital games bad on her own.

I remember that when I was young, in the 1990s, I often saw my friend's younger brother playing *Super Mario* with his Gameboy. At the time, I always wanted to play it, but I never asked him if I could play the game because I thought that the game was not for me, but for boys. The room decorated for a boy, my friend's indifferent attitude toward his game play, and my past experiences all stopped me from asking him to play the game with me although the three of us often played together. These types of stories and experiences are not uncommon among women like Eunsook and myself. Most of the mothers in my study grew up without experiencing games by themselves because of the predominant discourse in which digital games belong to boys. This has led to more mothers with anxiety about their children's game play than fathers.

However, the fears of these mothers, who are actual consumers in the digital market, do not stop their children's game play. In *From Barbie to Mortal Kombat,* Cassell and Jenkins (1998) explain the growing digital game market, especially for girls. With a rise in the application of feminist theories in digital game studies and digital game industries seeking new consumers, digital games targeting girls have become increasingly popular (Cassell and Jenkins 1998). Cooper (2006) argues that there still exists a digital divide in terms of gender norms between boys and girls, which gives girls anxiety about digital technology because of the social pressures of the past, but I found that this anxiety presents itself in different ways than the anxieties of mothers concerned about their children's digital game play. Girls playing games on a daily basis now is nothing special or new, and I did not find any instances of the girls having been discriminated against regarding their game play or gender.

The young girls in this study did not display any anxiety about using digital technology, contrary to Cooper's argument. According to Hwa, along with her piggy bank, Lin's iPad is something that she wants to protect and keep away from bad guys, not at a thing to be afraid of:

> Hwa: When she saw the police, she asked, 'Where are they going?' If someone breaks into our house, She knows what to do. Just dial 911.
> Hwa: If a bad guy comes in what do you do?
> Lin: Why do they come to our house? What we do is simple . . .
> Hwa: They might come to take your iPad or your piggy bank . . . if a bad guy comes in what are you going to do?
> Lin: Call the police.
> Hwa: What number are you going to dial?
> Lin: 911! . . . when the bad guy comes in, I will use the baseball bat . . . I am going to fight with them.
> Hwa: No . . .
> (Conversation, August 23, 2012)

Clearly, the matter of simply playing digital games is not sufficient to explain how digital games might disempower young girls as they play. These young girls did not display any fear of using their game players, and they fought to keep their game players from their brothers, unlike the behaviors described by Eunsook and myself from the past. Playing digital games is no longer only a boys' thing. Today's children play games regularly.

Nevertheless, there still exist criticisms of digital games as many see them as a space where stereotyped gender roles are easily reproduced and reinforced (Walkerdine 2006; Bryce and Rutter 2002). Now, it is more of a matter of how the game is used rather than whether or not a girl is able to play a game.

## Chan performing game characters to survive as a three-year-old boy

According to Tobin (2000), when children talk about their games and digital media in general, they rehearse and perform gender roles. In other words, when children talk about digital games, it is easier to see how they view and perform their different gender identities, and how the digital games play a role in this process. For example:

> Jun: Chan likes *Mike the Knight*.
> Youn: I want him to play a new game. So . . . [opening the *Dora the Explorer* webpage]
> Ashley: Wow . . . *Dora the Explorer*? Haha . . .
> Youn: This!
> Ashley: *Mermaid Adventure*? I think that Chan really, really dislikes this. This is for a baby girl. Dora is girls' stuff.
> Jun: Chan likes *Mike the Knight* [game series].
> Ashley: Dora is so girly.
> (Conversation, July 3, 2012)

*Dora the Explorer* was originally a popular animated television series that has since been made into various versions of digital games targeting young children. The main story of these games is similar to the television show, which involves Dora, a young Latina girl, traveling around the world with a monkey as she completes various missions along the way. *Dora's Mermaid Adventure* (Viacom Media Networks 2013) is one of the online games available on Nick Jr.'s website, and in this game, Dora explores the sea as she becomes a mermaid. I chose this game for Chan because Eunsook suggested that I find some games on the educational game site *Nick Jr.* and I heard that Chan had never played the *Dora the Explorer* game series. The game that I picked seemed fun to play because it was designed to be played like *Super Mario* (Chan's favorite game), so I imagined that it would be less boring than the other commercial learning games which purposes are mainly not for entertainment but for education. I did not intend to choose the game for Chan to make him and his peers talk about gender related issues, but I accidentally involved some children in the discussion of what games are for boys and what games are for girls as I suggested that he play the game.

In the discussion above, the two girls (Jun and Ashley) talked about games for Chan. When I tried to introduce *Dora's Mermaid Adventure* to Chan, they discouraged me

from doing it by providing their own rationale.  First, they pointed out, *Dora the Explorer* game series are not for boys but for girls. When I clicked on the website, it made Ashley laugh. After that, when I clicked on *Dora's Mermaid Adventure* among the available games and she stressed that what I was choosing for Chan was wrong by repeating the word "really." According to Tobin (2000), the repetitions of the word can be the sign of exposing the double-voiced discourse in this situation. One could say that it was only Ashley's argument, but it was double-voiced, reflecting dominant discourse in a larger society following Bakhtin. To support her argument, Jun also suggested that I pick another game (i.e. one of the Mike the Knight game series) for Chan. Chan was invisible in this conversation, but I could say that he also participated in the meaning making process as a listener, and both Ashley and Jun's utterances have affected Chan's game selection.

*Mike the Knight* is a popular animated television series with an adventure story in which Mike acts as a knight, like his father. In the game Mike goes on trips with two dragons, just like Dora does with her monkey. I have seen Chan playing the game many times, and instead of playing *Dora's Mermaid Adventure*, Chan chose one of the *Mike the Knight* games to play right after our conversation. Chan, like the two girls, selected a specific game character to make sense of his gender identity. According to West and Zimmerman (1987: 142), this process of selecting a correct game as a boy or a girl can be a part of the gender recruitment process, which is "a self-regulating process as they begin to monitor their own and others' conduct with regard to its gender implications." Chan is not only playing the game, but also making sense of his gender identity during his game play.

Also, according to Tobin (2000), this behavior is not just a rehearsal for adulthood, but rather a serious and meaningful performance by a three-year-old boy. As one of the girls pointed out, *Dora's Mermaid Adventure* is too 'girly' for Chan.  There are no male characters in this game, and everything is related to girls, including jewelry, necklaces, and stars. On the other hand, Mike is a knight. He gets along with dangerous dragons, and he proves his courage and power as a man throughout the game. The children have to find games in which they can perform their gender, allowing them to be accepted by their peers.

By just selecting game that feels right for them, as a boy or a girl, young children seriously interpret and then represent these game characters in their real lives as they perform their gender. This is done not just through imitating the game characters, but also in a way that makes sense for the child as he or she expresses gender during everyday life. This became clear as Chan helped his mother water the tomatoes in their backyard:

> Eunsook: Wow! The tomatoes are getting bigger, aren't they? Can you water them, please? [Chan waters the tomatoes using his squirt gun.] Wow . . . Good Job!  What game are you going to play? Are you going to play the robot game? Robot?
> Chan: Yes! [squirting the water into a bucket with his squirt gun]
> Eunsook: Wow! Super Strong! Good Job!

> Chan: [smiling and looking up at his mother proudly] Yo-ho! [squirting the water] Mommy! Chan is super strong.
> Eunsook: Wow! Super strong guy! Wow! Good job! (Conversation, June 7, 2012)

While Chan watered the tomatoes with his squirt gun, he pretended to behave like a robot in his favorite game. Then, Eunsook responded to him positively by saying "Wow! Super strong! Good job!" and Chan cited his mother's words again to assure her that he did a right thing. Tracing out their conversation, we can find that there is a mind transformation of Chan from a three-year-old boy to a super strong guy, which his mother reinforced by saying 'super strong guy'. Although the robot character that he performed does not represent a certain gender or explain what a grown-up man means, Chan and his mother applied the character to deal with their real life situation. The robot game itself does not force him to be a strong male man, but his interpretation of the game character and the people around him interplay to contribute to his performance of the game character in his real life.

In another example of this behavior, Chan and his sister had two friends, Tom (age eight) and Ashley (age eleven), over to their home to play. When they arrived, Chan followed Tom around and watched him. Tom showed his Nintendo DS to Chan, then took out the stylus from the DS, touched Chan's toy, and rolled it from Chan's head to his chest. Chan imitated this behavior, then stood up on the sofa:

> Chan: [standing up] Super strong.
> Tom: No! [climbing onto the shoulder of the sofa and standing]
> Chan: What?
> Tom: I am really super strong.
> Chan: No . . . [climbing up like Tom] I am super strong! [jumping down from the sofa] I am super strong. [raising his hands] Heehaw . . . Heehaw . . . [running around the living room]
> Chan: [moving towards Tom] Super strong! [Tom pushes him and he turns around. Super strong! [jumping on the sofa] Super strong! [Tom opens his Nintendo and faces it toward Chan like a weapon]
> Ashley: What are you doing Chan?
> Chan: Super strong!
> Ashley: Super strong?
> Tom: [wrestling with Chan] I want your toy! [grabbing Chan's toy sword]
> Chan: Heehaw . . . [turning toward Ashley and clenching his fists like a super hero]
> Ashley: Chan! If you touch this [pointing toward a toy car], you get stronger.
> Chan: [jumping down from behind the sofa and grabbing his sword] Heehaw!
> (Conversation, July 3, 2012)

Tobin (2000) said that to understand the deeper meaning in children's talk about digital media, we need to find what things remain unsaid in the conversation; we have an obligation to answer, although the words or gestures used to answer the utterances of another can never be completely adequate, because the meaning of these utterances is inherently double-voiced, contradictory, and unfixed. There was no mention of a particular game in this scenario, but looking at the children's performances, there were

many stereotypically gendered characteristics displayed that may come from the game characters that the children know and love.

From my point of view as an audience in this play, Chan was the main character who had to defeat his enemies. He needed to show his power to the enemy (Tom) as he climbed up the sofa, raised his hands, and jumped down from the sofa. He needed to continually prove that he was both more powerful and a more strategic fighter than Tom. Tom also acted out his character as he continued to challenge Chan. They attacked and counter-attacked as men. On the other hand, Ashley, the only girl in the scene, did not engage as a warrior in the fight, but instead, she served as a wise woman, trying to give Chan advice that might help him to defeat his enemy. They did not directly explain their roles to me, but the entire context and the children's bodily movements and gestures allowed me to understand what they were trying to show as an actor or actress in this play.

This situation, dominated by the boys, showed the children's desperate efforts to be seen as strong men. Tobin (2000: 54), points out that 'the reality of these boy's lives is that they spend most of their childhood under the control of women,' leading to 'their performances of masculine swagger'. Chan spends his most of time with his mother and older sister, and he has to obey his mother's authority. As he pretended to be a robot or to perform like some masculine character from his games, he displayed a meaningful sense of power, although temporary.

**Girls' game play: The stories of Mia and Amy**

While the young boys played boys' games and performed male behaviors, the young girls also displayed typically female behaviors as they mimicked their mothers. In a way, as the girls played the games, they took on their mothers' roles by taking care of pets, feeding others, and cleaning their rooms. They seemed to be serious and hard-working while playing these games, using voices and gestures to mimic their mothers' behaviors.

However, this type of representational play in digital games can be dangerous as it may encourage misrepresentations of what women should do or how women should behave. Mia likes popular princess characters, like the other girls in the study. According to her mother, she changes her outfits many times on a daily basis, and she likes to play princess games such as *Disney Tangled* (LeapFrog Enterprises, 2012) with her Leapster Explore. Mia is biracial. Unlike her Caucasian mother, she has dark skin and curly hair. However, Mia does not own any games with princesses that have dark skin or characters from different ethnic backgrounds. Both the princess characters and her mother are white, but Mia is not. I was not able to identify the ways in which these game characters might affect her in terms of her perceptions of beauty, but I could see that Mia desperately tried to look pretty as she wore Barbie dresses or decorated her princess game character with flowers and jewels. Here is an example of how she presented her idea of beauty:

> [Mia goes to the television shelf and then takes a DVD out of the shelf]
> Mia : I wanna watch this.

Youn: What's this? Let's see. . . Barbie? What's the story about?
Mia: Barbie and …[Nutcracker] He is a nutcracker. Look at …Isn't that pretty? I feel I am watching…
Cris: She likes a princess. Youn! I like the video game, Angry birds. I always wanna play it.
Mia: I always…I always…Love this one.[points at the Barbie on the DVD cover]
Cris: She likes watching TV.
Mia: I like watching TV, too. Oh! That [the Barbie] looks just like you.
(Conversation, October 26, 2012)

Mia told me that she likes princesses while her brother said that he likes the *Angry Birds* game (Rovio Entertainment, 2009). This can be an example of gender differences in children's game selection. However, I focused more on what she said at the end of the conversation. Mia said 'Oh! That looks just like you.' She thinks that Barbie is pretty, and that the Barbie looks like me. Where is this idea coming from? What makes her think that I resemble the Barbie more than her wearing a princess dress? According to West and Zimmerman (1978: 135), such sources like the Barbie character may "describe the sorts of behaviors that mark or display gender, but they are necessarily incomplete."  To complete the process of making sense of gender, Mia needs to interpret the popular figure and apply or modify the concept "as the occasion demands" (West and Zimmerman 1978: 135).

Furthermore, by playing games that allow them to rehearse their mothers' roles, these girls are able to experience having other people around them under their authority. For example, as Amy was watching her mother's cooking, she mimicked her mother's behavior towards me:

Amy: [stepping on a chair to watch her mother's cooking] What is that mommy? Can I stir? Can I stir?
Kelly: Just for a second. There you go. Look at what you do. Keep it down. We are making donuts.
Amy: Wow . . . Do you wanna eat a donut? [turning toward Youn]
Youn: Yes. Please . . .
Amy: Mommy! She wanna eat a doughnut. Mommy . . .
Kelly: Yes. You need to cook first.
Amy: When the donut is done. We can eat it.
Kelly: Ok! Good job!
Amy: Can I um . . .  Can I do that one? Mommy? Can I do that one? Mommy? [touching the measuring cup]
Kelly: Hold on baby. No! No, no, no, no . . . You have to be careful. The computer is right there ok?
Amy: This is hot. This is too hot.
Kelly: You have to be very careful. The computer is right there.
Amy: Mommy . . . Can I show it mommy? Mommy? Can I do that? When you do that, I can't. Remember we did um . . . on the computer? um . . . um . . . um . . .  um . . . we did a . . . um . . . um . . . we did um . . . um . . . we did um . . . um . . .  um . . . glass computer.
Kelly:  Last time you were here she splashed the computer.
Youn: She really likes to cook, even in the game.
Kelly: Games, too?
Amy: Can I do it now Mommy? Mommy?

> Kelly: I need these in the oven. It's getting late.
> Amy: Can I do it?
> Kelly: No!
> Amy: No?
> Kelly: Ok! Here . . . but listen! No whining. Get your hair out of the food.
> Amy: Can I lick this one when I am done Mommy?
> Kelly: Thank you. Ok. Let go.
> Amy: Can we play now? [turning toward me] In my room?
> (Conversation, September 18, 2012)

Like her mother, Amy really likes to cook, but in her real life, her mother dominates the kitchen, and she needs to follow her mother's instructions if she wants to participate in cooking time. It seems that Amy does not have any power in relation to the cooking. What she can do is to listen to her mother and use some tactics to negotiate with her mother in order to gain access to the cooking tools. On the other hand, in the game space, Amy is more powerful in that she can control the space and the tools for cooking.

According to Bryce and Rutter (2002), digital games play a role in reinforcing stereotyped gender roles for children, but it is also possible that the children's activities with digital games may be used to contest and resist their reality as young boys or girls. In the case of Amy playing cooking games, the games might imply that cooking is for girls, not for boys as they are filled with pink objects and girl characters. However, looking at the entire context in which her cooking play is generated, these games are more likely to offer Amy an experience of being in power as she is able to control the variables in the digital kitchen.

Her tones and gestures resemble her mother's while she plays the games. When someone is around her and wants to play with her, she speaks to the person in her imitation of her mother's voice, and she commands to the guest to follow her instructions. During the game, she is the commander, more like the typically masculine characters in various games, although she still operates in a typically feminine environment in the game, based in the kitchen.

For Tobin (2004), the scariest part is not the explicit messages which directly require being a super strong robot or taking a mother's role, but rather the abstract images of an ideal family, woman or man, and child which might be mingled into their preexisting anxieties and prejudices, and then reinforced by the children's lives. Young children know that a bad guy robot is not real and something to make fun of, but for them a princess with light skin in the game is something to desire and want to be, or even to make them frustrated.

## Conclusion

This study explores very young children performing game characters in their everyday family life. Even three-year-old children are able to select their own games and play them on a daily basis. Certainly, digital games are no longer exclusively boys' activities; they are now a part of a broader culture of young children in modern society. There have been

ongoing debates about the digital divide between boys and girls (Cooper 2006; Goldstein 1994; Provenzo 1991), but this study shows that gender differences in children's digital game play cannot be explained with the simple matter of digital equipment availability or game software mostly designed for boys. Unlike their mothers, three-year-old girls incorporate digital games as play in their everyday lives.

Digital games affect young children; young children use game characters as a source for spontaneous play and conversations with peers. Digital games encourage young children to take the role of boys or girls as they present gendered characters. However, I argue that young children performing their gender during their game play, should be understood within the context of their everyday lives. Young children make sense of gendered game characters by using their preexisting knowledge gained from their personal lives (Tobin 2000). As West and Zimmerman (1978: 135) argued, popular culture can be a powerful source for young children to construct their gender identities, but it waits for their interpretation and modification "as the occasion demands". Therefore, without considering young children's everyday experiences we cannot understand the meaning of the performance of the boy swaggering like a robot in front of his mother and the girl ordering like a commander during her game play.

Tobin (2000) points out the need for empirical studies on young children's game play beyond game content analysis in order to understand how digital games function in young children's' lives. The three-year-old children performing game characters and their conversations regarding digital games show that digital games have the potential to affect young children positively or negatively, but they also reveal the dynamic interplay between young children's local experiences and ideological messages from digital games on young children's perceptions on gender.

Therefore, this study suggests the need for empirical studies of young children and digital games to understand how digital games and the local experiences of young children are interrelated with their game play as well as how they play a role in young children's perceptions and performance in their everyday lives.


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