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Using the ZMET Method to Understand Individual Meanings Created by Video Game

Players Through the Player-Super Mario Avatar Relationship

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GRADUATE COMMITTEE APPROVAL

of a project submitted by

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This project has been read by each member of the following graduate committee and by majority vote has been found to be satisfactory.

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As chair of the candidate's graduate committee, I have read the project of Bradley R Clark in its final form and have found that (1) its format, citations and bibliographical style are consistent and acceptable and fulfill university and department style requirements; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the graduate committee and is ready for submission to the university library.

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Abstract

Video game researchers have recently begun to explore qualitative techniques to understand video games and their audiences.   Yet many questions remain concerning the significance of gaming media and how video game research should be conducted. This research addresses the changing focus of video game researchers from the "producers," or sender of the video game, to the "audience" or receiver.   This is accomplished in the following ways: by exploring meanings created by individuals while "role-playing" in an electronic world as an on-screen video game avatar; by using the Zaltman metaphor elicitation technique (ZMET), to gather a deeper understanding of how players are interpreting the video game creators intended message, and focusing on the relationships formed between a player and their onscreen character.

Using the ZMET method the author conducts ten in-depth interviews looking at the interviewees' relation with the *Super Mario Bros* avatar to gain an understanding of player-avatar relationships.   Interviews are then discussed to describe how these individuals understand the video game message and avatar relationship.

Acknowledgments

This work is dedicated to my wife Ashley who spent the time, trouble, and money to allow this thesis to be possible. I hope I make you proud.

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Chapter 1: Introduction

Nolan Bushnell, sometimes referred to as the father of the video game industry,

once described early reactions to the idea of a video game as, "What? You want to put a

computer inside a box and [have] people put quarters in it?" (Demaria & Wilson, 2004, p.

21). Yet, in 1972 Bushnell's newly developed company Atari released a simple ball and

paddle game, called *Pong*, into the video game arcades and a new medium was born.

Although there were earlier efforts to create commercially successful video games, such

as Ralph Baer's attempt to market a home video game console, it was not until the release

of the arcade game *Pong* that video games were recognized as a commercially sound

investment. As Bushnell stated "*Pong* was a runaway smash hit in the coin-op

amusement business. . . . *Pong* was the biggest success anyone had seen" (Demaria &

Wilson, 2004, p.21).

More than three decades later, video games have become a $7 billion a year

industry according to the Entertainment Software Association. In 2004, combined

computer and video game sales topped $7.3 billion, nearly matching the $9.5 billion

generated by the movie box office (ESA, 2005; NATO, 2006). In the United States,

almost three quarters of children and teens aged two to 18 have video game systems in

their homes, and they spend an average of 20 minutes playing it each day (Scharrer,

2004; Roberts, Foehr, Rideout & Brodie, 1999). While in 2005, the average game player

age was estimated to be 30, with 75 percent of heads of households playing computer or video games (ESA 2005).

Originally researchers primarily studied audience effects of video games, such as violence and social interaction. The majority of video game research tended to be quantitative, focusing on impact on children, violence, and stereotypes, usually with psychological or social-psychological perspectives (Loftus and Loftus 1983; Greenfield 1984).   Such studies tended to be focused on the community instead of individuals, and intent on questions such as game addiction and violence.

As video games have become a more accepted medium for analysis, new approaches to game studies or "ludology," from the Latin word for "game," and "narratology" are slowly becoming accepted in academic circles (Wadhams, 2004). Many of the new directions that researchers have recently begun to explore are qualitative, incorporating ideas such as textual analysis, interviews, and narrative, with most researchers basing their research on similarities between video games and other media including television and cinema, or creating new tools tailored for interactive media (Brooker, 2001; Dutton & Consalvo, 2006; Gonzalo, 1999; Greenfield, 1984; Kinder, 1991; Konzack, 2002).

Researchers have begun to use qualitative ideas to understand video games and their audiences, often looking at fantasy themes created around video games by examining peripheral phenomena such as "cosplay," player created narratives, MMORP interaction, and virtual communities as well as individual games, to create an understanding of symbolic convergences in gaming communities (Brehm-Heeger,

Conway & Vale, 2007; Burn & Schott, 2004; Kirkland, 2005; Krzywinska, 2003; Laurel, 1991; Newman, 2002; Wai-ming, 2006).

Yet ludology remains in its infancy, and many questions remain concerning the significance of gaming media and how video game research should be conducted. Questions concerning whether video games, and other interactive texts can be studied using traditional textual analysis, which elements should be included, and if video games can be considered a narrative are currently under consideration (Wadhams, 2004).

This research addresses the changing focus of video game researchers from the "producers," or sender of the video game, to the "audience" or receiver. This change in focus allows researchers to ask important questions such as: Do individuals receive the video game messages that the sender meant to relay? If not, how does the message change? What do individuals understand about the character or characters they are playing? How do individuals interact with an electronic world? What is the nature of the individual relationship formed between a player and their onscreen character? Do players see themselves as playing a role? How does an avatar's image impact the message? Does a player simply consider a game's character to be a tool used to accomplish an end goal?

These research questions are addressed in this thesis by exploring meanings created by individuals while "role-playing" in an electronic world as an on-screen video game avatar, defined as a "graphic icon representing users in three dimensional (3D) or virtual reality games and chat rooms" (Chung, Shearman, & Lee, 2003, p. 3). This study uses the Zaltman metaphor elicitation technique (ZMET), to gather a deeper understanding of how players are interpreting the video game creators' intended message.

The ZMET method, developed to understand consumers' subconscious thoughts, decisions, and behaviors, was chosen for this study because of its unique ability to suggest subconscious feelings and thoughts on the relationship between a video game player and an avatar (Morse, 2002).

To address the question of the meanings created by a player in a video game, this study will focus primarily on the relationships formed between a player and their onscreen character. This player-avatar relationship was chosen as a focus because the title avatar is the primary aspect of each game that a player most closely controls, and the player can therefore relate to. Also, this ability to control the avatar is the player's primary way to interact with each on-screen world, directly influencing each message created.

To address the question of the messages created through the player-avatar relationship, this study will take a qualitative look at *Super Mario Bros*, a game franchise that has greatly impacted the video game industry from the beginning. This franchise was chosen for a number of reasons: its historical impact on how players interact with on-screen avatars, it was the first game to include a story line, and the first to include a fully humanoid character (King, 2002, p.77). Unlike arcade games before it "original characters, their looks, and their motivation were created first, and then the game play was crafted with them in mind" (Kohler, 2005, p. 38). This meant that *Donkey Kong*, the first in the franchise, was the earliest game in which players could not only relate to their avatar but were given a distinctly unique character role and story line to follow. Also, unlike any other franchise, the Super Mario franchise has been successful in almost all video game genres, with Super Mario having appeared in everything from side-scrolling

and racing games to role playing games (RPG's) since his introduction in 1981. This versatility, history, and popularity have combined to make Super Mario the most recognized video game avatar in the world.

Beginning with a short history of *Super Mario Bros* and its impact on the video game industry, this thesis uses the Zaltman Metaphor Elicitation Technique, a personal interview method developed by Gerald Zaltman, to gain an understanding of the message created between the Super Mario character and the player.   These interviews will focus primarily on a player's understanding of the character-avatar relationships (including role-playing, avatar usage, and avatar meaning), how each individual interprets his or her interaction with an electronic world, and each player's interpretation of the sender's original message.

Chapter 2: Literature Review

A brief history of Super Mario and video games

In 1972 Nolan Bushnell invented the first commercially successful video game, a simple ball and paddle game called *Pong*. "To be successful, I had to come up with a game people already knew how to play, something so simple that any drunk in a bar could play," Bushnell later recalled (Koener, 1999). As such, *Pong* was originally tested in a bar called Andy Capps in Sunnyvale, California. Two days later the owner of Andy Capps contacted Atari saying that the machine was broken. Al Alcorn, an original employee of Atari was sent to repair the machine, finding that the coin box, legendarily believed to be a milk carton with the top cut off, was overflowing with quarters which prohibited the machine from working. The machine was soon fixed. Alcorn replaced the milk carton with a casserole dish, and the quarters continued to flow in (Sheff, 1993; Demaria & Wilson, 2004).

With the initial success of *Pong,* the age of the coin arcade was ushered in. By 1975, Atari, the Los Gatos, California, firm was leading the industry with sales of $39 million (*Newsweek*, 1976). The small company was growing so fast that its manufacturers could not produce enough internal circuits to meet demand. As Edger A. Sacks, the vice-president of GI's Microelectronics Group, explained, "the trouble is that demand is 50% to 60% greater than anyone anticipated" (Demand Overwhelms, 1976, p. 31). Bushnell could no longer continue to create the additional funds needed to overwhelm the competition and appease the demand (Demand Overwhelms, 1976). Bushnell sold Atari to Warner Communication on 5 October 1976 for $28 million (Koerner, 1999).

In 1977, Atari released the Atari Video Computer System or VCS, the first commercially successful video game console designed to play individual plug-in cartridges instead of built in games; the VHS was later renamed the Atari 2600 using the unit's Atari part number, CX2600 (Herman, 1997). The Atari 2600 initially did poorly its first Christmas because of the many competitors that had decided to enter the lucrative video game market. Sheff described the market in his book, *Game Over: How Nintendo Zapped an American Industry, Captured your Dollars, and Enslaved your Children.* Atari was poised for a big year in 1978, but "so were National Semiconductor, Fairchild, General Instruments, Coleco, Magnavox, and a dozen other companies. The Christmas season came and went, and few consumers, perhaps because they were confused by all the choices, brought video games home that year. Of all the entrants, only Atari and Coleco survived, and Atari was in shambles" (Sheff, 1993, p.143).

Also in 1977, a Japanese college graduate, Shigeru Miyamoto, was hired as an apprentice by Nintendo, a video game company in Kyoto, Japan, which was originally founded in 1889 as a Hanafuda or playing card company (Sheff, 1993). However, Nintendo (whose kanji characters roughly translate to "leave luck to heaven") would not discover the impact that Miyamoto would have on its company for another four years.

 By the end of 1979, the Atari VCS had sold around six million units. Still it did not become a common household fixture until 1980 when Warner Communication struck a deal with the Japanese game maker Taito making them the first video game company to license the best selling arcade game *Space Invaders* for a home console. Consumers were soon rushing out to buy the system just to play the game (Demaria & Wilson, 2004).

By 1981, more than five million additional Atari VCS Consoles were sold, entering almost 9% of all U.S. households with a television set (The Riches, 1981). The boom in sales of the VCS earned Atari over $5 billion over the next two years, marking the Golden Age of Atari (Lindorff, 1983).

However, Nintendo, which was doing well in Japan, was having difficulty cracking the American market and was looking for a game that would help its American branch stay in business. Nintendo of Japan (NOJ) had recently found success with a game called *Radarscope,* and Minoru Arakawa, the President of Nintendo of America (NOA), decided that this game, which featured enemy planes flying at the screen while players attempted to shoot them down, was just what NOA needed. Arakawa ordered 3,000 *Radarscope* units to be shipped to the United States but soon found that he had made the wrong decision when only about 1,000 units sold (Sheff, 1993).

> Arakawa later explained that "we brought all the *radarscope* machines from Japan via Panama to New Jersey. By the time they reached us, the game's market opportunity was already half dead. We asked Japan to come up with the next great game, but all the R&D heads were busy and didn't want to do anything for us. So they appointed a young guy [Miyamoto] who had just joined Nintendo to develop a game for us" (Demaria & Wilson, 2004, p.231).

Miyamoto, who was more interested in designing toys than video games, looked at the games that were being produced and decided to create a game that was more cartoon-like and followed a story line. The resultant game was called *Donkey Kong*; an error in translation lead Miyamoto to use Donkey as a synonym for "stubborn" and the word Kong for "gorilla," which starred a carpenter, named "Jumpman," whose mission

was to rescue a princess from a giant King Kong-like gorilla (Kent, 2001). In 1981

Donkey Kong became not only Nintendo's first American hit but also the first arcade

game to include a story line and a humanoid character (King, 2002; Newsweek, 1981).

Donkey Kong was soon followed by two arcade sequels: The 1982 *Donkey Kong*

Jr., in which the original carpenter "Jumpman" was renamed "Mario" after Arakawa's

landlord, and was playing the protagonist, and the 1983 arcade game *Mario Brothers*

which featured both Mario and his newly discovered brother Luigi, in a new occupation,

plumbing (Kent, 2001; Demaria & Wilson, 2004). Furthermore, versions of *Donkey*

Kong, Donkey Kong Jr. and *Mario Brothers* were all being released for various Atari and

Coleco consoles (Kohler, 2004; New Cartridge Report, 1984).

Nintendo had finally broken into the American market, however the video game

industry as a whole was on the verge of collapse. On 18 October, 1983 the *New York*

Times proclaimed that, "the boom is over for the once high-flying world of video games."

With Atari laying off about 600 people in its first of many major personal reductions in

February of 1983, millions of new video game cartridges being buried in the New

Mexico desert to reduce inventories, and video game cartridges dropping in price from

$40 to as low as $4, the whole video game industry was quickly headed for a massive

meltdown (Sutton, Eisenhardt, & Jucker, 1986; Demaria & Wilson, 2004; Jim Morgan,

1984).

For the next two years toy distributors in America avoided console video games.

While on the other side of the world, Nintendo was introducing its new video game

console the Famicom, short for family computer, to the Japanese population. Nintendo,

who had originally offered Atari the exclusive rights to market the Famicom console to

the American market, now held the majority of the video game market in Japan and was

determined to revive the stagnant American market (Herma, 2001).

In order to enter the American Market, Nintendo had to persuade the many

retailers that had been burned by the downfall of Atari that their new console, the

Nintendo Entertainment System or NES, would attract consumers. This took drastic

measures. Nintendo promised to personally stock each store while also setting up any

displays and windows. They further offered a 90-day grace period in which participating

store owners did not have to pay a dime for any Nintendo merchandise. After which each

store would only pay Nintendo for any merchandise that they had been able to sale, with

the option to return any unsold product free of charge (Sheff, 1993). Store owners saw

the offer as a no-lose situation and allowed Nintendo to set out their merchandise.

"Nintendo proceeded to unleash a $30 million television advertising campaign in the

New York Area alone. It was the most successful toy launch in US history, resulting in

sales of one million units the first year [1986]" (Shades, 1991, p. 10). By 1988 Nintendo

held 90% of the market, and its sales of video game cartridges alone had hit $2.3 billion

(The Nintendo, 1989; Potts 1987).

Leading the sales once again were Mario and his brother Luigi in a sequel to

Mario Brothers that was unimaginatively called *Super Mario Bros.* In 1985 Nintendo had

decided to package each Famicom console with a copy of *Super Mario Bros.* This idea

proved to be successful as thousands of people went out to buy the Famicom just to get

their hands on this new side-scrolling Mario adventure (Herman, 1997). "When

Nintendo decided to repeat its Famicom success in the United States, it once again

packaged *Super Mario Bros* with the console, as the company had anticipated, many

people bought the NES just to get the game" (Herman, 1997, p.118).

Soon Nintendo controlled virtually the entire video game market; all outside

companies interested in producing games had to play by Nintendo's rules. Sales of

Nintendo product also began accounting for a large part of many toy retailers' yearly

earnings. As Ed Logg, the inventor of the arcade classic *Centipede*, explained, "toy

stores couldn't do anything because all their business was from Nintendo. Nintendo

made it quite clear that if [Toys 'R' Us] carried [unlicensed games] their allotment would

get reduced. And at that time 50 percent of the Toys 'R' Us profit came from Nintendo"

(*Tetris*, 1999). Nintendo enforced a number of rules to insure that the video game market

remained profitable.

Although other Nintendo developers created a number of classic games for the

NES (*Metorid, Exitebike, Punch-out, StarTropics, Kid Icarus, Ice Climber*, etc.), the top

two best selling Nintendo Franchises, *Super Mario Bros* and *The Legend of Zelda*, both

created by Shigeru Miyamoto, were still Nintendo's greatest asset. Mario started making

cameos in a large number of Nintendo's games, playing everything from the referee in

Punch-out and *Nintendo Tennis* to the bonus *break-out*-like level in *Nintendo Pinball*.

Still *Super Mario Bros* had done so well for the NES that Nintendo quickly

needed a sequel to keep consumers buying. With so many successful games coming

from Miyamoto, Nintendo had him working primarily as a game designer, and the task of

creating a second Mario Brothers was left up to a designer named Takashi Tezuka. The

resulting sequel *Super Mario World 2,* subtitled "for super players," (later referred to as

the *lost levels* in the United States) was blisteringly difficult (Kohler, 2005). So difficult

in fact that it was dubbed too hard for an American audience, forcing Nintendo to turn to

a game that was originally designed by Miyamoto for Fuji Television called *Doki Doki*

Panic, which was released to the United States in 1988 as *Super Mario Bros 2* (The

Greatest, 2006). However since the American *Super Mario Bros 2* was not a true sequel it

only slightly resembled its predecessors. "The only thing it shared with the original

Super Mario Bros were the lead characters, a few clever puzzles, and the same cute,

innocuous sense of humor" (Kent, 2001, p.364).

The third Mario installment, which was released in 1990, was Miyamoto's first

intended bottom-to-top complete remake of the series (Kohler, 2006). Featured in the

Fred Savage film *The Wizard* before even being officially released, this Mario game took

the series to new levels in both sales and game creativity. *Super Mario Bros* 3 sold more

than 17 million copies world wide, "setting a lasting sales record for a game cartridge that

was not packed in with console hardware," a title which *Super Mario Bros 3* still holds

(Kent, 2001, p. 422).

However, by 1991 Nintendo no longer held such a tight grip on the video game

market. The Sega Genesis, a 16-bit console, which was superior to the older 8-bit NES in

speed and graphics, was released in 1989 and marketed to attract an older demographic

(Herman, 1997). Nintendo had been focused on the release of a new handheld gaming

console called the Gameboy and failed to launch a 16-bit console to counteract the

Genesis until 1991 when they released the 16-bit Super NES or the SNES. Still by that

time it was too late, Sega had been able to get its foot in the door. The "sales for the NES

plummeted by 46% during the first half of 1991," the age of the 8-bit Nintendo had ended

(Demaria & Wilson, 2004; Herman, 1997, p. 159). Once again video game console competition was introduced.

Still Nintendo had its secret weapon. The Super Nintendo, like its father before it, was released with the newest sequel in the Super Mario Brothers franchise. *Super Mario World,* which came packaged with the 16-bit console, was a return to the bright worlds and crazy characters introduced on the NES.   Furthermore, despite the fact that the Super Nintendo launched with only two games available, both *Super Mario World* and the new game system sold out immediately with demand vastly outpacing supply (Kohler, 2006).

However, Sega held a card up its sleeve that the company was hoping could overcome not only videogame "mascot" recognition, but the overall dominance that the Super Mario franchise currently held. Sega soon introduced Sonic, a quick-running, wise cracking, blue hedgehog.

> [Sega] wanted to make a game that was similar to the *Super Mario Bros* games, only simpler. Mario games used two buttons, so Sonic should use one. Mario collected coins, so Sonic collected rings. The way [Sega's] people differentiated Sonic from Mario was by making the hedgehog faster and giving him "attitude" (Kent, 2001, p. 429).

Sega and Nintendo battled for market dominance for the next four years. In many ways not only battling over which console could boast the lowest price, best graphics, and most popular games but also over which companies "mascot" could create a bigger buzz (Biddle, 1992; Space hedgehog, 1991). Each company released a number of games based on its mascot. It was at this time that classic Mario franchise games such as *Super Mario RPG, Super Mario Kart,* and *Super Mario All-Stars* were released for the SNES.

However, on September 9, 1995 both companies were met by a company that Nintendo had essentially introduced to video games: Sony. In October 1992 Nintendo had announced that it would join forces with the electronics giant, Sony, to build a CD-ROM player for the SNES (Herman, 1997). However, when Nintendo backed out a month later, Sony decided to continue with the project on its own. The resulting console was the new 32-bit Sony Playstation (SCEA, 2006; Kent, 2001). By 1992 the advanced, more adult Playstation had captured 20% (about $3.1 billion) of the video game business.

Nintendo tried to fight back with the N64, a cartridge-based console, which doubled the processing power of the Playstation (Franco, 1996). Initial sales of the new Nintendo, aptly named the Nintendo 64 (N64) were very promising with all 500,000 units that Japan shipped to the United States pre-selling days in advance (Kent, 2001). Still, even with Nintendo's hard hitter *Mario 64*, one of the 12 games available at release, receiving rave reviews, the decision to remain with a cartridge-based console instead of the newer and cheaper CD-ROM formats proved to be a miscalculation (Kent, 2001). Early on, the N64 ran into game shortage problems because of the amount of time it takes to create a game on a cartridge. Even more challenging was that the average age for gamers was going up, and Sony was aiming for an older demographic while the N64 was seen as a machine for young children (Ryan, 2000). Despite its problems the N64 continued to remain profitable in part by once again capitalizing on the Super Mario franchise releasing games like *Super Mario Party, Super Smash Brothers, Super Mario Kart,* and *Paper Mario.* In October 1995, "Nintendo announced the sale of its one billionth video game -- or one game for every teenager in the world" (Schilling 1997).

With the Nintendo Empire shaken and vulnerable, Sony released its newest gaming platform in 2000 (Stenger & Sieberg, 2000). The Playstation 2 (PS2), which was backwards compatible with original Playstation games, played DVD's and was considered a 128-bit machine. It was released to frenzied gamers who bought them at astronomical rates, propelling the PS2 to become the fastest-selling gaming console in history (Rivero, 2000).

Still Sony did not have very long to celebrate with Nintendo (Gamecube) and newcomer American PC-giant Microsoft (X-box) both announcing launch dates for their new consoles in November 2001 (both were to be released on the same week) (Cataldo, 2001). The three-way competition proved to be brutal, and for the first time in history Nintendo was not going to launch with their front-man, Mario. Instead a new game based solely on Mario's brother Luigi was available for purchase at the launch of the new Nintendo Gamecube console (Gamecube Heavyweights, 2001).

Not until 26 August, 2002 did American Gamecube players get a Super Mario only adventure, *Super Mario Sunshine* (Nintendo.com). *Super Mario Sunshine* would also be the first and only Super Mario game for the GameCube with the original platform game format. Although Super Mario would appear in a number of games on both consoles and handheld systems over the next five years, not until Christmas of 2007 would the next platform game, *Super Mario Galaxy*, be released.

Yet, the console competition continued. Major console developers had learned from past mistakes that they needed to release new consoles more powerful than the previous generations about every five years to keep their consumers interested (Changing, 2003). This process, referred to as the "console cycle," assures that announcements

concerning next generation gaming machines are constant (Changing, 2003, p. 19). By May 2005, Sony, Microsoft and Nintendo had each unveiled their next-generation consoles, with the promise of a fall 2005 release (Yi, 2005; Peterson, 2005). However, only Microsoft was able to meet that deadline by releasing their new XBOX 360 console on 22 November 2005, with both Nintendo and Sony admitting that their consoles would not be ready until winter 2007 (Richtel, 2005).

On 17 November 2006 Playstation launched their newest console, the Playstation 3. Two days later Nintendo followed with their console, Wii, setting the stage for the next generation of videogame systems (Snider, 2006).

Video games and research

Since the emergence of Nintendo as an important production, the majority of research looking at the medium of the video game has been quantitative in nature. Most of these early studies either looked at the effects that video games have on a player, tending to focus on their impact on children through psychological or social-psychological perspectives, or analyzing the content of video game stories and story lines (Loftus and Loftus, 1983; Greenfield, 1984).   These studies were usually negative in nature and fit into one of four categories: gender differences (Ivory, 2006; Jenkins, 1998; Beasley & Standley, 2002), aggressive behavior (Jenkins, 2002; Funk & Buchman, 1996), depiction of race (Leonard, 2003; Scharrer, 2004), and portrayal of addictive behaviors (Haninger & Thompson, 2004; Thompson & Haninger, 2001). Far less research has been done using qualitative measures to understand the medium of video games, and the

majority of work that has been done often refers to the media of television and cinema as guidelines.

Past research looking at video games has modified the tools of analysis developed for television and cinema. Kennedy (2002) compared the main character of the *Tomb Raider* video game series to famous females of television and cinema. He sites examples like *Tank Girl*, *Thelma and Louise*, and Trinity from the *Matrix*, stating that, "the obvious connection between *Tomb Raider* and film narrative conventions and the way in which the game deploys themes and tropes from other popular cultural forms means that a feminist critique at the level of the politics of representation is somewhat inevitable." Krzywinska (2003) analyzed both the videogame version of *Buffy the Vampire Slayer* and the television show of the same name analyzing how they offer or extend various versions of "agency" to each consumer. Kirkland (2005) suggested that because traditional media has been created based on the *Silent Hill* series of video games, including novels and comic books, online fan art, fan fiction, and on-line discussion concerning the story of *Silent Hill* and a 2006 film version of *Silent Hill*, a compatibility with traditional media analysis exists (Kirkland, 2005, p. 168).

In addition, a number of authors have observed the lack of methodologies in video game critical analysis and have tried to address the need. Brooker (2001) provided an "early template for analysis, looking at the elements of institution, authorship, character and narrative, genre and socio-political connotations and remakes" in the game *Jetman* (Dutton & Consalvo, 2006, p. 3). A set of tools were developed by Dutton & Consolvo (2006), including object inventory, interface study, interaction map, and game-play log, to analyze interactive texts. Konzack (2002) suggested analysis using seven layers,

including hardware, program code, functionality, game-play, meaning, referentiality, and socio-culture, designed specifically for computer game analysis (pp.91-98). Finally, Aerseth (2003) suggested that there are three main ways to gain an understanding of each game; "we can study the design, rules and mechanics of the game…we can observe others play, or read their reports and reviews…we can play the game ourselves" (p. 3).

Other areas of interest in video game research include an exploration into fantasy themes, constructed by fans, based on individual video games and their avatars. Consalvo (2003) looked into player fantasies independently constructed and shared through walkthroughs or narratives on fan-created web sites based on individual video games. Consolvo further suggested that "gamers should be considered active creators of meaning regarding games, as they exhibit many of the characteristics of traditional media fans, including active reading of the media text, construction of media texts to share with other fans, and knowledge of inter-textual relations between various media forms" (p.321).   Wai-ming (2006) looked at Hong Kong artists and players who have incorporated elements of Hong Kong commercial movies, martial arts novels and comics, as well as lower-class slang and behavior into Japanese video games, the making of new rules and jargons by Hong Kong players, and the adaptation of games into Hong Kong comics from historical and cultural perspectives (Wai-ming, 2006) Brehm-Heeger, Conway and Vale (2007) studied "cosplay," derived from combining the words "costume" and "play," describing the phenomena of fans dressing up to look like their favorite video game characters.   Burn and Schott (2004) looked at avatars and the player's engagement with the avatar using a social semiotic analysis of the design of the character compared to the discourse of interviews with players and fan writings. They

conclude that the integration of player grammar and fan discourse provides the pleasure of game-play and narrative engagement.

Audience centered video game research

Proper techniques for the analysis of the videogame medium have been under question since the medium's introduction. The difficulty in studying this medium lies partly in the reluctance of traditional communication researchers to acknowledge videogames as both a popular and important medium. "The advent of electronic games as a new entertainment and art form is sometimes treated as an event divorced from cultural history" (Murray, 2005, p. 1). Yet, even more difficult than being accepted is defining what type of medium the videogame is. As Aarseth stated, "to claim that there is no difference between games and narratives is to ignore essential qualities of both categories. Yet, as this study tries to show, the difference is not clear-cut, and there is significant overlap between the two" (Aarseth, 1997, p. 17).

The argument over video games, or interactive texts, as a narrative heavily depends on whether a narrative can be considered non-linear. A number of analysts argue that interactive texts are similar to traditional texts because according to each reader's understanding or interpretation of each text can be essentially non-linear. Aarseth (1997) further explained that each reader has to make decisions regarding his or her interpretation of a text because even though every text, even interactive texts, cannot at their essence be non-linear, readers must view each in a set sequence to create meaning. However the meaning can be understood differently for every reading [or viewing].

However, other analysts argue that compared to traditional texts, interactive texts alone are non-liner because, "when you read from a cyber-text, you are constantly reminded of inaccessible strategies and paths not taken, voices not heard" (Aarseth, 1997, p. 3). Unlike traditional texts, consumers of cyber or interactive texts can feel that they have missed important content or made a decision which led to a lack of knowledge, or an undesired result (Aarseth, 1997).

This definition problem has lead researchers looking at video game content to develop two distinctly different methods for studying such content. The first approach, which has been associated with the term ludology focuses on video games as a different genre from narrative, drama, and poetry as well as other such media forms (Murray, 2005; Wadhams, 2004). This method tends to see the proper study of games as analysis and compression of game formalisms, or in short, to analyze each game only as a game (Gonzalo, 1999; Murray, 2005). Murray stated that "the focus of such study should be on the rules of the game, not on the representational or mimetic elements which are only incidental" (Murray, 2005, p. 1).

However, the second approach, Narratology, used to describe videogame research based on narrative, emphasizes the more static storytelling aspects of a game by regarding each videogame as a text that can be read (Kirkland, 2005). Narratology, unlike ludology, often uses research methods closely related to those used for other media (Kirkland, 2005).

Player-character relations

"The word Avatar is comprised of two Sanskrit words: 'Ava,' which means 'descend' or 'pass,' and 'terr,' which means 'beneath' or 'earth.' In ancient India, it meant that a god incarnates to come down from heaven, or an incarnation in human form, or an embodiment (as of a concept or philosophy) often in a person (Merriam-Webster, 2000; Chung, Shearman, & Lee, 2003, p. 3).

However, with the invention of the Internet, the idea of an avatar has come to define a "graphic icon representing users in three dimensional (3D) or virtual reality games and chat rooms" (Nowak, 2000; Chung, Shearman, & Lee, 2003, p. 3). Often used interchangeably with the word "character" to describe a player's on screen physical representation in console-based video game worlds, avatars traditionally differ from the console based video game idea of a "character" because they are not stagnant or fixed, but can be modified and changed according to each users preference. However, as recent console-based videogames have increasingly offered customization of title characters, the contemporary idea of avatar and character has become interchangeable.

Different opinions exist on the relationship that is built between a gamer and an on-screen "character." Originally researchers suggested that each "character" was the audience's vehicle to move onto a "gaming stage," in effect becoming a digital actor, allowing each gamer to role-play the title "character" (Laurel, 1991). However, contemporary researchers have begun to suggest that each "character" should instead be considered simply a suite of characteristics or equipment which a controlling player utilizes as a type of tool to accomplish end goals (Newman, 2002).

Original player-character relationship research often suggested that each gamer participates in a type of role-playing fantasy when interacting with an on-screen character. Indeed, even the video game industry itself builds games with the opinion that every player wants to role-play as their on-screen character. Many games and characters are tailored to attract a desired audience. Kinder (1993) pointed to an early Nintendo marketing tactic of creating four, uniquely different, player-selectable characters in the video game *Super Mario Bros 2* as a means to create a connection with each player (Kinder, 1993). Kinder suggested that males 7-14 can more easily relate to "Mario" and "Luigi", while younger children have the character "Toad," and girls have their token female character "Princess Toadstool" (Kinder, 1993). A whole video game genre has become known as "role-playing" games.

The second body of research suggests that each character should be seen as "a bundle of semiotic resources, or affordances for the player's engagement with the game's system, equipped to move them through the game's link and nodes, landscapes and events" (Burn & Schott, 2004, p. 221). Often referring to earlier "great games" with poor visuals, suggesting that "an entire generation of players grew up with blips of light, @ signs, and even text-only games," each character does not depend on its appearance but instead their abilities (Newman, 2002, p. 8). Even after suggesting that each character classification in *Super Mario Bros 2* is important in helping players create an on-screen connection, Kinder (1993) related that "despite her inferior jumping and carrying power [Princess] has the unique ability of floating for 1.5 seconds – a functional difference that frequently leads my son and his buddies to choose her over the others, even at the risk of transgender identification (Kinder, 1993, p. 107). Jenkins (1993) in turn stated that

Kinder's account seems to point out the inadequacy of her assumption that the "player-character" relationship is role-playing based. Jenkins further stated "does this not suggest that traditional accounts of character identification may be inadequate descriptions for the children's relationships to these figures?" (Jenkins, 1993, p. 68). Newman (2002) further suggested that the appearance of a player's character is of little or no importance.

> "The level of engagement, immersion or presence experienced by the player -- the degree to which the player considers themselves to "be" the character -- is not contingent upon representation. On-line, "character" is conceived as capacity -- a set of characteristics" (Newman, 2002, p. 8).

Research in this area also suggests that gamers don't role-play as individual characters because videogame playing is often a group effort. Jessen has noted that videogames, although generally regarded as a more or less asocial experience, are often not an individual affair, stating, "secondary players" play an active role in game participation by performing tasks such as map-reading, puzzle-solving, and assisting the player in finding things (Jessen, 1995; Jessen, 1996; Jessen, 1998). "The secondary-player role is frequently taken by players who like the idea of games but find them too hard . . . . . So they play together. Adopting a "co-pilot" role allows one to notice aspects of the game that are missed in the role of primary player" (Newman, 2002, p.5).

Self presence and avatars

Presence is defined as "the subjective experience of being in one place or environment, even when one is physically situated in another" (Witmer & Singer, 1998, pg. 225). In electronic gaming, presence is most often used to refer to "experiencing the

computer-generated environment rather than the actual physical locale" (Witmer & Singer, 1998, pg. 225). There are a number of different forms of presence, each with different labels applied to them. Video games rely heavily on the idea of "self presence," the users' mental model of themselves inside a virtual world, to deliver their message; the idea of "self presence" is more commonly referred to as role playing (Biocca, 1997). "Self presence," or role playing in electronic games, is further identified as the "three bodies present in a virtual world: The actual body, the virtual body, and the body schema, or the user's mental model of self" (Tamborini & Skalski, 2005, pg. 17; Biocca, 1997).

Immersion into the message of each game is directly linked to the player's self presence as "the degree to which a virtual environment submerges the perceptual system of the user and psychological immersion is the degree to which users are involved, absorbed, engaged, and engrossed in immersive presence" (Chung, Shearman & Lee, 2003).   Players rely on immersion to understand and interpret each video game message. Many of the studies done in the past looked at the idea of immersion to understand how a player interacts with each game.

Chapter 3: Research Methods

Past methods

Many video game researchers have noted the lack of agreement on methodologies of critical analysis in video games (Aarseth, 2003; Brooker, 2001; Konzack, 2002; Dutton & Consalvo, 2006). Past textual analyses of the media of television and cinema have often been used to develop approaches to analyzing videogame text (Kirkland, 2005; Krzywinska, 2003). This is partly because video games incorporate many traditional media elements such as story, characters, setting, *mise-en-scene*, sound effects and music, etc., while also adding video game-specific components such as puzzles, artificial intelligence, and multiple narrative pathways and endings (Kirkland, 2005, p. 168). However, past television analysis has also questioned which elements are the most important in each text. Barthes (1987) stated that special attention should be given to the element of images over language and to connotation rather than denotation. Hall (1997) suggested that all of these dimensions must be equally explored to consider what a text tells us. Williamson (1985) further suggested that ideas such as juxtaposition, formal structure, and signifying chains all be studied to find created meanings (Barthes, 1987; Hall, 1997; Williamson, 1985; Jin Paek & Hemant, 2003).

A number of suggestions or outlines for textually analyzing video games have been published (Dutton & Consolvo, 2006; Aarseth, 2003; Brooker, 2001; Konzack, 2002). These methods look at "layers" of a game that can be analyzed including hardware, program code, functionality, gameplay, meaning, referentiallity, and soci-culture (Konzack, 2002, p. 91-98). Other methodology aspects, including studying design, rules and mechanics, observing others play, reading others' reports and reviews, and personally

playing each game, have also been suggested (Aarseth, 2003, p. 3). However, Dutton and Consolvo outlined the most descriptive method by suggesting that researchers use tools, such as object inventory, interface study, interaction map and a gameplay log (Dutton & Consolvo, 2006, p. 4).

Current Method

　　To further the understanding of video game analysis this research will look at Super Mario, the title character of the *Super Mario Bros,* using a methodology that was originally developed to understand an individual's attitude toward advertising, the ZMET method. Created to understand consumers' subconscious thoughts, decisions, and behaviors, this method will provide a unique look at the meanings and relationship developed between a video game player and an avatar (Hidden Minds, 26).

　　The ZMET method was chosen because of its ability to "surface the mental models that drive thinking and behavior" (Zaltman & Coulter, 1995, p. 35). The ZMET method was originally designed to understand consumers' underlying feelings about advertising campaigns and new products lines. It "is a hybrid methodology grounded in various literatures, including verbal and non-verbal communication, visual sociology, visual anthropology, literary criticism, semiotics, mental imagery, cognitive neuroscience, and phototherapy" (Coulter, Zaltman, & Coulter, 2001, p. 2). This method consists of a semi-structured, in-depth, personal interview using visual images that individual participants gathers prior to the interview (Denzin, 1989; McCracken, 1988; Coulter, Zaltman, & Coulter, 2001).

The ZMET method was chosen as the best method to conduct this study because of its ability to explore not only each individual's thoughts about a subject but feelings and overall relationship as well. Unlike other methods which primarily attempt to uncover the ideas or themes that a player has built around a subject, the ZMET method uses images and metaphors to explore people's subconscious thoughts (Morse, 2002) The ZMET method attempts to look at subconscious ideas or correlations that individuals might have about a subject (Morse, 2002). The focus of this thesis is to understand the type of messages a player independently creates in each video game. By focusing on the correlations and ideas individuals make through each relationship created, between a gamer and an avatar, a better understanding of how gamers interpreted each message can be made.

As earlier stated, a number of differing presences exist, this research will use "self presence" to address the question of the messages created through the player-avatar relationship. The player-avatar relationship was chosen as a focus because it is the aspect of each game that most provides each player with a sense of self presence. Each avatar is the object that a player most closely controls; it is the player's vehicle or connection to the message and is the key to creating self presence in a players mind. As Tamborini & Skalski (2005) stated, "self presence is first and foremost a product of cognition" (p. 18). This cognition structures how each player views the entire video game message.

Aspects of this relationship that will be focused on will include: (A) the character-avatar relationships (including self presence or role-playing, avatar usage, and avatar meaning). (B) Each players understanding of their avatar's appearance and abilities. (C)

Each individual's interpretation of their interaction with the character in an electronic

world. (D) Each player's interpretation of the senders' original message

ZMET method

Unlike traditional personal interviews, the ZMET method was originally created

to uncover a consumer's reaction to advertising, is designed to understand a consumer's

image of a brand, the product, product concepts and designs, purchase experiences, and

product experiences such as life experiences, consumption context, and attitudes toward a

product (Zaltman & Coulter, 1995). This method will be used in this thesis to decipher

the Super Mario avatar product and image, and how they are understood by each player.

The ZMET method uses nine steps to extract insights from each individual. This

thesis will conduct two hour depth interviews with ten subjects using these nine steps.

After qualifying for participation, participants will be given seven to ten days to collect

photographs or pictures (from sources such as magazines, the Internet, books, newspapers,

etc.) which embody the ideas of what the Super Mario avatar means to them (Zaltman &

Coulter, 1995). The total number of pictures gathered by each participant may vary, but

this thesis will request between 12 and 15 pictures be brought by each participant.

Following this initial collection period, individual interviews will be used consisting of a

guided conversation using these nine steps.

Step 1: Story Telling

The first step "provides participants with an opportunity to tell their stories"

(Zaltman & Coulter, 1995, p. 40).   This is an important step because over the seven to

ten days that participating individuals have gathered pictures concerning the Super Mario

avatar they have also had time to think about past interactions they have had with the

Mario character (Zaltman & Coulter, 1995). Because human memory and

communication are story-based, this opportunity allows participants to release any basic

concepts and related thoughts that they have gathered over the week (Schank, 1990;

Zaltman, 1997).

Step 2: Missed Issues and Images

In step two, the interviewer asks the participant to "describe any issues for which

he or she was unable to find a picture and to describe a picture that would represent the

issue" (Zaltman & Coulter, 1995, p. 41). Because pertinent pictures might not have been

available within the time period allotted, this step allows the participant to address issues

that were thought of during the gathering process but not available (Zaltman, 1997).

Step 3: Sorting task

In this step, each "participant is asked to sort his or her pictures into meaningful

piles and to provide a label or description for each pile" (Zaltman & Coulter, 1995, p. 41).

This step allows the participant to establish any major themes or constructs relevant to

them (Zaltman & Coulter, 1995). Each participant is allowed to make as many piles as

he or she feels necessary, and no further suggestion on how pictures should be separated

are provided (Zaltman & Coulter, 1995).

Step 4: Construct Elicitation

In step four, a modified version of the Kelly Repertory Grid technique is used with laddering techniques to elicit constructs (Zaltman & Coulter, 1995; Kelly, 1963; Gengler and Reynolds, 1995). "The interviewer randomly selects three of the participant's pictures and asks how any two are similar and yet different from the third with respect to their relation to the research topic" (Zaltman, 1997, p. 429). This will usually surface one or two constructs. Additional questions are then asked to elicit other constructs. The laddering process continues until "the constructs that are surfaced become redundant" (Zaltman, 1997, p. 429).

Step 5: Most Representative Image

In step five the participant is asked to choose the picture that most represents his or her feelings about the subject (Zaltman & Coulter, 1995).

Step 6: Opposite Image

The interviewer then asks the participant to describe some pictures that would describe the opposite of the subject. This is done to get a better understanding of what the concept does not represent (Zaltman & Coulter, 1995).

Step 7: Sensory Images

The participant is then asked to describe the idea in terms of the other senses. "Each individual tells what is and is not the taste, touch, smell, color, sound, and emotional feeling related to the concept being explored" (Zaltman & Coulter, 1995, 41).

Step 8: The Mental Map

"The interviewer then reviews all of the constructs discussed and asks the participant if the constructs are accurate representations of what was meant and if any important ideas are missing" (Zaltman & Coulter, 1995, p. 42). After which they are asked to create a "mental map" to illustrate any connections between constructs (Zaltman & Coulter, 1995).

Step 9: The Summary Image

Finally, each "participant creates a summary image or montage using his or her own images" (Zaltman & Coulter, 1995, p. 42). This step involves the subject describing or creating an imaginary montage using the images that they have gathered. By manipulating or describing an imaginary scene, each interviewee is able to suggest what ideas and images are missing in their collection.

Sample

For a number of reasons console games were chosen over personal computer (PC) games for the study. Consoles are developed primarily to play video games while PC's are used for a variety of reasons. Looking at sales and numbers of units in American households, it is easy to see that consoles are used for gaming over PC's. In 2005, about 40 percent of U.S. households owned at least one PC used for gaming, home console or handheld device. Among those who owned a gaming device, 89 percent owned a console, 65 percent owned a PC, and 36 percent owned a handheld device (Gaudiosi, 2005, p 19.) Also games sales for that same year show that sales of games for consoles exceed those

for PC's more than three to one, with computer game sales at $1.1 billion (45 million units), while console software sales were $5.2 billion (160.7 million units) (Sheffield, 2005).

The games analyzed in this study consist of console games from the *Super Mario Bros* franchise. This franchise was chosen for a number of reasons.   One reason is the Super Mario Brothers impact on how a player interacts with his or her on-screen avatar. Starting with *Donkey Kong*, the very first game to include the Super Mario character, game development was done uniquely, as it was the first game to include a story line and a fully humanoid character (King, 2002, p.77). Unlike arcade games before it, "original characters, their looks and their motivation were created first, and then the game play was crafted with them in mind"(Kohler, 2005, p. 38). In arcade games prior to *Donkey Kong*, "programmers and engineers were responsible for game design…. [T]he engineers were even drawing the pictures and composing the music themselves" (Kohler, 2004, p. 36). This meant that *Donkey Kong* was the first game in which players could not only relate to their avatar but were given a distinctly unique character role and story line to follow. Also unlike any other franchise, the Super Mario franchise has been successful in almost all video game genres, with Super Mario having appeared in everything from side-scrolling and racing games to role playing games (RPG's) since his introduction in 1981. This versatility, history, and popularity have combined to make Super Mario the most recognized video game avatar in the world.

In 2006, *Forbes* magazine named Mario the most powerful figure in the video game business, stating that "over the past 25 years Mario-themed games have sold more than 185 million copies world-wide" (Ewalt, 2006). The Super Mario franchise holds

seven of the top 20 spots for the most units sold (All Time, 2003). The Mario franchise

boasts of marketing the best-selling video games, stating that

> The *Nintendo* game *Super Mario Bros* has sold a total of 40.23 million copies
>
> worldwide. The 26 [major] games featuring Mario, the character who first
>
> appeared in the arcade game *Donkey Kong* in 1982, have sold more than 152
>
> million copies in total since 1983. More than 40% of US households own a
>
> *Nintendo* game system" (Best Selling, 1999). Super Mario franchise games also
>
> appear on more "greatest game lists" than any other game (The Best Video Games,
>
> 2006).

As previously mentioned, the Mario franchise almost single handedly revived the

gaming industry, and having been around since the age of the arcade, it is the longest

lasting successful videogame franchise. (King, 2002, p.77). Also to a greater extent than

any other game franchise available, Super Mario has become a pop-culture icon. A 1993

study even found that *Nintendo's* mascot *Super Mario* was, at the time, better recognized

than *Mickey Mouse* (Beasley & Standley, 2002).

Chapter 4: Results

A number of interesting trends surfaced in the research interviews. This section will look at those trends and what they might suggest about the relationship between those people interviewed and the Super Mario Avatar.

Who was interviewed?

As earlier stated, each interviewee participated on a volunteer basis. Each volunteer was offered training on how to conduct a personal interview and use the ZMET method. With interviews being completely voluntary, researchers did not discriminate and included all individuals that offered to participate.

Interviewees were between the ages of 18-26 and included nine males and one female. There was a mixture of infrequent, casual, and hard core gamers. Each individual was briefed on what his or her interview would be used for, and each gave verbal permission allowing the research team to use information provided during their personal interview in our research.

Super Mario means video games

After volunteering to participate in this research, each individual was specifically instructed to bring 12-15 pictures that reminded them of "Super Mario, the character." Despite this direct statement, a number of interesting pictures relating to other objects appeared, making it apparent over the span of these interviews that the majority of those interviewed strongly relate the Super Mario character to the Nintendo Corporation, especially the NES console, and the video game industry as a whole. This association

allowed interviewees to switch easily from describing their relationship with the Super

Mario avatar to the relationship that they have with Nintendo, video games, and

characters from other video games. This provided the interviewer with a variety of

information on the relationship these individuals have with not only the Super Mario

character, but characters from other games that have impacted them.

The majority of interviewees brought a picture of one or more of the Nintendo

consoles, hardware, and Nintendo logos. When asked why, one interviewee stated that

"the first thing that I think of with Super Mario is Nintendo. I don't actually think of

Nintendo the company, I think of Nintendo as a game system." This person's initial

reaction when asked to think about the Super Mario Character was explained by another

interviewee who related the fact that the NES was originally packaged with the *Super*

Mario Bros cartridge. "The reason I picked this [picture of the *Super Mario Bros* game

cartridge] is because the Mario we had is the one that came with the [NES] system."

In addition, many of those interviewed explained that they associated Super Mario

with the video game industry because Super Mario Bros. was their introduction to video

games. "I think [*Super Mario Bros*] is one of the first games that people really remember.

Starting off this whole thing [video games], I mean you had Atari and all that, but this

was the first real game system that my generation will really remember. This is what we

knew at the time. I think that portrays exactly what we were thinking . . . . It is

recognizable, kind of an emblem."

This comparison of *Super Mario Bros* and the video game industry further led

many of the interviewees to talk about characters from other video games. Despite the

fact that the characters described came from other consoles such as the X-BOX, and

PlayStation 2, as well as PC games. When one interviewee was asked why he associated the characters from *Halo-2* with Super Mario, he stated that "I guess [*Super Mario Bros*] was just the start of video games for me at least. I never really got into the Atari. The only thing in my family we had was Nintendo, and it wasn't until recently that I have used other consoles like X-BOX and GameCube."

Furthermore, unlike many of the other trends in these interviews, the association between Super Mario and video games did not change between infrequent, casual, and hardcore gamers. Each individual at some level described the Super Mario Avatar and franchise as being representative of the gaming industry. One interviewee even suggested that the Mario character is the "Tom Hanks" of video games, describing him as the "everyman's videogame character," "someone that every player knows and can relate to in some way."

Relationships with video game avatars

During these interviews it was apparent that strong emotions had been created between each player and their onscreen avatars. While talking about the relationship they had with Super Mario many interviewees spoke in detail about past experiences that they have had either playing or watching others play Super Mario Bros franchise games. Many of the experiences had happened more than fifteen years ago so it was surprising that these individual were able to distinctly recall them. These individuals vividly recalled these early experiences, many from when they where children, suggesting that playing Super Mario Bros franchise games had made an impact on many of the interviewees. In some cases those interviewed were able to recall trivial details such as

which blocks Mario hits to get a "power-up," how to make Mario moon-walk, secret codes used to gain more lives, bridge levers on the far side of the final antagonist, specific fish characters, locations of clouds, flagpoles, etc., despite not having played the game in over a decade. As one interviewee stated, "there's this one spot on level two for some reason it is ingrained in my head that you had to break the bricks and get to a certain spot where you would run across the top to get to a certain spot. There are these vivid images in your head. It's weird that happens."

Memories of Super Mario also often rotated around people that each interviewee was with and things that happened while in groups, suggesting that often Super Mario games are seen as a group activity, or at least it is the most memorable when played with others.

Interaction with the Super Mario world

The majority of the interviewees explained that their pictures reminded them of interacting in some way with the Mario world. Often a picture that appeared commonplace or easily explained was described as directly affecting a player.   This is especially true with the various enemies found in the Super Mario world. Players would often explain that they brought a picture because it was an enemy that was especially difficult for them. One interviewee explained that he had brought a picture of Bowser, Mario's Dragon-like nemesis, because, "I never beat him, I could get to the last level, but I could never beat him." While another said that the first picture he thought of when asked about Super Mario was that of a ball and chain because "it was on one of the first levels of *Super Mario 64* and you would run up and have to go past him and every time

you would have to be really careful. That was always a part that you would have to be really careful so he wouldn't get you."

Even background items were described as becoming more vivid when the character interacted with them. When questioned about the picture of Super Mario's hat, one subject explained that "the hat doesn't come into play in my mind until later on in the different games when he starts taking it off." While another interviewee explained that "if you lose it [the hat] in the Nintendo 64 [version] games you can't fly and stuff," both individuals suggesting that the hat became a more important aspect of Mario when it impacted their play in some way. This is interesting because Mario has worn a hat since his introduction in *Donkey Kong*, but these individuals felt that it was not an important aspect of the Super Mario character until the Nintendo 64 version of Super Mario over ten years later. This suggests an onscreen interaction with aspects of Mario's persona is a key element in making the object stand out.

Super Mario and actions

When looking directly at the "role playing" relationship between a player and the Super Mario character, one trend that was common was the lack of pictures showing a distinct action that Super Mario can do. The majority of the pictures dealing directly with Super Mario instead showed Mario's physical characteristics (his red hat, red overalls, a bushy mustache, the fact that he is Italian, etc), background, or secondary characters, (Bowser, turtles, goombas, etc.) and background items (pipes, castles, flags, flowers. etc.)

However, during each interview, participants repeatedly referenced Super Mario's ability to jump, throw fireballs, run, fly, etc., referring to most "actions" in the first

person, describing the specific actions that they "made" Mario perform. For example, one subject stated that she brought pictures of "the flower that gives you fireballs" and "the star because it gives you superpowers." While another man "brought the flag from the castle from the first [Mario] where you would jump off the rocks and land on the flag to see how high you could get him [Mario]." One man explained that he brought a picture of a flagpole because "one thing I really liked about Mario was the flagpole, because you could run and jump on the flag and then just squirt down." Each individual suggested that they personally performed or benefited from each action, even though the avatar Mario was actually the image on the screen. These individuals took credit for Mario's onscreen actions, contributing the characters jumping, running, and etc. to their efforts. Indeed this seemed to be the case, as the majority of Mario's onscreen actions were described as happening in the first person.

This personification of action in a video game was not based solely on Super Mario and his actions. Instead, any action by any character that the gamer could perform "personally" by pressing a button was personalized. When describing his relationship with Yoshi, a hungry little dinosaur which Mario rides and uses to eat enemies in Super Mario World, one interviewee said "I like to eat stuff," suggesting that he personally is doing the action of eating the onscreen antagonist. If this interviewee felt that he was "role playing" as the Super Mario avatar, he more likely would have said, "I like to make Yoshi eat things" or "I like when Mario makes Yoshi eat things," but instead he personally took credit for the action. Later in the same paragraph he said "remember you could fly? I would fly for like an hour," reminding the interviewer that the Super Mario character could indeed get a "power-up" that was a cape that allowed Mario to fly. This

paragraph is interesting because the participant is not only taking direct credit for actions that Mario performs on-screen, but he also takes credit for the action that a secondary character under Mario's control performs.

Taking credit for onscreen actions was not solely seen when talking about Super Mario; the majority of interviewees also compared their actions with Super Mario to that of other video game characters. Describing times he played *Halo* with his roommates, one participant said, "It was just funny [be]cause my roommate was so intense and another roommate and I would go out and play with him and snipe him off and he would go nuts." This is a significant statement because the interviewee describes himself "going out," suggesting that some type of movement took effect. When in actuality only the character onscreen was able to travel in a virtual world. This description seems to suggest that the player in some way "role plays" as the on screen avatar to describe his actions and physical position as interacting or mirroring his on screen persona. Indeed he even describes some of the more violent acts of his virtual *Halo* persona in the first person, suggesting that he and his roommate "snipe" or shoot the third roommate causing the acted upon roommate to "go nuts."

The majority of pictures brought were those of objects that were the focus of a player's action or something that they could interact with onscreen. People focus on that which they can do or use or compete against.

Personalizing any action that a player makes Mario perform seems to be a common way of describing individual game play. When describing the onscreen action of gaining a fire flower "power up" or an item which boosts Mario's current abilities (this one provides Mario with the ability to throw fire at enemies), an interviewee stated that

"he never eats it [the flower] he just touches it but it's almost like you eat it because you grow strong or something." This player changes from the use of "he" to describe actions that Mario performs, the act of eating the flower, to "you" to describe actions that the player can control or benefits from, gaining fire power.

Although most players used "I," "me" and "you" to describe what they made the Mario avatar "do" onscreen, none of the interviewees seemed to think that they were role playing, in the strict sense of the word, as the Super Mario character.

Role Playing?

Despite the predominate usage of first person when talking about video game play, it would appear that role playing, traditionally defined as pretending to be someone else, especially as part of learning a new skill, is not exactly what each player experiences (Cambridge Advanced Learning Dictionary, 2005). As one participant elaborates, "I don't know? You're just a blob on the screen, in control, but not actually doing what he does, saving the princess or whatever. I don't think there is any emotion tied to the plumber. It could pretty much be a little circle ball and accomplish the same thing."

The "role playing" relationship between player and character seems to change depending upon the role that each takes. When Super Mario appears as an uncontrollable character onscreen, in movies, on television, on Nintendo paraphernalia, etc., he is described by using original characteristics such as his mustache, overalls, or the fact that he is Italian. It is when Mario is uncontrollable that players seem to notice more details of what "he" looks like.

However, when he is controlled by an individual, either personally or by someone else, the individual does not pretend to be the onscreen avatar, but instead, Mario is seen more as a focal point on the screen, used to keep track of what a player is doing.   It would also appear that individuals pay less attention to the avatar onscreen but worry more about the obstacles around the character focal point that "they" need to overcome. The use of the avatar as a focal point would explain why players more readily associate items surrounding the characters when asked to describe an avatar than the avatars on screen characteristics.

If that is the case it would appear that it would not matter what the onscreen character looks like as long as the game is fun. If players do not "role play" or picture themselves as the mustached plumber but instead simply see the plumber as the area that they need to look at on the screen, it would seem that the Super Mario avatar could have looked entirely different and players would have still enjoyed the game.

Look versus skills

When players were asked about games where they are given a number of different characters to choose from or a decision about what their character will look like, they did suggest that the character's image played a role in who they choose. However, even then, what their character looked like was only a secondary aspect in the character decision process, preceded by a character's skill set. Or if a character had a unique "skill" or "ability" that was beneficial to a player and what they were trying to accomplish, the character was chosen before other characters that had a look or appearance in which they were interested.

For example, an interviewee mentioned choosing to use the princess in *Super Mario 2*, despite feeling embarrassed, because she was able to "float" for a short period of time. "I feel kind of silly; I picked a princess, but I liked the floating ability." When asked about feeling silly, the interviewee elaborated, comparing the princess in Super Mario with a female character from an older fighting game. "Well you know there are certain abilities. It's kind of like I always liked being Chun-Li in *Street Fighter [II]* that was just because of her moves. I thought she had some pretty good moves. I was pretty much able to beat a lot of people playing her." Suggesting that even though he was embarrassed to play as a girl character in both games it was more important to have a character that was able to "do" a certain skill that gave this individual an advantage.

Others individuals also stated that they would choose characters based first on their skills by saying they chose characters "because he was a lot faster," while not choosing other characters because "he was so slow; he had a high top speed rate but that is useless."

Individuals even suggested that when given a choice they would sometimes choose characters because they had unique look that gave the player an advantage in the game, such as a "small head that was easier to see around," or to make a character easier to see. "Turtle doesn't look like anything from the back, you know, it is just like a little bump over the top of the roll bars. But you could actually see Toadstool's head. So I picked him."

Choosing characters on ability first seemed the norm for all of the male participants, but the one female participant did mention that she chose the character Toadstool when playing *Mario Kart* because "he was cute." However, when asked if it

mattered that he was not a girl, she said, "He was cute. I didn't like to pick Bowser or those ones because they are not as cute. I didn't pick princess because toad is cute and princess is kind of wussy." When asked directly if she picked Toad "because he is stronger than the princess but still cute?" she replied, "Yes," suggesting that even though the cuteness of a character was more important to this player, the character's attributes still played an important role in the decision process.

Personalizing characters

One aspect of a character that stood out was that a character's looks did seem more important when playing on-line games in which an avatar is used to portray an individual's personality to an online community, or if an individual could name the character. When asked if naming the character made a difference to one individual they said, "I think so. Even though it was a stupid little thing, you were a bit more involved." Another character also stated that he created a character in the on-line MMORPG, *World of WarCraft*, that was a female character because, "I like the name of the character. I was like Fieria. That sounds really cool it kind of means fiery and that is kind of a mage. I was looking for a mage name; that's kind of a really odd name for a guy." Also when later asked if he created a female character more for the name than the look he replied affirmatively.

These findings suggest that being able to personalize a character makes that avatar more important to the individual. Being able to show a bit of the player's personality on-screen, especially when others can see it, seems to be a major part of the decision process when picking a character. However, when characters are stagnant and cannot be changed

to illustrate the personality of the player, the character's looks seems to play a smaller role in the decision-making process.

Games without avatars

When looking at each individual's relationship with an onscreen avatar, it is interesting to look at popular games that did not include a central avatar or even human shaped character. Games like *Tetris*, *Guitar Hero II*, *Pong*, *War Craft II*, sports games, (*NCAA football*, *John Madden Football*, *NBA Live*, *FIFA Soccer*, etc) driving games, etc, do not contain central characters and players can switch from one avatar to another or not have an avatar at all.

Looking at these types of games, one individual described his relationship with *NCAA football*: "I consider myself the quarterback, like you're leading the team or something. Because in football, you act more realistic, like you're actually calling the play. Whereas in Mario, you're dodging the obstacles coming at you, I jump now, run now, or jump now. It's not premeditated that way in football. I can get more involved with it, more like a coach."

Another individual described his relationship with the war strategy game *WarCraft II*, as being that of "the general or an overseer who is able to control the troops." He then spoke about the game of *Tetris*, a puzzle game where a player must fit differently shaped blocks together to create lines, and *Dr. Mario*, a puzzle game from the Super Mario franchise, stating that they involved "no characters on the screen, because in those games it is the player against the computer. It would have made no difference at all if Mario had been in the *Dr. Mario* or not, the game play was the same."

It would seem that every video game could be considered a player vs. computer experience. Perhaps this idea further explains why individuals describe the character's movement on the screen in first-person. Each person is controlling the on screen character to battle individual trials, but over all it is the player versus the computer that keeps a players attention.

Group Play

This idea of computer versus player would also help to explain some of the comments that were made to describe group play. During the interviews, it was often mentioned that *Super Mario Bros* and other games were most memorable when played in groups. As one interviewee said "the times I played the most were with other people. When I was by myself, it lost some of its excitement because there wasn't someone there to celebrate with. It brings in a level of competition." Each of those interviewed spoke briefly on group play and group interaction with video games and the onscreen avatar.

Much like a television program or some other form of entertainment the interviewees suggested that they were content to watch others play while they watched. One interviewee stated, "I would play with my brothers a lot of the time. They would play a lot of time and I would watch. I loved it. I don't know why but I really liked watching it when I was little." He also explained that he still enjoys watching others play video games. "It's funny to watch. We will play *Guitar Hero* sometimes in the theater in my clubhouse. And two people will be playing and fifteen people will be sitting around watching the notes go down. For hours just watching the notes and they're entertained." He described the group relationship while playing the contemporary game *Guitar Hero II*,

a game in which players follow onscreen notes to play a controller shaped like a "guitar". This game is unique in that play consists mainly of colored stars gliding down the screen to alert the player to hit a button at the correct time. The on screen pictures mainly consist of the guitar fret, colored stars, and a character shown playing a guitar. With stagnant backgrounds, lack of changing game play, etc., it would appear that this game would be uninteresting to those not playing.

This ability to sit and watch another individual enjoy a game while not personally playing suggests that a bond also exists between onscreen avatar and non-playing individuals. In explaining why watching others play a game was enjoyable, one man said that "[watching] didn't really bother me cause there was always something else to do it seemed like. I didn't ever feel like I should be playing instead of someone else. I did usually l think that I could do a better job, but I think we all do that sometimes." The suggestion that there is "something else" to do even when watching others play a game suggests that those individuals watching interact with the onscreen avatar or game in some manner.

The interest that is created that keeps people watching might come from the challenge taking place between the human player and the computer. Each watching individual is interested in the competition that is going on, and that interest keeps their attention. This would also explain why the previous interviewee stated that he spent some of the time watching, thinking that, "I could do a better job." By understanding the rules and difficulty of the competition taking place on screen, the individual is better able to gauge how he would react and what the conclusion might be.

The competition between the computer and a human player further explains why individuals consider the avatar to be a focal point more than a role to play; players know that each message at it is core is a game between themselves and the computer.

Cyber worlds

One other interesting thing that some interviewees brought up was the recent phenomena of combining characters from different game franchises into the same game. Interviewees stated that this was in some way a "weird" experience. When asked about *Super Smash Brothers*, a Nintendo made game featuring their most popular characters together in battle situations. One player explained, "I mean it made sense because they were from the same; see I wouldn't even say the same universe because to me it doesn't even seem that way because when I think of a universe I think kind of like the games as their own little universe. But I mean they are branded under Nintendo so they are all Nintendo characters, so to me it just seems like? The first time I kind of thought how did they get there? It's kind of weird. Kind of like alternate realities or something like that."

The idea of "alternate realities" created in a players mind seems to suggest that at some level players accept that video game avatars each have unique back stories, or their own history. Players may separate characters from different games by imagining them as existing in entirely different worlds. This suggests that players may see themselves as entering different worlds when they switch from one character or game to another.

However, players do seem to play a very active role when interacting with video games, engaging in the process of making, rather than simply absorbing meanings. This active interaction was easy to see when discussing earlier Super Mario games where

despite the brief background given, players had actively constructed individual meanings

for some of the game elements. According to the official Mario Bros. instruction booklet,

> One day the kingdom of the peaceful mushroom people was invaded by the
>
> Koopa, a tribe of turtles famous for their black magic. The quiet, peace-loving
>
> Mushroom People were turned into mere stones, bricks and even field horse-hair
>
> plants, and the Mushroom Kingdom fell into ruin. The only one who can undo the
>
> magic spell on the Mushroom People and return them to their normal selves is the
>
> Princess Toadstool, the daughter of the Mushroom King. Unfortunately, she is
>
> presently in the hands of the great Koopa turtle king. Mario, the hero of this story
>
> (maybe) hears about the Mushroom People's plight and sets out on a quest to free
>
> the Mushroom Princess from the evil Koopa and restore the fallen kingdom of the
>
> Mushroom People. You are Mario! It's up to you to save the Mushroom People
>
> from the black power of the Koopa (Nintendo, 1985).

Despite the fact that this was the entire background given to describe the original *Super

Mario Bros* game, interviewees often mentioned that Super Mario was Italian and

enjoyed Italian food (Nintendo has never officially stated Mario's nationality.) In

addition, a number of differing stories were given about the other characters and items

one can interact with, such as many interviewees stating that the pipes in the game were

there because "Mario is a plumber." Not one person interviewed mentioned anything that

coincided with the official Nintendo story.

Chapter 5: Discussion

Videogames can be studied using the same research methods as traditional media, but one challenge in analyzing the videogame medium is that it looks similar to traditional media, so researchers see it as delivering similar messages. This idea may be true to an extent; however, how the audience receives that message is unique. While it would be easiest for researchers to simply use traditional techniques, which appear to work and deliver results, to fully understand the message a player receives simply copying conventional tools might not provide a clear understanding.

Unlike traditional media that are largely used to relay a direct message, videogames use a game or challenge to allow the audience to explore a message. How the audience understands the videogame experience is easier to understand when a researcher knows that the primary message of each game is the challenge between player and computer (or player and player), making all other messages secondary. Often additional messages, such as story lines, additional content, improved skills, and extreme challenges are used to drive each player to complete the challenge against the computer.

This is not to say that videogames are only games and should be studied primarily as such. While the challenge of each game is central to the message, videogames continue to mature and producers are increasingly incorporating traditional communication techniques to involve their audiences. Story lines have been added to strengthen bonds between the onscreen character and player. Cut-screens or short movie clips help tie games together. Music is used to create the right atmosphere. Text helps to make messages clear. Many new games even allow players to use head sets to connect with players around the world to create interpersonal communication or communities

around a game. This merger of many types of communication makes videogames and other interactive media difficult to understand because players and producers have so many possibilities surrounding each message.

Suggestions that a compatibility with traditional media analysis exist because traditional media are often created based on videogame series would be inaccurate. Many traditional media messages have been made based on the life of influential people; however, no researcher would suggest that one could gain an understanding of these people by simply conducting a traditional media analysis. This is not to say that videogames are as complex as people's real life experiences, but as the medium grows, interactive plots and multiple messages are becoming a normal part of the videogame experience. Instead, using traditional media analysis on audience created media, based on a video game to develop an understanding of a player's interpretation of the videogame message, would be more beneficial.

This is not to suggest that trends do not exist in videogames that offer an understanding of how these messages can be read. Interactive media are continuously becoming more complex but some underlying aspects have remained the same since their introduction.

Avatar relationships

Original research looking at avatars suggested that a character acts as the audience's vehicle to move onto the "gaming stage," allowing the player to become a digital actor or role play (Laurel, 1991). While, more recently researchers have

suggested that each character is simply a suite of characteristics or equipment for a controlling player to utilize (Newman, 2002).

However, the gamer's responses in this research suggest that avatar relationships in videogames relate directly to the challenge between a player and computer. Each avatar is the player's emblem or symbol in the virtual world. A player does not picture themselves as the avatar but instead relates to the onscreen character because they ultimately have the same goals. Each player joins the avatar in a partnership to complete the challenge. The avatar has many skills or tools that the partnership needs while the player provides the direction or brainpower. However, the idea that each avatar is just a suite of characteristics or equipment for a player to utilize as a tool is not correct.

Also based on this research avatars, are not considered a tool themselves because players create a type of bond with their onscreen emblem. This bond is similar to those developed between a customer and their favorite brand or fictional character. Like branding, which is used to differentiate similar products in a consumer's mind, players develop brand loyalty with their avatar, creating feelings of kinship or affinity. Much like the Pillsbury Doughboy, Ronald McDonald, Indiana Jones, Magnum P.I. or other television, movie and advertising icons, avatars take on a life of their own. Players accept Super Mario as their on-screen icon not considering him to be a mindless drone, but a partner with a set of skills needed to accomplish their mutual goal.

This partnership is seen in the verbiage these players' used when recreating game play. Both first-person and third-person actions are referred to in game interaction. With actions that the player can control described in first person, and actions that the avatar conducts talked about in third person. The interviewee always referred to the avatar in

much the same way he or she would a colleague or friend. Using the avatars first name, players described what the character adds to their partnership. Phrases such as "Mario gets the star," or "Mario saved the princess" were common; however, statements such as "I used Mario to get the star," or "I made Mario save the princess" were not.

Since avatars and players were described in a partnership the onscreen character was easier to accept if the player felt his or her image was correct for the game's location, experience, mood and challenge. Mario was accepted by these players because he looked the part. Super Mario games are made to look unthreatening and colorful; the atmosphere allows the player to accept the mustachioed plumber as their avatar. However, if Super Mario were to appear in more threatening and realistic games, he might not be as easily accepted, appear comical, or appear misplaced. Players wanted their avatar to look like it is up to the challenge.   It is true that earlier games with poor visuals had "blips of light, @ signs, and text only" characters, yet that does not mean that these same characters would be accepted in the games of today (Newman, 2002, p. 8). These early characters were accepted because they matched the challenge; the "@ sign" character looked able to compete against the "% sign" antagonist.

Identification

How does an avatars' image impact the message? Do players accept certain character images more readily than others? Researchers in the past have debated the importance of avatar identification. It has been suggested that characters are tailored to attract a certain audience (Kinder, 1993). With others arguing that a character does not

depend on its appearance but instead relies on their abilities to attract an audience

(Newman, 2002).

According to the individuals interviewed in this research, if the character looks

right for the challenge, more than the look, gender, or age of an avatar, players relate to

the common goal. No interviewee (male or female) mentioned any difficulty, unless he

or she was directly asked, in identifying with Super Mario or any other avatar because of

their image. Suggestions that a player prefers a character similar to his or her own race,

sex, or age does not appear to be correct. When asked, subjects never suggested that

once a character was chosen the player had a hard time relating to it. In fact,

interviewees suggested that the ability to personalize a character improved their

relationship to that a character, but no personalized character was described as having

similar physical characteristics.   Large men described having personalized female

characters; thin men made muscular characters, suggesting that players do not necessarily

prefer characters similar to themselves.

The belief that many researchers hold that a player primarily uses character

identification to relate to his or her on-screen avatar appears inaccurate. However, what

the title character looks like is more important in getting a player to initially try a game.

With the large selection of games available, players often rely on the look, location, and

type of game to make their selection.

Avatars are often made to be part of the games puzzle or challenge. Many avatars

start out inadequate to the final challenge, and players must invest themselves in their

development. While the character will always possess the skills to accomplish the lower

level tasks necessary for the partnership to move on to harder challenges, they will often

need the player to help them to gain more skills to complete the final goal. For example,

Super Mario starts out small with only the ability to jump and run. However, as a player

progresses Super Mario grows, he learns new skills, he gains friends, and develops as a

character. As Super Mario advances, the player feels accomplishment.

Similarly, each game is made to be solved by the player; when a player's skill

becomes equal to the problem a more difficult puzzle is presented to them. These

problems also create a connection between the player and avatar. The player is aided by

his avatar, along with other helpful characters, beneficial items, improved skills, etc.

Each of these additional skills or abilities improve the player's chance to succeed.

Presence versus role playing

Original player-character relationship studies often suggested that each gamer

participates in a type of role-playing fantasy when interacting with an on-screen character.

However, contemporary understanding seems to argue against this belief, stating that "the

level of engagement, immersion or presence experienced by the player….is not

contingent upon representation" (Newman, 2002, p.8). So do players see themselves as

playing a role? Or is the feeling of "self presence" developed in another way?

Players do not role-play as their onscreen avatar. Each gamer explained that they

were not participating in a type of role-playing fantasy when controlling an on-screen

character. Instead, well made games used presence to engage an audience. The players

did not picture themselves as a plumber when playing a Super Mario game; instead they

were immersed in the challenge and created a kinship with their on screen avatar. This

relationship in many ways resembles the connections that are made between characters in

movies, books, and television. Just like audiences using traditional media can form relationships with on-screen characters, videogame audiences also experience these connections.

However, videogame relationships do not completely mirror those of traditional media because a player is able to control a portion of the message. By challenging the player and offering a multitude of decisions, games are able to create increased feelings of "self presence." It is true that traditional texts can to some extent be non-linear because each reader makes personal interpretations of text. However, the medium itself is linear; viewers can only make their interpretation on what is provided. However, interactive media are not-linear and variable experiences and multiple message choices help involve the player and create an in-depth presence.

The feeling of "presence" appears to come more directly from the challenges, accomplishments, and interactive message then from the avatar itself. The avatar is seen as the players' connection to the game, but overall it is a small part of the gaming experience. Instead, the feeing of presence comes from immersion in the game. Aspects such as game play, controls, sound, visuals, story, etc. play an important part in drawing the player in.

Interviewees described the most important aspect of presence as the challenge because it creates the motivation and attaches a player to the message. Without the puzzles, opposition, accomplishment and challenge, the player has nothing to gain and no reason to control the experience. However, when the player is invested in solving the challenge he or she is willing to invest a part of them in the message and this creates a connection.

Another aspect that affected the player's level of presence in a videogame is the player's individual skills and interests. If a player feels that a game is either too hard or too simple, they lose interest and move on to a challenge that they can solve. It is difficult to become immersed in the message when the challenge is unsolvable or uninteresting. However, challenges that are too simple lack the feelings of accomplishment that comes when a player in able to complete a difficult, yet manageable, task.

A correct level of difficulty might explain why the Super Mario franchise has managed to remain popular for so long. With each franchise game continuously built at an appropriate level of difficulty, the audience might be less interested in if the game looks childish, or how the Super Mario avatar looks, because the puzzles presented remain interesting and challenge the audience.

Group play

Past research has recognized that even though videogames are generally regarded as an asocial experience, they are often not an individual affair. "Secondary players" often play an important role in the gaming experience (Jessen, 1995). What are the roles that secondary players take on? What makes watching a videogame exciting? How do group dynamics change the videogame experience?

Group play is normal even in single player videogames because those individuals watching relate to the challenge. Like viewers watching a football game, spectators enjoy watching the game unfold. They decide how they would react to the puzzle presented, and provide solutions or opinions.

Interviewees enjoyed watching as a group because it was fun to see how others handled each difficulty or the skills that they had acquired. Playing as a group allowed players to showcase the skills they have acquired for each game. Since players invested a large amount of time to gain the skills required to master each videogame the viewers that understand the game's difficulty enjoy seeing the game skillfully played.

Players enjoyed playing together as a team in multi-player games because they built camaraderie and accomplish the goal as a group. Working as a team often changes the challenge in a game. The need for cooperation and group problem solving skills often increases the challenge while allowing the group to accomplish tasks that would be hard or even impossible as a single player. In many games skilled players can also help beginning players; this allows players to showcase their accomplishments and skills while helping their friends.

One of the most popular types of group play was player versus player play; more so than any computer adversary, playing against another person tests an individual's skill. Solving the challenges that come from beating an opponent that does not always do what is expected brings more rewarding victories. Players enjoyed using their skills to overcome a live opponent because they can understand the feelings that another player has when losing. Furthermore, because live opponents can think rationally it becomes more difficult to outthink and outplay making the game more enjoyable.

Limitations

This research was qualitative in nature and can not be generalized to any but the individuals involved. Instead the interviews and opinions given during this research

suggest a direction to take for future research. The intention of this research was not to understand the gaming population as a whole but instead to suggest that researchers look at possible alternative suggestions or understandings in future research.

Conclusion

The focus of videogame research is changing from the producers of each message, and in some ways the message itself, to how the audience interprets each message. This shift in focus appears to not only be justified but perhaps necessary to gain the clearest understanding of how a user interacts with the videogame medium and its message.

Unlike traditional media that relay a more direct message, videogames are games or challenges that allow the audience to interactively explore a message. While many video games use additional messages to create interest, the primary message of every game is the challenge between the player and computer (or player and player), making all other messages secondary.

While originally videogames imitated many of the games that people already understood, such as ping pong, chess, mazes, etc. the paradigm of what a videogame is continues to change. Early games lacked any type of story, unique characters, imaginary worlds, unique powers, etc. and were more linear in their design. The familiar, straightforward, and simplistic constructs of early games were easier to interpret because each player was sure to have a similar experience.

However, as videogames continue to become more complex they have increasingly become more difficult to define. Unlike television or movies which have, to some extent, kept a similar construct since their introduction, the videogame's construct is continuously changing. Since their introduction, only the underlying challenge that makes each message a game has remained constant.

These changes make the videogame medium a unique form of communication. Traditional measurements used to analyze television and movie media often fall short in

their efforts to understand videogames completely. Additionally, it would appear that using analysis tools developed as little as five years ago are quickly too outdated to gain a clear understanding of contemporary videogames.

Traditional media messages remain constant once they are written, recorded, or otherwise documented. Each message provides a similar experience to audience members, the story, characters, and other aspects remain the same. However, the videogame medium changes this paradigm by letting each member of the audience control his or her own story. This allows the audience to create new characters, explore personal interests, and change the message to their needs.

These varying experiences were evident listening to each interviewee relay his or her understanding of the *Super Mario Bros* character. Despite the researcher's belief that the participants would focus on the visual aspect and story of each game, players more often focused on how they interacted with the game, or what they made the game do. Often the more unique experience the player made, the more interested a player was to share it. Extreme point totals, unintended outcomes, outstanding abilities, etc. lead to more vivid memories.

These varying experiences necessitate a larger focus on how the audience understands each message. Past research tools that focused on the producer or message, such as a content analysis, cannot provide a full picture, but may instead find those ideas that the researcher is interested in.

As videogames become more realistic and personal to each player, new research methods are needed. A focus on what each player experiences has become more important. It is not justifiable to simply consider videogame an offspring of traditional

media, or to use the research tools established for traditional media in an attempt to gain a full understanding of newer interactive media and their personalized messages. Indeed, believing that the changing messages in this interactive medium can be read using the same methods as traditional media could lead some researchers to the delusion that they have gained the understanding of what a message means when they have no understanding of what it means to the audience.

Research done in the future needs to develop tools that integrate the videogame's underlying challenge in the analysis of the messages received by individuals. Games continue to become more open ended, and only by building on the fundamental messages produced by the challenge and focusing on the audience instead of the producers, will a clear understanding of the videogame medium be possible.

Further Research

Additional ideas for research based on these findings would include studying how each challenge impacts a videogame player. What are the elements that are needed to make a challenge interesting? How can these elements be used to better understand each videogames message? How do different players react to the same challenge?

Also looking at the difference between characters that men and women pick when playing video games, and why they pick the characters that they do. With a number of companies trying to make games that females enjoy playing, it would be interesting to see if females want cute characters over abilities, and if they are more interested in female avatars than male avatars. In addition, a study could be done looking at how

males choose characters, to gain a deeper understanding of what role abilities and skills play compared to how a character looks.

An additional study could look at whether or not an onscreen character is used primarily as a focal point, meaning that gamers take less notice of what a character looks like than what it can do. It would also be interesting to look at MMORPG's compared to console games to see if how a character looks is more important to a player when their character is used to portray themselves to a community.

The social aspect of videogames is another area that needs to be looked at. Many people consider videogames to be a personal or solo activity. However, group gaming might be important, especially for infrequent gamers.

Another study that could be done is to look at those characteristics that are the most important to each gamer when choosing a character. It would be important to separate out this character decision by those games which have stagnant characters, characters that a player can name, and characters that multiple aspects (looks, skills, name, etc.) can be changed.

Complete list of Super Mario Games

1981
  * Donkey Kong (Arcade)

1982
  * Donkey Kong (Game & Watch)
  * Donkey Kong (ColecoVision, INTV)
  * Donkey Kong Jr. (Arcade, Game & Watch, Atari 2600)
  * Donkey Kong 2 (Game & Watch)

1983
  * Donkey Kong (Atari 8-bit, Apple II, C64, MS-DOS, Famicom)
  * Donkey Kong Jr. (INTV, ColecoVision, VIC-20, Atari 2600 , Famicom)
  * Mario's Cement Factory (Game & Watch)
  * Mario's Bombs Away (Game & Watch)
  * Mario Bros. (Arcade, Atari 2600, Atari 5200, Famicom)

1984
  * Punch Out!! (Arcade) Mario is the referee
  * Pinball (Famicom) Mario is found in the bonus stage
  * Golf (NES) - Japan release - features a fat version of Mario
  * Punch Ball Mario Bros. (NEC PC-8801)

1985
  * Super Mario Bros. (Famicom/NES)
  * Wrecking Crew (Famicom/NES) stars Mario
  * Golf (NES) - United States release - features a fat version of Mario
  * Tennis (NES) Mario is the referee
  * Pinball (NES) - US release - Mario is found in the bonus stage

1986
  * Donkey Kong Jr. (NES) - United States release
  * Golf (NES/Famicom Disk System) – (NES)European Union release (FDS)
  * Super Mario Bros. (Famicom Disk System) Japan only
  * Mario Bros. (NES, PC-88) - United States and European Union NES release
  * Donkey Kong (NES) - United States and European Union release
  * Pinball (NES) - Europe release - Mario is found in the bonus stage
  * Super Mario Bros. Special (NEC PC-8801)
  * Super Mario Bros.: The Lost Levels (Famicom)

  * Vs. Super Mario Bros. (Arcade)
  * All Night Nippon Super Mario Bros. (Famicom Disk System)

1987
  * Donkey Kong Jr. (NES) - European Union
  * Mario Bros. (ZX Spectrum)
  * Mike Tyson's Punch-Out!! (Famicom/NES) Boxing referee.
  * Wrecking Crew (NES) - Europe release – stars Mario
  * Mario Bros. (Atari 7800, XEGS)
  * Donkey Kong (Atari 7800, Famicom Disk System)
  * Donkey Kong Jr. (FDS, Atari 7800)
  * Super Mario Bros. 2 (NES) - USA Release
  * Kaettekita Mario Bros. (Famicom Disk System) - Japan only known in the USA as "Return of Mario Bros."
  * Donkey Kong Classics (NES) - United States release
  * 2-in-1 Super Mario Bros/Duck Hunt (NES)
  * Super Mario Bros. 3 (Famicom) - Japanese release

1989
  * Super Mario Bros. 2 (NES) - Europe and Australian Release
  * Alleyway (Game Boy) Appears in bonus level
  * Donkey Kong Classics (NES) - European Union Release
  * Super Mario Land (Game Boy)
  * Tetris (NES) Once player beats Level 9 Height 5, Mario and friends appear
  * Tetris (Game Boy) Mario and Luigi appear in 2-player game

1990
  * Super Mario Land (Game Boy) - European
  * Super Mario Bros. 3 (NES) - United States and Canadian release
  * Dr. Mario (NES & Game Boy)
  * VS. Dr. Mario (Arcade)
  * 3-in-1 Super Mario Bros/Duck Hunt/World Class Track Meet(NES)
  * Super Mario World (Super Famicom)

1991
  * Mario the Juggler (Game & Watch)
  * Super Mario Bros. 3 (NES) - European
  * Mario Teaches Typing (PC)

  * F-1 Race (Game Boy) Mario appears when player wins a race
    * Super Mario World (SNES)
    * NES Open Tournament Golf (NES)
    * Yoshi (Game Boy)
    * Super Mario Bros. & Friends: When I Grow Up (PC)

1992
    * Super Scope 6 (SNES) Mario flies by in a plane
    * Super Mario USA AKA Super Mario Bros 2 (Famicom) - Japan release of Super Mario Bros. 2
    * Super Mario Kart (Super Famicom/SNES)
    * Yoshi (Famicom/NES, Gameboy) The player controls Mario or Luigi
    * Yoshi's Cookie (Famicom and Game Boy) – Japan Release
    * Mario Paint (SNES)
    * Super Mario Land 2: 6 Golden Coins (Game Boy)
    * Mario's Time Machine (DOS)
    * Super Mario World (SNES) - Europe release
    * Mario Is Missing! (DOS) Mario is captured

1993

    * Mario Is Missing! (SNES, and NES) Mario is captured
    * Mario's Time Machine (SNES)
    * Mario and Wario (Super Famicom) - Japan only
    * Super Mario All-Stars (Super Famicom/SNES) - in Japan "Super Mario Collection"
    * Yoshi's Cookie (NES, SNES, Super Famicon and Game Boy) - North American (all three platforms) and Japan (Super Famicom)
    * Mario's Early Years! Fun with Letters (SNES) - North America only
    * Mario's Early Years! Fun with Numbers (SNES) - North America only
    * Mario's Early Years! Preschool Fun (SNES) - North America only
    * Yoshi's Safari (SNES/Super Famicon) Yoshi's Partner
    * The Legend of Zelda: Link's Awakening (Game Boy) Mario and Peach were featured as "outside" characters

1994
    * Donkey Kong '94 (Game Boy)
    * Wario Land: Super Mario Land 3 (Game Boy) Mario makes a very small cameo at the end
    * Tetris & Dr. Mario (SNES)
    * Super Mario All-Stars & World(Super Famicom/SNES) - Japan, North American, and Europe
    * Mario's Time Machine (NES) - North America only
    * Yoshi's Cookie (NES) - Europe Release
    * Hotel Mario (CD-i)

1995
    * Mario's Tennis (Virtual Boy)
    * Mario Clash (Virtual Boy)
    * Mario's Picross (Game Boy)
    * Mario's Super Picross (Super Famicom) - Japan only
    * Undake 30 Same Game (Super Famicom Satellaview) - Japan only
    * Mario Excite Bike (Super Famicom Satellaview) - Japan only
    * BS Dr. Mario (Super Famicom Satellaview) - Japan only
    * BS Super Mario Bros 3 (Super Famicom Satellaview) - Japan only
    * Mario's Game Gallery (PC)
    * Super Mario World 2: Yoshi's Island (SNES)

1996

    * Super Mario RPG: Legend of the Seven Stars (Super Famicom/SNES)
    * Super Mario 64 (Nintendo 64)
    * Mario's Picross 2 (Game Boy) - Japan only
    * Kirby Super Star (SNES) - Mario is found in the audience at the Megaton Punch arena and King DeDeDes arena

1997

    * Game & Watch Gallery (Game Boy)
    * Game & Watch Gallery 2 (Game Boy)
    * Mario Kart 64 (Nintendo 64)
    * Mario Teaches Typing 2 (PC)
    * Mario's FUNdamentals (PC)

1998

    * Mario no Photopi (Nintendo 64) - Japan only.
    * Wrecking Crew '98 (Super Famicom) - Japan only
    * The Legend of Zelda: Ocarina of Time (Nintendo 64) Cameo appearance in Hyrule castle

* Mario Party (Nintendo 64) - Japan release

1999

* Super Mario Bros. DX (Game Boy Color)
* Game & Watch Gallery 3 (Game Boy Color)
* Mario Golf (Game Boy Color, Nintendo 64)
- (Game Boy Color) Japan Release
* Super Smash Bros. (Nintendo 64)
* Mario Party (Nintendo 64) - release outside Japan
* Mario Party 2 (Nintendo 64) - Japan release

2000
* Mario Golf (Game Boy Color) - United States Release
* Mario Tennis (Nintendo 64)
* Mario Tennis (Game Boy Color) - Japan release
* Mario Party 2 (Nintendo 64) - release outside Japan
* Mario Party 3 (Nintendo 64) - Japan release
* Game & Watch Gallery 3 (Game Boy Color) European release
* The Legend of Zelda: Majora's Mask (Nintendo 64) - Worldwide release (appears as a cameo as a mask on the back of the Happy Mask Salesman's bag)

2001
* Mario Tennis (Game Boy Color) - release outside Japan
* Paper Mario (Nintendo 64)
* Mario Party 3 (Nintendo 64) - release outside Japan
* Mario Kart Super Circuit (Game Boy Advance)
* Super Mario Advance (Game Boy Advance)
* Luigi's Mansion (GameCube)
* Super Smash Bros. Melee (GameCube)
* Dr. Mario 64 (Nintendo 64)
* Animal Crossing (Gamecube) - Japan Release - included Mario Bros. mini game

2002
* Super Mario World: Super Mario Advance 2 (Game Boy Advance)
* Super Mario Sunshine (GameCube)
* Mario Party 4 (GameCube)
* Game & Watch Gallery 4 (Game Boy Advance)
* Animal Crossing (Gamecube) - North American Release - included Mario Bros. mini game

* Yoshi's Island: Super Mario Advance 3 (Game Boy Advance)

2003
* Super Mario Advance 4: Super Mario Bros. 3 (Game Boy Advance)
* Mario Party 5 (GameCube)
* Mario Kart: Double Dash!! (GameCube)
* Mario & Luigi: Superstar Saga (Game Boy Advance)
* Mario Golf: Toadstool Tour (GameCube)
* Animal Crossing (Gamecube) - North Australian Release - included Mario Bros. mini game
* Nintendo Puzzle Collection (GameCube) - Japan only - Dr. Mario is a game in the collection

2004
* Super Mario Fushigi no Korokoro Party(Arcade) Playable character.
* Mario vs. Donkey Kong (Game Boy Advance)
* Mario Golf: Advance Tour (Game Boy Advance)
* Super Mario Bros. (Classic NES Series) (Game Boy Advance e-Reader)
* Paper Mario: The Thousand-Year Door (GameCube) Sequel to Paper Mario
* Mario Pinball Land (Game Boy Advance)
* Dr. Mario (Classic NES Series) (Game Boy Advance)
* Mario Power Tennis (GameCube)
* Super Mario 64 DS (Nintendo DS)
* Mario Party 6 (GameCube)
* Animal Crossing (Gamecube) - European release - included Mario Bros. mini game
* Metal Gear Solid: The Twin Snakes (Gamecube) Mario made a cameo appearance as a statue on top of Otacon's file cabinet
* Wrecking Crew (Game Boy Advance)
* Super Mario Bros.: The Lost Levels(GBA} Japan only

2005
* Mario Power Tennis (GameCube) – European Release
* Mario Party Advance (Game Boy Advance)
* Dr. Mario & Puzzle League (Game Boy Advance)
* Mario Superstar Baseball (GameCube)
* Dance Dance Revolution: Mario Mix (GameCube)
* Super Mario 64 DS (Nintendo DS) –

Australia and Europe Release
* Mario Party 6 (GameCube) - Australia and
   Europe Release
* Super Princess Peach (Nintendo DS) - Japan
   release
* Mario Party 7 (GameCube)
* Mario Kart DS (Nintendo DS)
* Mario Tennis: Power Tour (Game Boy
   Advance)
* Mario & Luigi: Partners in Time (Nintendo
   DS)
* Super Mario Strikers (GameCube)
* Mario Kart Arcade GP (Arcade) –
   international release
* NBA Street V3 (GameCube) Nintendo All
   Stars Team
* SSX On Tour (GameCube) Mario is a
   playable snowboarder
* Yoshi Touch & Go (Nintendo DS)

2006
* Mario Party 7 (GameCube) - European and
   Australia Release
* Mario & Luigi: Partners in Time (Nintendo
   DS) - European and Australia Release
* Super Mario 64 DS (Nintendo DS) - Chinese
   release
* Super Princess Peach (Nintendo DS) –
   release outside of Japan
* New Super Mario Bros. (Nintendo DS)
   playable character

* Mario Hoops 3-on-3 (Nintendo DS) playable
   character
* Mario vs. Donkey Kong 2: March of the
   Minis (Nintendo DS)
* Yoshi's Island DS (Nintendo DS) -
   supporting character
* Donkey Kong (Virtual Console (Wii))
* Mario Bros. (Virtual Console (Wii))
* Super Mario Bros. (Virtual Console (Wii))
* Donkey Kong Jr. (Virtual Console (Wii))
* Pinball (Virtual Console (Wii))
* Super Mario 64 (Virtual Console (Wii))
* Super Mario World (Virtual Console (Wii))
   - Japanese release
* Warioware: Smooth Moves - Appears in
   minigames

2007
* Super Paper Mario (Wii) playable character
* Super Smash Bros. Brawl (Wii) playable
   character
* Super Mario Galaxy (Wii) - to be released –
   playable character
* Mario Strikers Charged (Wii) - to be
   released - playable character
* Mario Party 8 (Wii) - Q2 2007 - playable
   character
* Mario Kart 64 (Virtual Console (Wii))
* Super Mario Bros. (Virtual Console (Wii))
* Super Mario World.(Virtual Console (Wii))

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