

A CONTENT ANALYSIS OF GENDER REPRESENTATIONS IN INDEPENDENT VIDEO
GAMES

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A CONTENT ANALYSIS OF GENDER REPRESENTATIONS IN INDEPENDENT VIDEO
GAMES

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DEDICATION

This thesis is dedicated to my amazing husband, who has always encouraged my academic success and constantly fights to do the right thing, even if he doesn't realize it.

ABSTRACT

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Video games are an increasingly popular pastime, and their influence on society grows along with the gaming industry. Independent video games are also growing in popularity, though little research has been conducted on how indie games compare to mainstream Triple-A (AAA) games, particularly in representations of gender. This content analysis investigates the representations of gender found in indie video games. Twelve popular indie games from 2010 through 2015 were selected for investigation. Characters appearing in these games were evaluated on a number of variables to determine adherence to gender norms exposed in previous research. Male characters were found to outnumber female characters, though by a smaller margin than expected. Female characters were sexualized in higher numbers than males, though less than found in AAA games. A significant number of characters were found to be gender non-conforming.

KEY WORDS: Video games, Gender, Indie video games, Media

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CHAPTER I

Introduction

Background

Video games are a staple of modern society's media consumption. Gone are the days when gaming was a niche hobby, shared among teenaged boys who would swarm their local arcades, pockets full of quarters. The video game industry today is a multi-billion dollar industry, with games being produced for many different machines (Egenfeldt-Nielsen, Heide Smith, & Pajares Tosca, 2013). Home consoles, such as the Microsoft Xbox and Sony PlayStation, are manufactured as primarily video game machines, but they are not the only devices on which to play games. Home computers, cell phones, tablets, and even smart watches are now capable (and profitable) video game devices. While video games, no matter where they are produced, are a global phenomenon, examinations of this form of media are observed from a western perspective throughout this paper.

While the vast majority of the population may not consider themselves gamers, it is nearly impossible to escape their presence and impact. Games such as *Candy Crush Saga* are overwhelmingly popular on Facebook, and mobile games like *Clash of Clans* have millions of daily active users (Brightman, 2015). Video games are a thriving business, and a media that has a profound impact on the landscape of society. As a tool of socialization, video games are arguably the most influential form of media that exists, due to their invasive nature.

Video games differ from other forms of modern media by their interactivity. Players take direct control when playing video games, directing heroes and choosing to

engage with, and advance, a narrative. Unlike similar visual media, such as movies or television, a player is an active participant, rather than a passive observer. Without a player, the narrative of a video game ceases to exist. This interactivity and immersion is unique to videogames, and makes their effect on players much more profound.

The complexity of this interactive media can be explained using media theory and the work of Marshall McLuhan. A key figure in media theory, McLuhan coined the phrases “hot” and “cool” media. According to McLuhan’s work, video games would be considered a cool media. This is because a cool media requires a significant amount of interaction on the part of the audience. Hot media, such as radio and film, emphasize the use of one sense over the other, whereas cool media requires the audience to engage multiple senses to obtain value from the medium (McLuhan, 1964). McLuhan’s work predates the advent of video games, which combine motor skills with audio and visual stimuli. Regardless, the ideas of McLuhan continue to influence media production.

The prevalence of video games, and their popularity among children and adolescents means they have been applied to many different aspects of society, including as educational tools. Due to the pervasiveness of video games in the lives of children, it is unsurprising that game companies have utilized this media as a learning tool. Games as educational tools are not a new development, as early PC games such as Math Blaster, a math learning game for children, were popular in the early 1990’s. These types of games occupy a genre of games known as “edutainment,” a mix between education and entertainment. This trend of using videogames for educational purposes has continued to evolve, and the elements of games are increasingly being used to facilitate learning (McDaniel & Telep, 2009).

Cultivation theory is often associated with television, but has broad concepts that can be clearly applied to video games. This theory proposes that the longer a person engages with a type of media, the more they will believe that media is an accurate depiction of society (Gerbner, 1998). The more a person engages in media, the greater the effects of cultivation will be. In essence, a person could spend a day watching television, or playing video games, and by the end of their experience, they would expect to have an accurate picture of acceptable behavior and norms in that culture. They then take these learned beliefs into society, mimicking the behavior they learned from this media in society. This explains why media such as video games can have such a significant impact on participants and observers. One tenet of cultivation theory is that media does not challenge the status quo, but simply cultivates it. Thus, representations of gender in media are expected to be accurate reflections of what is seen in society, rather than a break from these expectations.

The research discussed in this paper is not focused on the validity of cultivation theory, but uses it as a basis for explaining the importance of gender representation in video games. Past research on cultivation theory's application to video games is limited, but important. Mierlo and Bulck (2004) conducted research examining cultivation theory's effect on Flemish schoolchildren. They conclude that the ties between cultivation theory and TV are stronger than that between cultivation theory and video games. However, they contend that video games are a very different medium than television, and thus they should be studied much more closely (Mierlo & Bulck, 2004).

Williams (2006) looked at how cultivation theory specifically applied to one online multiplayer role playing game, Asheron's Call 2. This highly specified research

focused on how cultivation theory tied into measures of violence, a common topic of study in video games (Henning, Brenick, Killen, O'Connor, & Collins, 2009) (Collier, Liddell, & Liddell, 2008) (Carnagey & Anderson, 2005). The author concludes that there is a cultivation effect occurring in the particular game they analyzed (Williams, 2006). It is difficult to generalize these findings, as they are specific to views on violence in one particular game, but it is still an important piece of literature when examining the application of cultivation theory directly in video games.

Defining Video Games

A working definition of video games is a necessity for studying them. Video games, at their core, are simply games that are played with the assistance of an audiovisual apparatus (Esposito, 2005). Esposito also mentions that video games may be based on a story. In fact, there are many video games that do not contain story elements. Early video games, like Tetris, often did not include a story, and were more focused on the technical abilities of playing the games. The modern video game almost always includes a story, especially in the AAA (triple-A) gaming industry. AAA games are large-scale productions, and have the highest development budgets (Egenfeldt-Nielsen, Heide Smith, & Pajares Tosca, 2013) The most popular and well known video games today are AAA games, and accordingly they generally have a large return on investment for the game makers because of their high price points, high numbers of copies sold, and therefore high revenues.

Consoles such as the Microsoft Xbox, Sony PlayStation, and Nintendo WiiU are all machines (called consoles) produced for the dedicated purpose of playing AAA games. AAA games have multi-million dollar production budgets, with marketing

budgets to match (Egenfeldt-Nielsen, Heide Smith, & Pajares Tosca, 2013). However, the skyrocketing budgets and the increasing pressure to produce massively successful games is taking its toll on the AAA industry. Working conditions in the AAA industry are often less than ideal, and designers are rapidly realizing that there are other options for working in video games than staying in the AAA industry. It has been postulated that console games will become obsolete, unable to compete with the new wave of indie games (Whitson, 2013)

Due to their wide-reaching impact and popularity, AAA games have been the focus of all previous studies on video games the author could identify. Often, these AAA console games are chosen for inclusion in studies because of their high amount of revenue or number of copies sold. However, these large scale productions are not the only types of video games on the market. The growth of the AAA industry has created a reactive response from game developers - the creation of the indie games scene.

Indie video games. The idea of independent media is often associated with independent movies or music. Like any other form of media, video games have a dedicated independent movement. Often simply referred to as “indie games,” independent video games have become more popular in recent years. With the recent advent of cheap game development engines such as Game Maker and Unity as well as new online distribution platforms such as Steam, the independent game industry has grown exponentially. A finite definition of what makes a video game indie is a necessary precursor to studying them.

Defining the exact meaning of “indie video games” is not an easy task. To some, the notion of independence marks a break from AAA games, which are seen as corporate

greed structures. Independent games, according to this ideal, are made as a reactionary form of media, to oppose the structure of AAA games and provide an alternative experience. Creativity and freedom of choice are often defined as the foci of indie video game companies (Martin & Deuze, 2009). Even game studios that are financially independent and are not controlled by a parent company can face scrutiny from players or developers if they are too focused on economic success rather than creative freedoms (Lipkin, 2013)

Indie games are also defined as those created by a smaller studio, with a smaller budget (Egenfeldt-Nielsen, Heide Smith, & Pajares Tosca, 2013). These games may be published by a AAA company, but they remain within the umbrella term of “indie” by virtue of their small core staff and budget. Many indie games are created by a handful of people, or even just one person. In many ways, indie games are defined by their contrast to AAA games, and vice versa. This makes the definition of indie games one that is constantly shifting in reaction to AAA games as the video game industry evolves, and the indie game industry follows.

The rise of indie games is closely tied to the rise of the media as a whole. As video games became a mainstream type of media, digital platforms emerged that allowed for the easy distribution of games to a wide audience. Digital platforms, such as Steam, allow game designers to bypass the necessity of working for a video game company on someone else’s project before releasing their own. Steam, a digital video game platform, acts as a repository and distributor of video games (Parker, 2013). In basic terms, Steam is an application that is installed on a computer through which users buy and play games. No physical copies of games are involved, but rather Steam saves these purchases to a

user's library that they can access to play purchased games at any time. This platform allows for individual video game producers to create their own games and place them for sale on Steam, since it does not require the funds for creating physical copies of games and then persuading a store to sell them. Steam gives the power of production directly to the designers and producers who have the skills to create video games.

The indie game industry serves as a ground floor for video game designers and producers to create and sell products without creative control being hampered by financial directives or corporate obligations. Indie games can function more closely to individual expression and art than AAA games due to this lack of focus (in general terms) on financial success, and freedom from having to meet a bottom line (because all the tools to create are low cost). Indie games are often driven by passion, and created by people who are more focused on creating an interesting gaming experience than something that will be commercially successful (Whitson, 2013). This is a unique feature to indie games that allows for exploration of concepts that are not usually tackled by the more mainstream AAA games, which need to have broad appeal to their consumers. For example, themes such as depression and mental illness are rarely seriously tackled in AAA games, but the exploration of these difficult topics is not unfamiliar territory to the indie games scene.

When video games first became viable forms of entertainment, all games were what we now consider indie. There was no established industry for video games, as it was a brand new media. As the popularity of video games grew, and they became more accessible, and an industry grew around the production of these games (Parker, 2013). Today, indie games have emerged as reaction against AAA games, and have been

growing rapidly in popularity. Very little systematic research has been conducted on indie games in any capacity, though existing literature serves as a guide for interpreting and defining what constitutes “indie.” All games on the Steam platform are tagged with the genre they fall into, one of these being indie. Because Steam is a platform created for the aspects of indie games discussed in the literature (without AAA affiliation, low budget, small staff creations), if a game was listed on Steam as being an indie game, it was considered eligible for inclusion in this study.

Controversy

When research on video games first began, the inclusion of violence was a key concern for researchers. Examining how violent video games affected children was a common topic of study. The public outcry against violent video games in the early 1990’s such as *Night Trap* and *Mortal Kombat* led to the establishment of the Entertainment Software Rating Board (ESRB). The ESRB is an organization that reviews and assigns ratings to video games with the intention of restricting children from playing violent games (Chalk, 2007). Research on the link between violent video games and aggression continued throughout the early 2000’s, with results supporting the dangerous link between violence in games and aggression in players (Bartholow & Anderson, 2002). Even more recent research shows that mainstream media outlets describe the link between consuming violent media and aggression as, at the least, highly probable (Martins, Williams, Harrison, & Ratan, 2009)

More recently, topics of study have grown to include that of gender portrayals in video games, and attention has been directed to the treatment of female players, rather than just characters. Nearly half of all video game players are female (Essential facts

about the computer and video game industry, 2016). Despite this near even split of female and male gamers, there is a documented culture of hypermasculinity and harassment towards female gamers in the community (Kuznekoff & Rose, 2012). There have been several recent high profile cases of harassment against female gamers that have impacted not only the gaming community, but society as a whole.

Anita Sarkeesian launched a Kickstarter campaign in 2012 with the intention of creating a series on her YouTube channel dedicated to talking about common tropes that female videogame characters were often slotted into. Initially, the response to her proposal was overwhelmingly positive. Sarkeesian met her initial campaign goal of \$6,000 within 24 hours. However, her success was later met with a fierce backlash from parts of the video gaming community. Her focus on a critical analysis of female characters through a feminist lens raised the hackles of those who felt she was either attacking the supposedly male dominated gaming community or exaggerating her personal plight for attention. These protests against her campaign did not prevent her from continuing her work on the series, which at the time of this writing is still ongoing.

Due to her persistence in exposing the misogyny in female character representation, Sarkeesian faced increasingly personal attacks for her campaign. Threats of rape and death became commonplace, with harassers going so far as to create an online game where players beat her up. The game, which has since been removed, consisted of a picture of Sarkeesian's face which, when the player clicked on the image, would show a new bruise or injury. Her website was hacked, and her personal information was released to the public, causing her to seek shelter with family out of fear for her safety. Sarkeesian was forced to cancel a presentation she was scheduled to give at Utah State University

after there were threats of a mass shooting on the audience. Sarkeesian remains a target of hostile harassment, however she is not the only woman involved in gaming to receive this treatment.

Zoe Quinn released her game *Depression Quest* 2013. The game, a text-based interactive story focused around dealing with depression, received critical reviews from gamers who did not feel that the text-only presentation merited its status as a game. These negative reviews quickly transformed into gender targeted attacks at Quinn when her ex-boyfriend posted a blog post detailing how Quinn supposedly slept with five other men during their relationship, in an attempt to garner positive reviews for her game.

These accusations quickly drew ire from the gaming community, which justified the harassment against Quinn under the guise of exposing corruption in video gaming journalism. Similarly to Sarkeesian, Quinn received threats of rape and death and had to flee her home due to the release of her personal address on the internet. The validity of Quinn's ex-boyfriend's statements are not relevant to the discussion about the gendered harassment she received. As a female video game producer, she is not alone in experiencing harassment from the gaming community. Female indie game developers note that they often feel disconnected from the community, and feel the need to be accompanied by a male escort to validate their participation in indie developer's workshops (Harvey & Fisher, 2013). A recent documentary explores how female gamers as well as women involved in the gaming industry are treated due to their gender. Reports of harassment are sadly commonplace, regardless of whether women are consumers or producers of video games. (Sun-Higginson, 2015)

Video games clearly have a real life effect not only on gamers, but on all members of society. The treatment of female gamers like Anita Sarkeesian and Zoe Quinn can be linked to cultivation theory. The portrayal of females within video games influences how members of society view women outside of the games. This showcases why portrayals of females in video games are so important to understand.

CHAPTER II

Review of the Literature

Construction of Gender

Before the role of women in video games can be critically analyzed, the role of women in society, and the construction of gender, must be examined. Sociologically, gender is a construct that is reinforced through methodical social routines. The concept of “doing” gender is proposed by West and Zimmerman, who argue that gender is a performance that is reenacted through daily social interactions (1987). They contend that gender is a self-regulating process by which new members of society assign themselves a gender identity. Gender is not simply a title a person carries, but an unavoidable activity that they participate in daily (West & Zimmerman, 1987). Men and women participate in constructing gender every day by deciding what clothes to wear, which restroom to use, and how they will react in social situations. An individual not performing in accordance to their expected gender will face social consequences.

Children are taught to perform gender at young ages, which allows for the reproduction of gender inequalities that already exist. Lorber explores the idea of children being gendered by parents, who often dress babies in socially acceptable gendered clothing to display the sex category the child belongs to (1994). In this way, their sex category (determined by the appearance of an individual’s genitalia) has become an assigned gender status. Further gender markers, such as names, continue to affirm the child’s gender status (Lorber, 1994). Lorber contends that the gendering of children can be more easily explained when examining gender as a social institution. Gender, viewed through this lens, is one of many ways through which humans organize their lives.

When individuals do not perform their gender in an expected manner, they can face social consequences. These consequences can differ, however, based on the gender of the transgressor. Sirin, McCreary and Mahalik studied the phenomenon of male gender role transgressors and why they faced a higher degree of punishment than female gender role transgressors. They propose that the *social status model* is an indicator for this unequal treatment. The social status model suggests that the differing reactions to transgressors of gender roles is based on the idea that the two genders are not viewed equally by society. Men generally occupy a higher social status than women, so when they do not conform to gender standards, they lose this status, and are viewed more negatively than women. Conversely, it is more acceptable for a woman to break from their gender norm because they are changing their behaviors to align with a higher status than they currently occupy (Sirin, McCreary, & Mahalik, 2004).

This theory is further explained in research conducted on parental reactions to children's gender nonconformity. The reaction parents have to their children either breaking from or aligning with their prescribed gender status contributes to the social construction of gender (Kane, 2006). Kane explores this by interviewing parents to gauge their reactions to children's gender non-conformity. Parents express positive sentiments for their daughters transgressing gender roles, and in fact encouraged this behavior. Conversely, they had mostly negative reactions to when boys behaved in a traditionally feminine way, especially when in relation to wearing traditionally feminine clothing and playing with Barbie dolls. These negative reactions were often connected to the fear that their sons may be perceived as gay (Kane, 2006).

The performance of gender is linked to expressions of sexual orientation. Schrock and Schwalbe explain that masculinity, and the presentation of maleness, are intricately woven with heterosexuality. Signifiers of masculinity such as violence and aggression combine with the need to present heterosexuality and result in boys and men sexually harassing women (Schrock & Schwalbe, 2009). This combined past research on gender is an important foundation for the study of gender representations in video games. The way in which characters perform their gender within media can serve as another indicator of expected gender roles in society.

Gender in Video Games

Historically, the representation of females in video games has followed the precedent set by other forms of visual media. Gender inequality in media has existed for as long as gender inequality in society has. Mass media is a reflection of the time in which it was made, and analyzing how gender is portrayed in media can expose how the issue is treated in society as a whole. Western media portrayals of women have long focused on a specific ideal: that of a woman with a slim waist and large bust. Harrison (2003) investigates this prevailing image of women that has been recreated in movies, television, and printed media. Harrison coined this unrealistic female ideal the “curvaceously thin woman”. Harrison conducted research to determine how this prevalent and unrealistic ideal affected media consumers. Harrison’s findings indicated that exposure to this curvaceously thin ideal led to a female’s idealization of a larger bust and smaller waist and hips. This exposure also predicted approval from both men and women for body altering surgery which would allow for the pursuit of this body ideal (Harrison, 2003). This research is pivotal in exploring the validity of cultivation theory

because it draws a link between the representation of a woman's body in media and the acceptance of this representation by members of society. This is a result that would be expected according to the tenants of cultivation theory.

Female representation in video games has been studied for years, though much past research focuses on depictions outside of the context of the game in which they appear, such as magazines and box cover art. Additionally, all these studies are focused on AAA console games. Dill and Thill (2007) investigated the portrayal of female game characters by analyzing how these characters appeared in popular video game magazines. They conducted a content analysis on six video gaming magazines, chosen by their popularity at the time. Employing the concept of Harrison's (2003) *curvaceously thin* appearance ideal, Dill and Thill categorized females as sexualized if they adhered to Harrison's concept and were found to have their sexuality emphasized through clothing or provocative poses. They also identified images that portrayed aggression, by way of characters using power and dominance to suggest violence against another living being. This aggression was often characterized by the use of weapons, wearing of armor, or character poses which resembled an attack stance.

They found that not only were female characters underrepresented (with only about one quarter of video game characters featured being female), but females were also portrayed as sexualized and often scantily clothed (2007). Dill and Thill demonstrated that nearly 60% of the women portrayed in video game magazines were categorized as *sexualized/curvaceously thin*, in comparison to less than 1% of males being coded as sexualized. A majority of males and females were found to be depicted as aggressive, though more males than females (Dill & Thill, 2007). The display of aggression by male

characters is not wholly unsurprising, as aggression and dominance are essential components in displays of masculinity (Connell & Messerschmidt, 2005). This intersection between violence and gender is a common springboard for video game research relating to gender issues.

Burgess, Stermer, and Burgess (2007) conducted research on video game box art, examining the instances of a female appearing on the box art, as well as how she was represented. Two hundred twenty five console video game covers from the most popular video game consoles at the time were reviewed. Burgess et al. were also interested in the roles that men and women were portrayed as occupying on the box art. They sought to identify if males and females were shown as primary characters in equal frequencies. Another point of research was focused on signs of violence shown by the characters, and if females and males were shown to be equally violent characters.

Similar to the research conducted by Dill and Thill (2007), this study showed that women were underrepresented and oversexualized. Men were twice as likely to appear on covers than women, and women were presented as being physically objectified nearly half of the time they did appear on the cover art (Burgess, Stermer, & Burgess, 2007). Burgess et al. discuss how their findings mark a significant rise in the number of games that have any female representation at all, compared to past research. While this seemingly marks a dramatic improvement in female representation, examining how they are portrayed reveals that they are not only still underrepresented compared to men, but that those representations are significantly more likely to be portrayed negatively. In reference to the activeness of gendered characters, Burgess et al. found that men were almost five times more likely to be portrayed as the main character. Men were also more

likely to be seen as an ancillary character, though Burgess et al. surmise that this is likely due to the fact that there was simply a higher number of male characters overall. Female characters were more likely to be portrayed as primary if they shared this status with a male character. Not unsurprisingly, they found that men were almost four times more likely to be shown as violent on covers.

While these studies are useful and historically relevant, the nature of video games is that of constant growth and evolution. A difference of ten years within the gaming industry has brought sweeping change to how and where games are played. Prominent media theorist Denis McQuail proposed that mass media can be thought of as a mirror, reflecting events in society (2010). Following this logic, we can expect social changes to influence video games over time. Not only have the graphical capabilities of video games grown since early research on gender representations, but the very landscape of gaming has morphed. The rise of online gaming has led to a surge in interest in how players define themselves in an online space.

Waddell et al. (2014) explored how gamers represent themselves in online gaming spaces. The authors were interested in the relationship that exists between a player and the avatar they used to represent themselves on a screen. Waddell et al. conducted a content analysis of user-created avatars in four popular MMO (massively multiplayer online) games. These are games in which players have the freedom to choose the gender and basic appearance of the character they will use to interact with other players. Players will also interact with other non-player characters, meaning those characters are placed in the game by a game designer and are not controlled by a live person.

Findings from Waddell et al. indicated that players overwhelmingly chose to play as white male characters (2014). Not only were players choosing to use avatars of white males, but the non-player characters were more often white males than any other representation of gender or race. Waddell et al. speculate that players replicated the gender and racial patterns they observed in non-player characters from MMOs and other video games they interacted with. These games had frequent occurrences of non-human characters as well as humans. Interestingly, so prominent was the white male character finding, that non-human characters were more likely to appear than a female or non-white character.

Waddell et al. point out that this overabundance of white male characters is not wholly representative of the player base of MMOs. The distribution of race among characters was far from representative of the diversity of reported MMO users. Gender distribution among characters was more comparable to the user base, though still slightly more male in the character representation. Thus, explaining this white male character phenomenon as simply representative of the players creating the characters is inaccurate. (Waddell, Ivory, Conde, Long, & McDonnell, 2014). This overabundance of white male avatars can be explained by earlier research focused on exploring the devaluing of femininity (see Sirin et al., 2004 and Kane, 2006). White males belong to the highest level of social class, and thus players align themselves with that status, irregardless if reflects their real-world social status.

Research by Kuznekoff and Rose (2012) sheds light onto how players conduct themselves in an online space. Kuznekoff and Rose intended to discover how players reacted when hearing a male or female voice during online video game play. They

conducted this experiment by playing a series of pre-recorded lines spoken in a male or female voice during online gameplay. Using three separate Xbox LIVE accounts, they played a match of *Halo 3*, a popular first person shooting game. Each account they used was associated with either a male voice, female voice, or no voice. Kuznekoff and Rose recorded generic phrases that would be played over a headset to other players during a match. These phrases were benign and not intended to garner negative reactions. Two hundred and forty-five games in total were recorded, split between eighty two with no voice (the control group), eighty two with a female voice, and eighty one with a male voice. The researchers interacted with a total of 1,711 gamers. They accounted for skill level in each game match, ensuring that all instances had the same level of skill. This way, any negative comments could not be attributed to other players being upset over a low skill level of the researcher. In fact, the percentage of wins for the female and male voice were very similar, at 56 percent and 61 percent respectively.

The disturbing results of this study show that on average the female voice garnered negative comments three times as often as the male voice or no voice. Kuznekoff and Rose also noted that the female voice was often exposed to derogatory and gendered language. Some of the language they recorded included the female voice being referred to as “whore”, “slut”, “bitch”, and “nigger lover” (2012). The female voice also received more messages and friend requests after gameplay was completed than the male voice or control, despite the overwhelmingly negative responses in-game to a female voice.

This research can be analyzed in conjunction with that from Waddell et al. to explain why players involved in multiplayer games choose to use a white male character.

It is not difficult to imagine that female players may conceal their gender while engaging in online play due to hostility they may experience from male players. Kuznekoff and Rose reference past research to suggest that negative portrayals of women in video games, among other factors, helps to foster an environment of negativity towards female gamers, tying in with the idea that cultivation theory can be used to explain this link.

It is therefore unsurprising that research has been conducted to investigate what personality traits predict sexist attitudes towards female players. Fox and Tang (2014) utilized a scale to measure conformity to masculine norms to determine if adherence to traditional masculine constructs indicated sexist beliefs about female video game players. Participants were instructed to complete a survey which included several different scales to measure exposure to video games, conformity to masculine norms, social dominance, and empathy.

Fox and Tang (2014) found that two types of masculine norms could be linked to video game sexism: the desire for power over women and the need for heterosexual self-presentation. When male players in an online video gaming environment demand to see pictures of a female player's breasts (a phrase commonly used is "tits or GTFO", in which GTFO stands for "get the fuck out"), or make sexual comments to female players, this is heterosexual self-presentation. In this way, male players are asserting their heterosexuality to other players. The desire for power over women, the other masculine norm that was linked to video game sexism in this study, occurs when male players react to female players or characters with violence and aggression (Fox & Tang, 2014). These findings are supported by past research that asserts heterosexuality and masculinity are interwoven (Schrock & Schwalbe, 2009; Schilt & Westbrook, 2009).

Research on gender representation in video games has consistently shown that women are underrepresented and oversexualized. Two decades of research has shown that male characters are portrayed as primary characters, displaying power and violence, while women are relegated to sex symbols and trophies, and most notable by their absence. Female gamers are met with resistance and harassment in online gaming spaces. Examining research on the portrayal of women in video games, and taking into account the role of cultivation theory, a link can be drawn between these portrayals in games and the treatment of women in society. However, this past research on games has focused exclusively on AAA games. To date, no research has applied questions of gender representation to the field of indie video games, an important source of video game media, and one that is arguably more representative of societal norms due to the ability of small companies that produce them to quickly react to changes. Can the same portrayals of women be expected when examining indie video games?

CHAPTER III

Methodology

Previous work on gender in video games is focused mainly on representation through static images or descriptions. This work only rarely examines portrayals of gender within the context of the game itself, which is essential to understand these representations. Even among studies that focus on gender representation through gameplay, the samples are taken from AAA games. Despite the surge in popularity of indie games they are still largely unexplored in their representations of gender. Due to the small production scale of indie video games, it stands to reason that indie games are more likely to break from traditional stereotypes that formal media often adhere to. With such a rapid growth in popularity, indie games are gaining a wider audience and importance in media. This research builds off of past literature on AAA games, to explore how gender is represented by characters in indie video games.

Sample

Individual indie video games were examined in this study. These games were chosen based on their popularity and acclaim among gamers. Popularity of games was determined by looking at the number of owners each game had. The higher the number of owners, the more popular the game was determined to be. I utilized a website called SteamSpy, which analyzes various statistics of games that are hosted on Steam - a digital video game distributor. While Steam is not the only distributor of indie games, they are arguably the largest and most well-known.

I used the statistic of owners rather than revenue for several reasons. Unlike AAA games, the indie video game industry is rather secretive with their revenue and sales.

There is no single repository of sales information for indie games, unlike AAA games, which can be tracked using sites such as the NPD sales group and VGCharts.com. Thus, I decided to focus solely on data gathered from Steam, as it is the most reliable and still encapsulates the majority of the population who play indie games. The sales of AAA games are tracked through single purchases, and nearly all AAA titles are priced the same. This makes it easy to conclude that a AAA game that sells more copies also makes more money, and vis versa. Indie games have varying prices, and often are put on sale through Steam - sometimes they are even included in a bundle for free when purchasing a different game. Thus, looking at sales numbers or revenue would not give an accurate account of a game's popularity.

The number of owners indicates how many individual people have a particular game in their digital library. This is the number that I chose to use to indicate a game's popularity. The number of owners indicates the number of people who could potentially be exposed to the game. The second factor that contributed to the decision of which games to include was the critical acclaim of the game. This was determined by using the website Metacritic.com, an aggregate website that compiles scores from critics and users on forms of media. Choosing games with both a high score from critics and users ensures that the games included are praised critically as well as by the average gamer.

Once these guidelines were established, several more practical restrictions were required before choosing games. The games had to have some representation of anthropomorphic characters, as the purpose of this study was to focus on gender. As such, games that are solely puzzle based (such as Tetris or Pong) were excluded. Games that included non-human characters were still allowed, as the portrayal of gender is not

limited to human characters. The game also had to have a defined ending point, in order to draw a clear stopping point for coding. This ending point was determined to be once the credits rolled at the end of a game. This accounted for exclusion of so-called sandbox games (such as Minecraft), that have no definitive goal or ending point. Two games from each year from 2010 - 2015 were chosen, which marks the era when indie games became widely popular.

Procedure

Each of the twelve games were played to completion, which is defined as the playing of credits at the end of the game. During play, the coding sheet was used to record vital information about each character in the game (see appendix). For a character to be included in this analysis, they had to meet several criteria. With the exception of one game (*Battleblock Theater*), all playable characters were coded, as any playable character was likely to be a central figure in the game. If a character was not playable, they had to be named, have dialogue, or interact with the main playable character. In addition, there could only exist one instance of this character to be included. These parameters allowed for the exclusion of enemy characters - often unnamed and sharing similar or identical appearances.

In several instances, the gameplay was too difficult to complete on my own, and a walkthrough was watched instead. A walkthrough is when a game is played through and filmed, usually to serve as a guide for other players. Due to the thorough nature of walkthroughs, they are a reliable source to use for data collection.

Explanation of Coding Sheet

The coding sheet was designed to record basic information regarding the games analyzed as well as data relating to representations of gender within the games. The first section of the coding sheet details the game's title, the year it was released, the metascore, the user score, and the number of users. The year of release for the game is important to note as historically media has become more progressive to reflect society's standards, such as incorporating more women and ethnic minorities. It is possible that this trend could continue, and be measureable, in this sample. The metascore is the aggregate score given to the game by critics, whereas the user score is the aggregate score taken from user reviews. The number of users shows how many people have the game in their digital library on Steam.

On the code sheet, each character is coded within a set of parameters. Character name and age are recorded, when available. Often, age is either not specified or not applicable to characters. When specific ages are not mentioned, I recorded the age group in which the character physically appeared to belong - child, young adult, adult, or elder. The age of the character is important as it may relate to the way characters are depicted, especially as this relates to clothing (or lack thereof). Character gender is also recorded, and the coding sheet allows for the inclusion of players being allowed to choose the gender of their character, as well as the option for a character's gender to unspecified.

Character importance is broken into three categories: primary, secondary, and tertiary. This level of importance often correlates to how much time the character will appear in the game. Primary characters are playable characters and in traditional AAA titles there is often only one. However, many indie games have multiple primary

characters. A secondary character is typically a non-playable character, but is still vital to the narrative of the game. This character still interacts with the primary character(s) frequently. A tertiary character is a non-playable character that has little interaction with the primary character, and is not vital to the narrative.

The recording of a character's story role is important to note in its relation to a character's gender. I have defined five story roles: hero, villain, victim, helper, and bystander. A hero is often the main playable character and is the primary driver of the narrative. The villain is the antagonist of the narrative, working against the hero. A victim is any character that requires rescuing by the hero. A helper is a sidekick, aiding the hero in their journey. Lastly, a bystander has little involvement with the narrative and interacts with the hero in only a superficial capacity.

Character motivation focuses around what drives the character to action in a narrative. While often the character's motivation is related to their story role, it is important to study what motivates female and male characters to identify any differences in them. Motivations in this study are broken down into four categories. "Save the world" indicates that a character's motivation is to save or restore a physical space that is in jeopardy. The motivation of "rescue mission" indicates that a character is driven to save another character who is either lost or being held captive. "Personal gains" refers to a character who is motivated by greed - access to power or money, or seeking revenge. Finally, "passive motives" indicates that a character is simply reacting to a situation they are put in. This includes surviving a situation, escaping, or just doing their job.

The last variable examined in this study is character clothing choice. This ties in directly with gender as female characters in games have long been represented in overly

sexual or revealing clothing (Beasley & Standley, 2002). “Fully clothed” indicates that the character shows little skin, and any skin that is showing is not sexually suggestive. “Partially clothed” is defined as when a character is clothed in outfits that intentionally expose skin in a sexually suggestive manner. A character who is “mostly unclothed” is depicted wearing very little clothing, such as a bikini or only underwear. A “nude” character is shown as completely nude. The option of “unsure/not determinable” was included for characters that are not shown (as in first person perspectives) or non-human characters.

The final section of my code sheet includes a section for field notes. In this section, I recorded any other information that was pertinent to the study. The basic controls, narrative story, and character descriptions are included in this section. This section allows for a summative analysis of the game, incorporating all the data collected individually to analyze the game as a whole.

CHAPTER IV

Results

Primary Findings

Finding 1: Overall, male characters outnumber female characters. From a sample of 95 characters, 53 (55.8%) were male, and 32 (33.7%) were female. The remaining 10 characters (10.5%) were of an unspecified gender. This male character majority follows trends found in AAA games. However, taking into consideration non-gendered characters, the male to non-male character ratio is close to half male and half non-male. Two games in this data set had no female characters at all: *Amnesia: The Dark Descent*, and *Battleblock Theatre*. *Amnesia: The Dark Descent* was released in 2010, the earliest year included in this sample. While there are female characters mentioned in *Amnesia: The Dark Descent*, this game is a male driven narrative, with any female characters alluded to occupying minor roles. In addition, no female character is physically seen throughout the game, though a woman's voice is heard speaking dialogue.

Battleblock Theater, while released more recently in 2014, featured a main character devoid of gender. This game allows the player to unlock multiple other playable characters, some of which display male or female gender cues. Due to the large number of playable characters in this game (over 300), only the main playable character was included in this study. None of these playable characters are named or have any dialogue. All characters in this game are depicted in a cartoonish style, sharing the same base body model - a lumpy bipedal humanoid shape. The appearance of characters differs in what their head looks like. Some gender cues used are hair, eyelashes, makeup, and facial hair.

Because all these characters share the same body, there are no obvious sex characteristics to assist in gendering them. So while *Battleblock Theater* is coded as having no female characters, it is an ambiguous observation, as most characters in this game are truly coded as neither male nor female.

Aside from these two, all the games included in this study had physical representations of females. However, it is still worth noting that despite the more even gender casting, there were no games comprised of only female characters, as there are games with only male characters. In addition, the appearance of female characters in other games was often temporary, or very fleeting. *Limbo* features a cast of only two characters - the main playable (male) character, and the rarely seen female character that seems to be motivating the main character's actions. Likewise, the game *Brothers: A Tale of Two Sons* featured females only as temporary characters. One of these temporary characters is a troll - a character who is captured and must be rescued by the main characters. Although not a human character, this troll's gender was made obvious by her sex characteristics. This non-human troll is the only female character portrayed to survive the narrative of the game.

The only game to have a greater number of female characters than males is *Trine 2*. This game has two male characters, both primary characters, and three female characters. One of these female characters is a primary character, while the other two are secondary characters. Despite (or perhaps because of) the game having a female character majority, this game also had the most sexualized females. Every female character shown was coded as partially dressed - a finding that will be discussed further later.

Three games notably had even gender representation between males and females: *Limbo* (released in 2011), *To the Moon* (released in 2012), and *Crypt of the NecroDancer* (released in 2015). Gender representation as related to males vs females did not become significantly more even in more recent years. *Limbo* and *Crypt of the NecroDancer* both had a relatively small cast of characters (two and six, respectively), which may have contributed to the ease of balancing the gender of characters. However, *To the Moon* did not have a small cast of characters, with ten characters being represented. Likewise, there are other games with smaller casts that do not have an even representation of gender, leading to the conclusion that the cast size of a game did not have an effect on balancing the gender of characters.

Finding 2: There is little sexualization of characters overall, though females are more sexualized than males. The majority of games examined in this study had very little or no sexualization of characters. 88.7% of male characters were fully clothed, compared to 78.1% of female characters. Out of a total of 32 female characters, 5 (15.6%) were coded as partially clothed. In comparison, no males were coded as partially clothed, though one was coded as mostly unclothed and one coded as completely nude - categories that are devoid of any female characters.

Two games notably stand out against this trend - *Trine 2* and *Transistor*. *Trine 2*, while still categorically an indie game, closely follows the standards set by AAA games. All three female characters in the game are dressed provocatively, with Zoya, a primary character, having bare legs and ample cleavage showing. She is the only female of three protagonists, with the male protagonists wearing a full suit of armor and a fully covering wizard's robe. Zoya's role in the game is that of a thief, and her skills are focused around

quick acrobatics and long range attacks. As such, her state of undress does not serve any narrative justified function, but rather serves to titillate.

The other two female characters, both secondary characters, have similarly tantalizing outfits. Queen Rosabel and Princess Isabel both have form-fitting, low-cut dresses with prominent slits to mid-thigh. These women are not playable characters, and are shown most prominently in still images during cutscenes. These women are presented as royalty, and as with the depiction of Zoya, these revealing outfits serve no narrative purpose aside that of aesthetics.

The main character of *Transistor*, Red, wears a short dress paired with high boots and socks, exposing her upper thighs. The neckline of the dress plunges low enough to show cleavage. During gameplay, Red's state of undress is not highly noticeable, as the character is often seen from behind and is covered by a jacket. However, there are several times throughout the game that still art is shown of the character, often framing Red in positions that highlight her sexually suggestive attire.

Two characters appear as completely nude. The first of these characters appears in the game *Amnesia: The Dark Descent*. The villain of this game, Alexander, is seen only at the conclusion of the game, when the player engages in a final confrontation with him. Alexander, an elderly man, is depicted as completely naked during this exchange. He is the only character in this study to appear completely nude and display definitive sex organs. The second character coded as completely nude appears in *Battleblock Theater*. The main character is coded as non-gender conforming and displays no outward sex characteristics. However, this character was coded as nude due to the presence of other clothed characters existing in this game. Though few characters in *Battleblock Theater*

express gender identity at all, other characters wear clothing, contrasting with the main character's lack of any apparel at all.

Mark of the Ninja features a male protagonist who is fully clothed during gameplay, but is notably shirtless in some cutscenes. As part of the narrative, the main character undergoes the process of having an elaborate tattoo inked on his torso. As such, there are several scenes where he is unclothed from the waist up. These scenes were relatively short, and the character always wore a full ninja outfit during gameplay. This is an interesting departure from other scenes in media which briefly showcase a nearly nude female body. The only female character in *Mark of the Ninja* remains fully clothed for the entirety of the game.

Finding 3: Compared to AAA games, indie games have more characters whose gender is unspecified. Indie games break from AAA games in a significant manner in that there is more representation of characters who are not overtly confined to any gender. In three games in this study, the primary protagonists do not adhere to gender norms. In *Undertale*, the main character is a silent protagonist, identified as the “fallen human” in the opening cutscene. The player is directed to give the fallen human a name, which other characters will use to refer to them for the remainder of the game. The other characters also refer to the fallen human with the pronoun “they”, thus avoiding the gendering of the character via syntax. The simple pixelated style of the game lends itself to this gender non-conformity, with the fallen human portraying androgynous gender cues.

Similarly, the main character of *VVVVVV* is never revealed to belong to any gender. The main character, identified as Captain Viridian, is referred to by other

characters by name, but never associated with gendered pronouns. Again, this occurs in a game where the pixelated style of the characters lends itself to gender neutral characters. The character designs of *VVVVVV* resemble stick figures, with color largely serving as an indicator of character gender. The two female characters, Victoria and Violet, are a dark blue/purple and pink, respectively. Their names are also indications of their gender. Viridian, the main character, is shown as a cyan color, which is not overtly masculine or feminine. The remaining three male characters are green, yellow, and red. In both of these games, all other characters are gendered, indicating that the lack of gender for these main characters is deliberate. *Battleblock Theater* is the third game in this study which showcases a main character with no discernible gender. Unlike *Undertale* and *VVVVVV*, this main character's lack of gender is not a prominent contrast from other characters.

The main character of *Battleblock Theater* has a cartoony style, as do most of the characters in the game. The main enemies in the game are anthropomorphic cats, and while they wear clothing, they have no discernible gender, just as the main character does not. *Battleblock Theater* is also unique in that it allows for the player to unlock multiple new characters to play as in place of the default unnamed main character. In fact, there are over 300 characters a player could conceivably play as throughout the game. As such, only the default main character was included for analysis. Many of these other characters do not present a gender, but some of them do. In this way, *Battleblock Theater* sets itself apart from *Undertale* and *VVVVVV* as having a non-gendered main character without it appearing overtly deliberate.

There are several other games that employ the use of non-gendered characters, though they do not occupy primary roles. *Transistor* included a tertiary character who is

visually depicted as displaying androgynous gender cues. Through text, the game identifies this character's gender as X, though the main character's diary refers to them using female pronouns. *Undertale* contains six non-primary characters who do not display gender cues. Many of these characters are non-human characters, referred to as monsters throughout the game. However, other monsters encountered display very obvious sex characteristics or gender cues. Thus, the decision to gender some characters and not others was likely deliberate.

Although these characters do not occupy primary roles, the inclusion of non-gendered characters into the background of the stories implies subtly that they are not anomalies in the fictionalized world they inhabit. Never, in any of the games in which non-gendered characters appear, was their gender (or lack thereof) a focus of the narrative. These characters are never questioned about their gender and neither does their gender play any significance in the game at all. This normalizes the idea of gender non-conformity in these games - a feat that many AAA games have ignored or failed to accomplish.

While examining the ratio of male vs female characters did not show a significant move towards even representation, more non-gendered characters appeared in games from later years in this study. *VVVVVV* was released in 2010, and featured a non-gendered primary character. Though this character's gender is never specifically referred to, this lack of gender is not overly apparent either, due to the art style of the game. The next non-gender binary character appears as a tertiary character in the game *Transistor*, released in 2014. This character's lack of gender is expressly stated to the player. 2014 also saw the release of *Battleblock Theater*, which features a primary non-gendered

character, along with a slew of interchangeable non-gendered primary characters.

Undertale, released in the latest year included in this study, 2015, features the most non-gendered characters of all the games in this study, with seven characters. *Undertale* also features a main character whose gender is unconfirmed.

Secondary Findings

There are several findings which cannot be discussed in comparison to AAA games, due to the lack of similar studies conducted using these variables. One variable that was examined in this research is that of character importance. Characters were sorted into one of three categories: primary, secondary, and tertiary. Similar to the ratio of male to female characters, 50% of primary characters were male, with 33.3% being female and 16.7% of undeterminable gender. This results in half of primary characters being male, and half non-male. However, this ratio may be somewhat misleading when not taking into account the number of primary female characters that appear in the same game. While Burgess et al (2007) did conduct research looking into the numbers of male and female primary characters, their research focused on the portrayals of characters on static box cover art, and thus is not directly comparable to the research conducted here.

The majority of games in this sample have one primary character, though there are several games that notably break this trend. *Crypt of the NecroDancer* features a cast of six characters, three male and three female. Every female character is a primary playable character, and every male character occupies a secondary role. Three primary characters in one game is unusual, and three female primary characters even more so. Not only would this be considered unusual for a AAA game, it is an anomaly within the indie game genre as well. It is worth noting the year in which this game came out, 2015, which

is the most recent year in which sample games were drawn from. *Trine 2* also has three primary characters, with two male and one female. *To the Moon* has two primary characters, a male and female, and *Brothers: A Tale of Two Sons* has two male primary characters.

Characters were examined and sorted into story roles that they occupied during the story of the game. Overall, the most common story role shown was that of bystander, followed by villain. Broken down according to gender, the majority of female characters were bystanders (followed by villains), and the majority of male characters were villains (followed by bystanders). It is unsurprising to find so many bystander characters, as background characters are easy to populate in many forms of media, and video games are no different.

A majority of characters only occupied one role, but it was not uncommon for characters to occupy two roles. This usually indicated a shift in a character's role during the narrative of the game, rather than a character occupying more than one role at once. A common occurrence of a character switching roles was from that of victim to helper or villain. This occurs in *Bastion*, with a male character starting out as a victim and later becoming a villain. In *Mark of the Ninja*, a secondary character is saved by the main character and becomes a helper. In reference to gender, there were no discernible major patterns in how female and male characters changed story roles.

Brothers: A Tale of Two Sons is the only game that has a character who embodies three story roles throughout the progress of the game. A female character starts out as a victim, requiring rescue from the two male primary characters. She then aids the two characters through several obstacles, occupying the role of helper. Finally, the player sees

that she was luring the male characters into a trap, where she fatally wounds one of them, thus transitioning into the role of a villain. This is the only character to occupy more than two roles during gameplay.

Some of these variables tend to overlap, with primary characters often also occupying the story role of hero. Interestingly, the motivations for characters who are heroes vary greatly. While some heroes do have an expected motivation of “save the world”, a very typical motivation in storytelling, there are several who deviate from this. The heroes of *Undertale* and *Amnesia: The Dark Descent* both are coded as having passive motivations, meaning they are simply reacting to the event around them rather than actively seeking out a goal. The two hero characters of *To the Moon* are also coded as having passive motives, because throughout the story of the game they are simply performing the duties of their occupation.

While these are interesting deviations from typical storytelling devices, there was no significant relation between character motivations and gender. The majority of both male and female characters had passive motives, which could also be attributed to the large number of tertiary characters, who rarely have enough development to be given a deeper motivation.

CHAPTER V

Discussion

Representation

In many aspects, indie games mirror AAA games in how they represent females. The higher percentage of males, and the sexualization of only female characters falls in line with past representations of female videogame characters. However, the degree to which these trends appear is greatly reduced in comparison to past research. Early research indicated that there were no female characters in over 40% of games analyzed during a content analysis of 33 Nintendo and Sega Genesis video games (Dietz, 1998). Separate research from this time showed that out of 597 characters analyzed in a cross-platform content analysis of video game characters, only 13.74% percent were female. (Beasley & Standley, 2002). In comparison to this early research on gender in video games, significant progress has been made to include more female characters.

The gendered characters in this study expressed their genders in subtle, but easily understood ways. Characters preformed their gender, behaving in ways that would be expected of men or women. Few games featured combat as a significant aspect of the game, but those that did overwhelmingly had male characters engaging in combat. *Trine 2*, one of the few games with combat elements, regulates the female character to using a bow and arrows, rather than a direct melee weapon. The close combat fighter in this game is a male, fitting into the idea that aggression is a key component of masculinity (Schrock & Schwalbe, 2009).

Characters who did break from the traditional expression of gender roles did so in a way that can be expected according to past research. The three primary female

characters from *Crypt of the NecroDancer* are depicted as hardened adventurers, a title that is usually associated with men. Likewise, the primary female character in *To the Moon* is an accomplished scientist, another male associated field. However, there is no indication that any male characters in this study held feminine occupations. Similarly, women were occasionally permitted to wear traditionally masculine clothing, but the opposite was not true for males wearing feminine clothing. One male character, Zulf, from *Bastion*, wears a long robe-like outfit that resembles a woman's dress. This character later turns against the main character and becomes a villain.

Multiple games utilized clothing choices to express gender, often specifically depicting female characters in dresses – garments that are nearly exclusively associated with women. The sexualization of characters to depict gender is exclusively reserved for the female characters included in this study. The sexualization of female video game characters has a longstanding precedent, and is well documented (Beasley & Standley, 2002; Burgess et al., 2007; Dietz, 1998; Williams et al., 2009). The findings of this research indicated similarities to how female characters are sexualized in AAA games. Of particular note, the way in which nudity for males is presented in comparison to nudity for females is vastly different. Female characters in this study who were coded as partially clothed most often had prominent cleavage and exposed upper thighs, two sexualized areas of the female body. This exposed skin did not have any relation to the narrative of the games, and seemed to exist only to tantalize players. Conversely, when male characters were shown without fully covering clothing, this served a narrative or practical purpose within the game.

The character of Alexander in *Amnesia: The Dark Decent* is shown as completely nude. However, his nudity serves to show that he is a frail, elderly man. At this point in the narrative of the game, the player can choose to either help Alexander, or destroy him. His nude states serves to show that he is weakened, and no longer a threat to the main character, thereby instilling a sense of pity for him in the player. The main male character from *Mark of the Ninja* is also shown in a state of undress without this lack of clothing being used to sexualize the character. The unnamed ninja is shown shirtless in several scenes in which he is receiving an elaborate dragon tattoo. This tattoo is central to the narrative of the game, and thus his exposed skin has a function. In contrast, the state of undress for the female characters in this study was never utilized to have a narrative function, but rather serves to titillate the audience.

The difference in presentations of male and female nudity has examples in other forms of media. In children's films, male nudity is often treated as a joke, while the exposure of female bodies is treated as a way of gaining attention from men. Women's nude bodies are hinted at, and their sexuality is treated as an integral part of what makes them a woman (Martin & Kazyak, 2009). This difference in treatment of male versus female bodies reflects what is found in this study, where women's bodies are utilized to showcase their very femininity, rather than being used as a joke or having any narrative function.

Sexuality and Race

Sexuality, while not a variable that was examined in detail in during this research, is also a point of departure in indie games. *Undertale* featured two secondary female characters who end the game in a relationship with each other. *Undertale* also has two

tertiary male characters who express romantic interest in each other. In *Transistor*, a secondary female character admits her attraction to the main playable character, a female. *Transistor* also has two male characters in an established relationship. Similar to their treatment of non-gendered characters, the sexuality of these characters is never addressed or emphasized. Furthermore, in many games included in this study, the sexuality of characters is never even addressed, through the use of a love interest or by any other means.

The sexuality of video game characters has become a more prominent topic in modern games, with the inclusion of different sexualities in many AAA games. Many of these games include homosexuality or bisexuality as an option for the player to engage in, rather than specifically gay or lesbian coded characters. Games like *Mass Effect 3* and *Fallout 3* allow the player to create a custom avatar that they play as, and have the option of romancing male and female characters. Despite this rise in LGBTQ characters, little research exists on the topic.

Race is another variable that was not specifically included in this research, but is still worth discussing. Many games included in this study had portrayals of characters from different races. Most notably, *To the Moon* featured a primary female character with dark skin. The inclusion of people of color is rare in video games, and a female person of color even more so (Williams, Martins, Consalvo, & Ivory, 2009) It is also surprising to see this dark skinned woman as one of two primary characters in a game. *Mark of the Ninja*, while never explicitly stating its setting, appears to take place in Japan.

Accordingly, the majority of the characters in this game are depicted with Asian features,

including a prominent secondary female character. *Transistor* depicts several tertiary characters, both male and female, with a variety of skin tones.

Some games are more difficult when it comes to determining the race of their characters. *Limbo* employs a very unique art style, in which the main character appears to resemble a shadow, with glowing yellow eyes. The entire game utilizes a stark black and white palette, with the character appearing entirely black. As such, it is impossible to determine an ethnicity for the characters appearing in this game. *Bastion*, while using a more easily discernible art style, depicts the events happening in a fantasy world. While the characters are human in appearance, the game makes a distinction between several characters who belong to a different race, the Ura, who have somewhat Asian features. These characters have a fair complexion with dark eyes and dark hair. However, it is impossible to categorize them based on assumed race, as they belong to a fantasy race.

Still other games stray so far from the conventional presentation of human characters that they cannot be determined to have any race. *VVVVVV* does have humanoid characters that display gender, but these depictions are so simplistic that they are entirely one shade of color. *Battleblock Theater* has similar depictions of humanoid characters. *Undertale* has one human character, who appears to have brightly colored yellow skin. Other characters are similarly brightly colored, which serves mainly as a method of discerning characters rather than portraying race. These other characters are referred to as monsters, and many resemble anthropomorphic animals. Again, the presence of gender in these characters is more prominent than race. Games which expressed more gender diversity than racial diversity tended to be those with more

simplistic or stylistic graphics, implying that the use of symbols to portray race may be graphically limited.

Gender Nonconformity

The presence of main characters who do not conform to gender roles marks a departure from the standards of AAA games. Departing from suggestions of past research, the choice to have characters with ambiguous genders was a deliberate design decision by the makers of the games. It is interesting to note that this gender nonconformity occurs in three main characters, the most prominent and identifiable characters in their respective games. Instead of being relegated to background characters, these characters are given the most important role in their games, showcasing their lack of gender. The motivations for why a developer would choose to do this are numerous and highly subjective. However, based on previously explored literature, it seems possible that in the same way indie games are often reactionary works of art against the mainstream AAA titles, the inclusion of gender nonconforming characters is also reactionary. With so little recorded information about gender nonconforming characters in AAA games, it could be entirely purposeful that game developers included these characters because AAA games did not.

This phenomenon of purposely non-gendered characters has been only briefly commented on before, and has certainly not appeared in AAA games before. Beasley and Standley note in their research of video game character gender that there are more characters of indeterminate gender than female characters. The only other comment on this occurrence is to note that these characters were often portrayed as aliens or animals, and did not speak (Beasley & Standley, 2002). No discussion is given to the inclusion of

these gender indeterminate characters, which suggests that the games included in this study did not intentionally leave their gender undefined.

The closest comparison to non-gendered characters found in AAA games can be made to transgendered characters, though it is important to distinguish that transgendered characters are not the same as non-gendered characters. There has been no research conducted into the portrayal of trans characters, however there is a precedent for their existence. The character Birdo is widely believed to be the first transgender video game character, originating from the Japanese game *Doki Doki Panic* in 1987. This game was later released as *Super Mario Bros. 2*. Birdo, a pink creature resembling a dinosaur, is referred to as a boy who “thinks he is a girl” in the original manual for *Super Mario Bros. 2*. Birdo asserts that she would rather be called “Birdetta”. In later games, this name preference is dropped and she is simply referred to as Birdo, though there are still references to her having a male body (Loguidice & Barton, 2009).

Another seemingly prominent trans character in video games is Poison, from the fighting series *Final Fight*. Poison, originally designed to be a female character, was changed to what is called a “newhalf” - a Japanese term for a trans person pre-sexual reassignment surgery. This change was made due to the belief that American audiences would find it offensive to beat up a female character. Poison’s gender has remained purposely ambiguous, causing great speculation from fans. There have been a handful of other characters who can be considered trans, but no academic research has been focused on this subject. This history of trans video game characters is limited and not particularly inclusive.

Perhaps the most salient finding of this study is the revelation of the purposely ambiguously gendered characters found in indie games. It is also worth noting that the appearance of non-gendered characters appears to grow in frequency in later games. It is important to look at this finding through the lens of cultivation theory in the sense of how these representations portray society. Cultivation theory proposes that the consumption of media has a direct influence on its consumers. This inclusion of ambiguously gendered characters marks a departure from societal expectations regarding gender, and has the possibility of creating new perspectives on gender. The normalization of gender nonconforming characters in video games could influence society's beliefs towards people who do not adhere to a gender binary.

The Uniqueness of Indie Games

Though the topic of this study is not the stylistic choices of indie video games, it would be a disservice to overlook how the unique styles of indie games has an effect on the gender portrayals within them. Many of the games included in this study employed unique or untested art styles. Very few games attempted to portray realistic graphics, often relying on simplistic or highly stylized art styles to convey characters instead. This is likely due to smaller budgets that restrict indie games. *Trine 2* most closely attempted to use realistic graphics, and also has the highest number of sexualized female characters.

It is possible that the lack of ability to render realistic characters limits the number of sexualized females in indie games. Though this obstacle is overcome easily in the game *Transistor*, which uses still frames of digital art paired with narrative voiceovers as cutscenes instead of animations. These pictures portray the main character's sexual attractiveness in a similar way to that of *Trine 2*, though with less adherence to photo-

realism in its art style. As stated previously, *VVVVVV* and *Battleblock Theater* employ simplistic styles that are far removed from realism. This full departure from realistic graphics allowed for these games to push the boundaries of gender conformity in characters.

A significant number of games in this sample utilized a pixelated graphic style, reminiscent of the early days of video games. *VVVVVV*, *To the Moon*, *Undertale*, and *Crypt of the NecroDancer* all use this art style. In comparing these games to those that employ the use of more realistic graphics (*Amnesia: The Dark Descent*, *Trine 2*, *Brothers: A Tale of Two Sons*) there is more gender representation equality in games with pixelated graphics, and no sexualization of any characters. While I can declare no sweeping proclamations, I can postulate that the games attempting to emulate AAA games in graphical style also attempt to do so in their representations of gender.

This observation is not without research which serves partially to validate it. Martins et al. (2009) noted in their research on female bodies in video games that characters in games with low levels of photorealism are larger than the average American woman. In contrast, the female bodies observed in games that expressed more photorealism were found to be thinner than the average American (Martins, Williams, Harrison, & Ratan, 2009). The graphical limitations of these games necessitate larger bodies to convey human shapes. It is interesting to apply these findings to modern indie games, as these games are not as limited by graphics as they were in the past. Indie developers are choosing to use this graphic style on purpose, lending to the ability to create non-gendered characters as well as characters that are not sexualized.

CHAPTER VI

Conclusion

This paper provides an addition to the field of video game research. Past studies, while similar in nature, have focused on the representation of gender within the context of only AAA video games. The ever growing audience and popularity of indie games necessitates that attention be paid to this subject. Gender representation was examined by playing through a sample of games and coding each character that appeared. Several conclusions can be made from this study. First, male characters outnumber female characters in representation. This finding supports past research on AAA games. Though there is more equal gender representation to be found in indie games, the trend of games being dominated by male characters continues. Second, female characters are more sexualized than male characters, though this is far less than found in past AAA games. Third, there are a significant number of characters whose gender is unspecified. This finding has no comparison in AAA games, as it is a departure from game development conventions.

Although the trend of overrepresentation of males in video games is perpetuated in indie games, these games stand out from AAA games in very significant ways. The prominent inclusion of gender neutral characters is perhaps the most significant, as it marks such a great departure from the standard established by AAA games. More often, AAA titles are allowing players to choose the gender of the main character, but the inclusion of characters specifically not gendered is exceedingly rare. In this area, indie games excel. These non-gendered characters are woven into the fabric of the game with

no attention being called to them, allowing players to believe them whatever gender they want.

Many of the games in this study focus on topics not touched by the AAA industry. Unburdened by the restrictions of large publishing companies, indie developers have used video games to explore concepts like depression and autism. *To the Moon*, a game included in this study, has a narrative that focuses around scientists exploring the memories of a dying man, whose wife has Asperger's Syndrome. One of the main characters of this game is a woman of color, a rarity in any video game. *To the Moon* is also heavily focused on story elements, with little gameplay that would be considered standard in AAA games. In fact, many games in this study have very little or no combat elements to them at all. The differences in the content of these games could contribute to less traditional gender representation, as combat elements are often seen as necessary when marketing games to boys. More research would need be conducted on this topic to draw conclusive findings.

Undertale does have combat elements, but encourages a way to defeat enemies without using violence. This game emphasizes the idea of befriending enemies instead of killing them, and the result of a pacifist playthrough of this game is rewarded with a sense of accomplishment and having made friends. *Undertale* does allow the player to instead slaughter their enemies, and the world becomes less interactive as a result. If the player chooses to complete what is called a genocide run, many dialogue options and world building aspects are no longer available, giving the player a sense of having missed out on something important. This very deliberate storytelling style is unique, and it is arguably only possible because it exists in an indie game.

The role of cultivation theory in this study cannot be understated. Past research on the construction of gender has shown that masculine norms, such as violence and aggression, are expressed against women by men gamers. Cultivation theory explains how the reproduction of gender in video games can have a direct effect on gamers, influencing their behaviors. The constant reproduction of sexualized female characters and the overrepresentation of male characters in video games is not only a reflection of how gender continues to be constructed in society, but also reinforcing gender inequality in society as can be seen by cultivation theory.

Video games have the power to influence society for the better. Indie games especially are positioned to challenge the status quo set up by AAA games. Cultivation theory explains how media can have a direct impact on consumers, shaping their view of society. As indie games become more accessible, we can only expect their influence to grow. The more inclusive nature of indie games is an example that AAA games could follow, and the genre of indie games will likely continue to be the leader in social change among video games.

Limitations

This research does have several limitations. The only games considered for this research are those available on the Steam platform. While this is the largest platform for indie games, there are others which were not included. This leads to the possibility that certain games were cut out of this study which would have benefitted it. A larger sample size of games would allow for more generalization throughout indie games.

The exploratory nature of this research did not allow for rigorous data analysis, but instead provided a general overview of the state of indie games. A larger team of

researchers would enable a study of this type to be expanded, allowing for the inclusion of more games and deeper data analysis.

Future Research

There is much room for further research on this topic. With so little research available on indie games at all, research focused on gender representation within indie games is difficult to come by. Any additions to this field of research would be beneficial to the study of gender and videogames. Of particular interest may be results pertaining to character's story roles and motivations. A significant amount of past research on AAA games has focused on the physical representation of female bodies rather than the roles these women play in their games. It is therefore difficult to compare any findings related to story roles or motivation that may be found in AAA games. Further exploration into how females are characterized, rather than just displayed, is needed.

An examination of other variables in video games would benefit the field of sociology. Issues of race and sexuality were only briefly discussed in this paper, but further research on these topics in AAA games would allow for a comparison against the findings discussed in this research. Sociology can benefit the industry of video games by working with producers and designers to create a more inclusive environment and bring in new players of different backgrounds and identities. Several game companies already employ psychologists in an attempt to market their games more effectively. Sociologists can also assist in this endeavor and foster positive change within the gaming community.

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APPENDIX

Game Title:

Year of Release on Steam:

Metascore:

User score:

Owners (based on data from SteamSpy):

Character Name:

Character Age:

Character Gender:

- Male
- Female
- Player's Choice
- Unsure/Not Determinable

Character Importance:

- Primary - controllable character - possible to have multiple per game
- Secondary - often non-controllable character, interact with primary character(s), key to narrative
- Tertiary - non-controllable character, may or may not interact with primary character(s), not key to narrative

Character Story Role:

- Hero - drives narrative forward through action while working towards the completion of a task bestowed upon them
- Villain - actively works against the hero to impede their progress through the story
- Victim - requires rescuing from the hero
- Helper - assists the hero achieve their goal
- Bystander - interacts with hero in only a superficial capacity

Character Motivation:

- Save the world - physical space needs to be restored/reclaimed
- Rescue mission - save another character who is lost or being held captive
- Personal gains - access to power, money or knowledge, seeking revenge, personal vendetta
- Passive motives - reacts to events happening to them (surviving, escaping, just doing their job)

Character Clothing:

- Fully clothed - Character shows little skin, and not in a way that is meant to be sexually suggestive
- Partially clothed - Character wears outfits that expose skin in sexually suggestive manner (short shorts, crop tops, cleavage)
- Mostly unclothed - Character wears very little clothing (bikini, underwear)
- Nude - Character is completely nude
- Unsure/Not Determinable

VITA

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