

DESIGNING GENDER: MODDING AND COMMUNITY IN MINECRAFT

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To John and Annette Tran

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Abstract of Thesis Presented to the Graduate School
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The fan communities around video games can be valuable spaces for learning. While skills such as programming and digital art creation are often tedious to learn on one's own, they are much more easily learned with the motivation of creating a mod (modification) for a favorite video game. Mods are user created add-ons to games that can change its art or mechanics. Creating this type of content for video games requires technical knowledge, and so creating it can lead to an increased digital literacy as well as spark interest in technology careers. These digital skills will become increasingly important in the new global information economy.

However, men are generally more involved than women in both playing video games and participating in their fan communities. This means that men might be benefitting from these communities more than women. I am looking at one game which has a fairly sizeable female fan base in order to see how women are playing the game, participating in the community, and creating content: the Swedish game *Minecraft*. I looked specifically at how women participated in the community and whether or not they were creating content for the game.

I chose two mods created by female fans as case studies. I looked at whether or not these women were learning technical skills. I observed the interactions on the forums on which these mods were posted and interviewed these women in order to draw conclusions about how women are participating the community.

CHAPTER 1 INTRODUCTION

Despite attempts to bring awareness to the gender gap in science and technology careers, there continues to be a large disparity between the number of men and women in STEM (Science, Technology, Engineering, and Mathematics) careers. While women now hold 48% of all jobs in the U.S., they hold only 24% of STEM careers. (“STEM,” 2011). The question is, why are women not entering science and technology careers, and what can be done to get them interested? Women continue to be underrepresented in this area despite making strides in other previously male dominated fields.

At the same time, the gender gap would appear to be closing in one area of technology: video games. Women are playing now more than ever before, with women comprising 47% of all video game players (“Game Player Data,” 2012). However, even though women are playing more video games than ever before, there continues to be a disparity in both the types of games that women play and the ways in which games are marketed to men and women. There persists a tendency of branding certain games as being for women; or, worse yet, not for women. Such branding is done either explicitly or through subtler signaling.

How do these two seemingly unrelated tendencies—the continued separation of female gamers and the lack of women in STEM careers—work together? The central issue here is that often video games stimulate interest in programming, software creation and other modes of design thinking. For young gamers, they serve as an introduction to the exciting possibilities offered by these fields. Video games introduce players to many crucial aspects of digital technology, and can both create and validate

an interest in such careers. Furthermore, it is becoming increasingly accepted by researchers and educators that games are indeed valuable for learning. As Barab (2012) explains, “society seems to be questioning less and less as to whether learning occurs in games, whether the type of learning is significant, whether educators should be attempting to create educational games, and whether it is possible to create a game and have it used in schools... Instead, there seems to be numerous federal initiatives... and private foundation initiatives... designed to foster the research of educationally useful games” (p. 272).

Video games rely on the use of skills that are essential for working in these areas. This is true of playing video games, but it is especially true of creating custom content for them. Many players of video games create modifications (‘mods’) to use and share with other players. Creating modifications for a game relies on a wide variety of skills related to digital content creation. For example, players use image-editing software such as Photoshop to recolor existing objects and characters or to create original art. Players use 3D graphics software to create new objects, and practice programming by creating gameplay modifications, which change the behavior and rules of part or all of the game. These skills take time and practice to learn, but with the motivation of modifying a favorite video game, they become worth learning. Fans who enjoy modding practice these fundamental technological and design skills and in the process become more technologically literate. If women and girls are not using video games in the same ways as men, they are missing out on the opportunity to acquire and practice these crucial skills.

Minecraft

The seeming lack of interest that women have in video games has been noticed by the game industry, and there has been much debate about the design principles that might appeal to women, or if such principles even exist to begin with. However, instead of dealing with these sorts of hypotheticals, I will be looking at one game as a case study: the Swedish game *Minecraft*. *Minecraft* does have a community of female players, and so I want to examine how players of *Minecraft* use the game and how they participate in content usage and creation. *Minecraft* is a game that encourages users to create their own content. My objective is to see whether or not female players of the game are gaining and practicing these design skills, as well as how players perceive gender in the game and in the community as a whole.

Minecraft is a game about exploration, creativity, and design. It can be played online with others or as a one-player game. The player explores the game world in a first person perspective. The defining feature of the game world is that it is comprised entirely of cubes. These cubes are made out of different materials, such as rock, sand, metal, and so on. They are arranged in a variety of ways and make up every part of the game's environment. These cubes can be removed and placed at will by the player, and thus the world of the game is completely reconfigurable.

The basic premise of the game is that the player gathers food and resources during the day, building and rearranging these cubes as necessary, and must contend with monsters that become active at night. In the game's default mode of play, the player must build shelters and tools in order to stay safe. However, the game can also be played in creative mode, in which the player has complete control over the game and its environment, and has no hunger or health to worry about. As such, the creative

aspect is just as important as the survival challenge. There are no overt goals to the game, and no end in the traditional sense. There is a certain set of areas and challenges, the completion of which could be considered something like an end goal; however, completing these challenges does not end the game and players are free to ignore this aspect entirely.



Figure 1-1. Screenshot of the game Minecraft. Taken in-game.

Modding and Making with Minecraft

In addition to the base game, many players use modifications that alter the game and the way it is played. These mods, made by members of the *Minecraft* community, are shared on forums and on the many sites that exist specifically for sharing *Minecraft* content. Most commonly, these are aesthetic changes to the look of the player and the environment. There are “skins,” which change the way that the player’s character looks. These are very easy to use, requiring only that a user click on a single button to add a

skin into the game. There are also “texture packs,” which allow the player to change the look of the environment and materials. These can be added to a folder and imported into the game. Both of these types of mods are easy to install and use, and so altering the game in this way is very common. There is also the ability to download and use structures that other players have made, much in the same way that players of other games might use a level editor in order to create and share new areas to explore. In addition to this, there are mods that change the gameplay itself, such as adding additional types of animals to the world or adding new materials to the game.

Most importantly for this discussion, there are mods that directly affect gender in the game. There are various types of mods that affect gender. One is the aforementioned practice of “skinning,” where one can easily find just as many female characters to download and use as male or genderless characters. Another type is “texture packs,” which change the look and theming of the game. Yet another way of modifying gender is to introduce bigger changes, such as a gender mod that changes the default mesh (or shape) of the player’s character to have more feminine proportions.

Gender, Modding and Design Literacy: A Provisional Framework

The topic of gender in *Minecraft* is of particular interest because it is intended to be a genderless world. The player’s avatar is a blocky looking character that is meant to be a genderless human, as *Minecraft* creator Notch explains: “The human model is intended to represent a Human Being. Not a male Human Being or a female Human Being, but simply a Human Being” (“Gender in Minecraft,” 2012). Even the animals in the game are genderless: chickens look like roosters but lay eggs; cows have large horns and give milk, and any animal can be bred with another member of the same species.

Notch goes on to explain the creative decisions that went into the lack of a gender option: “The blocky shape gives it a bit of a traditional masculine look, but adding a separate female mesh would just make it worse by having one specific model for female Human Beings and male ones. That would force players to make decisions about gender in a game where gender doesn’t even exist (“Gender in Minecraft,” 2012). However, many players would like to see the option of gender in the world, feeling that the default character definitely appears to be male. Additionally, Notch once jokingly referred to the default character as “Steve” when asked what the character’s name was, and that has become what most fans in the community call this avatar.

In order to look at how gender plays into *Minecraft*, the community of female players is key. I believe that these fans are not only playing the game, which uses skills such as spatial reasoning that women are often believed either to not possess or to not enjoy using, but that they are also using *Minecraft* as a platform to design and create content. These players can create and use content to change the original game to be more appealing, which can include changing the portrayal of gender in the game. As such, this paper discusses the ways in which video games create and convey meaning, and the ways in which players both interpret and rewrite that meaning. Specifically, it analyzes how *Minecraft* conveys a certain perspective on gender, and how players interpret, negotiate, and challenge this perspective. In other words, how do players understand gender as presented in the game, and how do they react to it through fan created content?

Games as Literacy Practice

A primary framework with which to look at video games as a space for learning comes from the work of James Paul Gee. Gee looks at video games as valuable

teaching tools. Counter to the idea that video games are a “waste of time,” Gee argues that video games teach many important skills. Of course, video games have many critics who fear their potential negative effects, but most of this criticism centers around what Gee (2007) calls the “problem of content,” which is that “important knowledge (now usually gained in schools) is content in the sense of information related to intellectual domains or academic disciplines... Activities that are entertaining, but that themselves do not involve such learning, are just ‘meaningless play’” (p. 22). In other words, people are quick to dismiss video games for having useless content, but the real value of games is not the information contained in them but the skills and critical thinking needed to play them.

The content of *Minecraft*, to an outside observer, is not particularly educational: the player navigates a 3D space while trying to build structures and survive encounters with monsters. However, the actual gameplay requires many important skills that are also essential in education, especially for studying science and technology: spatial reasoning, problem solving, critical thinking and understanding. Gee (2007) goes on to explain, “Learning in any semiotic domain crucially involves learning how to situate (build) meanings for that domain... real learning is always an active and new way of experiencing the world” (p. 26). What this means is that in a domain, such as a particular video game, a learner must understand what things mean and how to use these meanings. In *Minecraft*, the player is dropped into the world of the game with no explanation as to what anything is, and so he or she must learn what everything is and what it does. As such, the player must learn to recognize patterns in the world in order

to figure out what objects have what function, and to be able to understand what to do in a variety of situations.

As such, the game requires the use of a variety of skills. Building in *Minecraft* is much like playing with a LEGO set, as blocks can be removed, added, and rearranged at will. This, along with the necessity to rely on the position of the sun and landmarks for navigation, make *Minecraft* a game in which it is essential to use and practice spatial skills. Additionally, players can find a material called “redstone” scattered throughout the game, which can be used to build circuits. These circuits are entirely based on logic and are used to give objects new functions, requiring a type of thinking which is parallel to important skills used in computer science. On the community forums one can find entire sections devoted to the discussion of these circuits, in which players show off their creations and ask for advice with their logic when their circuits are not functioning properly. Once again, a non-player might look at the content of the game- that a player wanders through a dungeon and finds a magical substance called redstone- and proclaim this to be of no educational value. However, the use of this substance and even the ability to find and gather it to begin with both rely on a precise set of skills.

Gee also introduces the concept of the affinity space, which is a group of people that participate in a semiotic domain— “an area or set of activities where people think, act, and value in certain ways” (19). Here, this would be the fan community of *Minecraft*. Player interaction greatly determines what kind of experience a player has. Interactions among players is just as, if not more, important than what occurs in the actual game itself. Hence, I will be investigating how players learn with *Minecraft* in and out of the

game – both in terms of gameplay and of how players share their understanding of the game itself.

Games as Procedural Rhetoric

Another perspective with which to approach the question of gender in the game is that of procedural rhetoric, an idea developed by Ian Bogost. This is the idea that games make arguments through their mechanics and rule sets. Bogost (2007) explains that “Video games are usually created with some expressive purpose in mind; they represent models of systems or spaces that players can inhabit,” adding that “Video games depict real and imagined systems by creating procedural models of those systems” (p. 122). These procedural models refer to the ways in which the rules of a game determine its meaning.

Much in the same way that the content of a game is not as important as the skills necessary to play it, the explicit narrative of a game is less expressive than its rules and mechanics. *Minecraft* has no built in narrative; rather, the story of the game is entirely emergent. It is a model of a world that players explore. The story arises from how the player interacts with the world and the narrative that he or she projects onto these interactions. These interactions are in turn determined by the rules of the world itself, to which the player is bound.

However, if games are model representations of some other system, then this model is likely making some type of statement. After all, this is a representational model, not a one for one replica, as Bogost explains: “Like all cultural artifacts, no video game is produced in a cultural vacuum. All bear the biases of their creators” (p. 128). Even games that appear to be neutral or without the intention of conveying a message

will still have a message embedded in them; after all, games are made by people with particular opinions and world views and these ideologies will in turn inform the design of the game. For example, players can do anything they want to do in *Minecraft*, but are rewarded most heavily for exploration and experimentation. As such, it could be said that *Minecraft* is making an argument for the importance of taking risks and trying new things.

Minecraft as Gendered Play Space

Minecraft is supposedly a world without a concept of gender, a virtual space where there is no such thing as male or female. However, is this actually how players understand the game? The ways in which players understand and interpret a game will be influenced by their own views and experiences, and players will likely try imposing the idea of gender on the world. While the game is attempting to model a world without gender, players' urge to understand the game based upon real world experience will often override the intended rhetoric.

While there are hidden and sometimes unintentional arguments made in games, Bogost believes that games can "also be created to make explicit claims about the way a material or conceptual system works". (p. 130) Indeed, the "serious games" movement largely rests on the notion that games can be used to make arguments for persuasive or educational reasons. However, players can and do respond to the arguments made in games, both through their discussion of games as well as through participatory practices such as creating mods. Players have responded to the portrayal of gender in *Minecraft* with their own creations, with everything from skins to mods that add the option of a female character.

To relate these ideas, and for the purpose of understanding gender in games, the third framework employed is that of gender studies and games. This framework looks at what games women are playing and why they tend to gravitate toward certain games and not others. Jenkins and Cassel (2008) explain that the focus of gender and gaming had, over the past few years, “shifted into participatory culture, onto the social dynamics that emerged as players created their own identities and communities within massively multiplayer online games. Onto the ways that players were modifying existing games to serve alternative purposes....” (p. 13) Indeed, these ideas are essential to the modern video game and gender studies framework. The question of why female players get involved with some games and not others, and what sorts of community practices they participate in, are the real key for figuring out how video games can benefit women. Brunner (2008) explains, based on evidence from a study she conducted on girls and gaming, “games serve as an entry point to the culture of computing and information technology” (p. 41). Women and girls can certainly benefit from the skills used in games as identified by Gee, but creating and sharing content is a cornerstone for the interest in computer science and IT that video games can generate, as it is in content creation that players must use elements of IT knowledge, programming, and graphic design.

There are two important ideas to be investigated here. The first is the question of how many women are playing *Minecraft*, as well as how they feel about the game itself and the ways in which gender is represented. *Minecraft* is not marketed specifically to men or to women, although many other games are. As Taylor (2008) explains, “Many women have been given signals (from the broader culture and from the industry itself) that computer games are not meant for them” (p. 62). Women are often

led to doubt whether being a female player of video games is in fact an ‘allowable’ and socially legitimized activity to begin with, and this is perhaps a more important element in women’s attitudes toward gaming than the game designs themselves. At the same time, while *Minecraft*’s marketing is gender neutral (and in fact nearly non-existent) traditional game design thinking would likely hold that the spatial puzzles and combat in the game would appeal more to men.

Secondarily, this project investigates how women participate in and feel about the game’s community. Women generally have differential access to games, whether from a lack of physical access (having to compete with boys for use of computers and consoles) or from lack of perceived social access. Taylor (2008) elaborates that “It is too often assumed that women who do not buy computer games or choose particular titles are making an informed decision—that is, a negative decision about a game or a play mechanic— rather than one in which they simply have not had the access to experiment and formulate tastes and preferences about genres and types of play” (p. 62). Hence, it is important to investigate whether women feel welcomed in the *Minecraft* community, and how they feel about the representations of gender within the game. It will be of special note whether women are participating in the modding community of *Minecraft*. If women do feel comfortable in this community, then they should feel that they could share their creations with others, if they are in fact participating in content creation in the first place.

Method: Women, Modding and Minecraft

This analysis uses two gender-related mods as case studies through which to research these questions (see Stake, 1995). I played with the mods in order to explain the ways in which they affect the game within the theoretical frameworks discussed

previously. I looked at this fan created content especially in terms of how it affects the perception of gender in the game. I was interested in what types of content women are creating and their level of involvement in this community: are women as involved with content creation as they are with playing the game? I looked at how these players create and use fan content to write new meanings into the game outside of what was intended by the game's designers, and whether this content was attempting to support, change, or subvert the original content of the game.

I analyzed the discussions that took place on these forums and looked at them from the perspective of a gender studies and gaming framework. I then triangulated this data with further research (see Jick, 1979). I interviewed the creators of these two mods in order to better understand their intentions and perspectives when creating them. Here, I wanted to learn how gender played a role in each player's creation of these mods. I also wanted to know how they thought modding practices relate to technology usage in a broader sense and specifically how they can accommodate learning. I looked at what meaning they hoped their content added to game, and compared their responses with how other players were using and discussing their content. I contacted these two mod creators through the forums on which they posted their mods and then interviewed them through text. One I spoke to through IRC (internet chat relay), a text based chat system. Another I spoke to through PM (private message) on the forums themselves. Both of these chat methods were used at the request of my interviewees.

This research will be presented as a series of case studies. I will explain and discuss each of the two mods and what they do in the game. I will then present my findings and discussion of the conversations around the mods and other relevant

information such as interviews. I will apply the theoretical frameworks discussed previously in order to interpret what these discussions mean for the perception of gender in *Minecraft* and its community. Players of video games use mods to create and negotiate meaning, and some of these mods will have meanings that are different from or even contrary to what was intended with the base game and in the community at large.

Minecraft and STEM

It is essential that women have an entry point to STEM careers. This entry point needs to both pique an interest in such fields as well as legitimize the decision to pursue a STEM career. If *Minecraft* is an appealing game to both genders and easily allows players to write their own meaning into the game through the use of mods, there are several implications. This means that *Minecraft* has managed to appeal to women without explicitly trying to, after so many attempts to make games “for girls” have failed. It will mean that women are engaged in the process of content creation. It will also mean that men in the community are not trying to alienate female players as has been the case in other gaming communities in which Yee (2008) states that “male players who dominate many physical and social access points actively discourage women from entering” (p. 89). If all of this is true, then *Minecraft* could prove to be a key game through which to examine gender studies and gaming.

The Forums

The *Minecraft* community consists of many different spaces such as websites, forums, and even physical meeting places such as the yearly MineCon convention. As Lammers (2012) notes, affinity spaces exist not in a singular space or site, but rather that “fan spaces can consist of numerous interconnected web-sites, discussion boards,

and listervs” (p. 25). However, in the case of *Minecraft*, the official forum run by the game’s developers is the largest single space for discussion of the game. More importantly, the vast majority of players’ mods are posted onto these official forums. As such, all research took place here.

As of this writing, the official forum has 1,8829,317 posts. Under each user’s name is the total number of posts they have contributed, along with a ranking that is upgraded the more frequently a user posts. These rankings relate to aspects of gameplay; for example, users eventually advance from “dirt miner” to “coal miner” to “gold miner” and so on as their post count increases. In this way, new members are easily distinguished from veteran ones.

The forum is divided into subsections related to specific aspects of the game, such as ‘Minecraft Discussion’ for general game talk, ‘Other Platforms’ for discussion on the console and mobile iterations of the game, and ‘Mapping and Modding’ in which users post all custom content. This last subsection is very active, and members use this space not only for posting content but also for discussing it. Each mod generally has its own thread (a dedicated discussion), which is started when the mod’s creator initially posts the mod. A mod’s thread contains all comments and questions about the mod.

This section of the forum, the modding section, is itself further divided into several smaller sections. There are several which are particularly popular. One is the general mods section. These mods change something major like the mesh of the characters and objects or the gameplay itself. The skills required to make these mods are generally more advanced, requiring technical expertise in 3D modeling or programming. Another section is for skins, which change the appearance of the player’s

character. Skins are 2D art, and require the use of a graphics-editing program to make. Another section of the forum is for the posting of texture packs, which change the appearance of the game world, including how objects look and the color palette. Texture packs, like skins, are an artistic endeavor that requires the use of graphics editing software. There are other sections as well, such as those for player-designed maps (game areas that contributors have created so that other players can use and explore them).

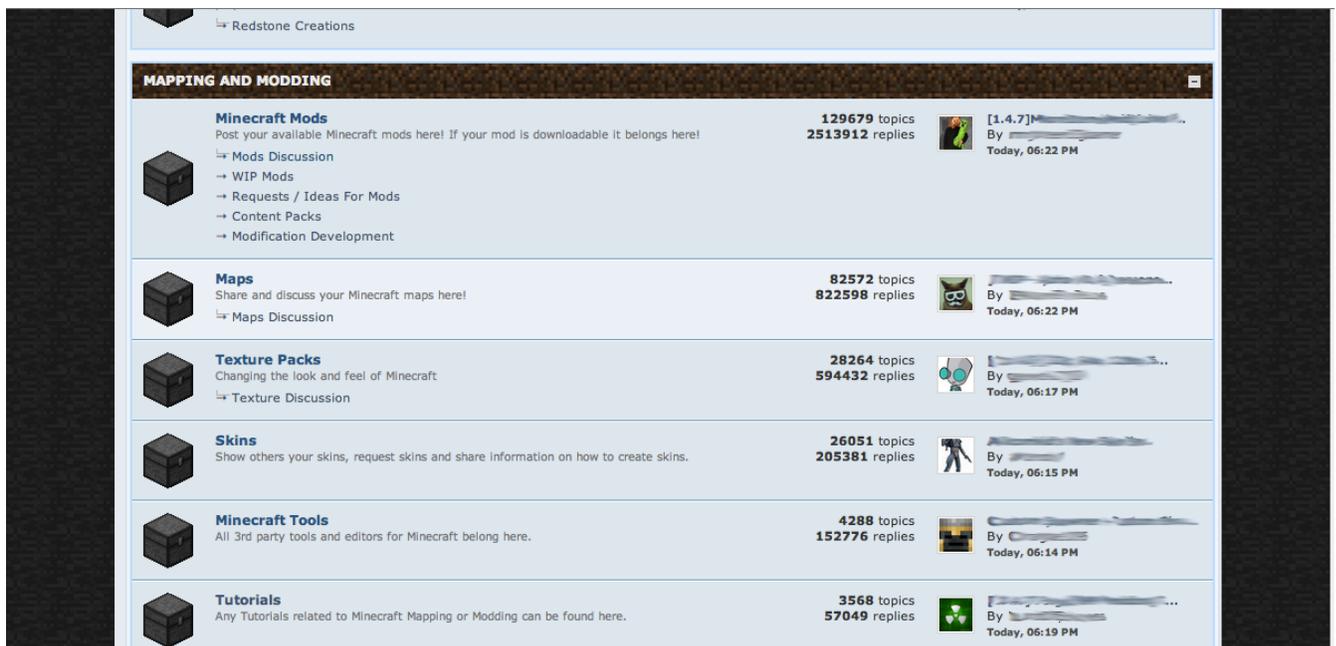


Figure 1-2. The modding section of the official Minecraft forums, with various subsections.

Demographics

While the game certainly does have a community of female players, it seems that there are still more male players, as is the case in most video game fan communities. It is difficult to discern what the ratio of male to female players of the game is, as these demographics are not available from Mojang (the game's developer). However, there are a few inferences that can be made from other sources.

One of these is Google ad planner, which collects user data from sites for advertising placement. *Minecraft.net* is the official homepage for the game and is the site from which users download the game. According to the entry for the site, it receives about 61% male visitors and 39% female visitors ("Google Display Network," 2013). While this is not necessarily reflective of who plays the game, it helps to give context for who is visiting the site and therefore possibly downloading the game.

It is more difficult to figure out who is participating in the fan community. However, the official *Minecraft* forums appear to have a mostly male user base. In order to test this, I looked at fifty users on the forums. Each of these users was the most recent poster on the fifty threads in the modding section that recently had someone post on them. I looked at their user profiles, where users can specify their gender (although many choose not to). While many users have gendered usernames or avatars (the pictures which display next to a poster's name), I only counted users who explicitly stated their gender and did not infer it from other indications.

Of the fifty posters I looked at, only sixteen provided their gender. The rest had the default "not telling" option set for their gender. Of the users who did report their gender, fifteen were male and only one was female. While this sample does not necessarily reflect the overall demographics of the forums, it does reflect the idea that there are more males than females in the community.

Mods for Discussion

In order to best examine how players create and use content for the game, it is necessary to look at different categories of mods. Notably, there may be a disparity between gamers who participate in 'hard modding' and 'soft modding' on the forums (e.g. King et al., 2011). While these terms can be somewhat problematic, they refer to

the difference between more computer science oriented practices (which require 3D modeling or programming knowledge) and artistic or design oriented practices (which require the skills to create and edit 2D images). As such, I have selected a mod from each category.

The other criteria I used for selecting mods is that they relate to gender. Specifically, I am looking at mods that rewrite the meaning of gender in the game, either by modifying the player's character or some aspect of the world itself. The mods that I will be looking at fulfill both of these requirements. I have selected two that I believe exemplify female modding practices in the community. I have assigned pseudonyms to both of these mods in order to preserve anonymity.

The first mod is the Gender Selection Mod. This mod, created by a female fan, allows players to select a female character. This new character has a feminine shape and a female voice. It also allows the player to play as a child. This mod is an example of hard modding, requiring a good deal of technical knowledge.

The second mod is the TextureGirl Pack, also a pseudonym. This is a texture pack that the creator, also a female fan, believed would be appealing to women. The mod's creator stated that she made it in order to play with her young daughter. It changes the look of the game, giving the world a pastel pink and aqua based color palette. This represents soft modding practices, requiring artistic and design knowledge.

For each mod, I read the thread on which the mod's creator posted her mod. I read through the posts on these threads in order to identify several key elements of discussion. (1) How do players discuss and debate the use of mods to change the portrayal of gender in the game? (2) How do players ask for and provide help to the

mod's creator and other users? (3) How do players address the real-life gender of players and users? Then, I compared this data to the creator interviews and the answers I received there.

Hence, the practices to be identified in these posts include discussion of gender in the game and how mods affect gender, learning and teaching activities that take place on the forums and how they are socially situated, and discussion of how real-life gender impacts both gameplay and modding practices.

CHAPTER 2 GENDER SELECTION MOD

Among the most well known mods that affect gender in *Minecraft* is the Gender Selection Mod. It is a much discussed mod; the thread on which the mod is posted currently has 1606 replies, which is quite a few more than the majority of posts receive. At the time of this writing, the thread had existed for over a year and a half. The high reply count is in large part due to two distinct types of posts. The first are posts that debate the merits of the mod and that discuss how players view the role of gender in *Minecraft*. The second are posts that relate to learning or teaching, mainly centered around users giving or receiving technical help.

In game, the process of using the mod is fairly straightforward. Upon installation of this mod, the player is granted access to a new character shape, the female character. This female character looks much like the original character, having the same blocky look. However, there are a few key differences. She is slightly smaller, has a feminine shape, and has a new voice. In *Minecraft*, when the player is hurt and takes damage, the player's avatar makes a masculine grunting noise (This has been changed in more recent updates to a cracking noise, with no voice). This mod gives the character a female voice for this 'hurt sound'. Additionally, the mod allows the player to select a child, which is the smallest of all characters, introducing age as well as gender. These changes are presented as a series of options. This character does not replace or overwrite the default character in the game. Rather, the player can now select a male or female character, and can toggle the options of gender and age on or off.

The look of the female character is not dramatically altered from the default character shape. The female has a small rectangle on her chest for breasts and is

overall smaller. It is certainly a more feminine appearance, but the overall blockiness and angularity of the character fits in with the look of the rest of the game. There were many suggestions from players on how to make the character look even more feminine, with suggestions such as slimming the shoulders, arms, and waist. These players were expressing a desire to further rewrite the portrayal of gender in the game.

The mod's creator explained her choice as being both an aesthetic choice and a technical limitation. She believed that this character was consistent with the world of the game, but also noted that her alterations were easier than the work that would be required in order to slim down parts of the character. She stated that she might want to try a more dramatically altered shape in the future, but not yet. Here, she explained her technical limitations, stating that it would be too complicated to implement some of these ideas.

Learning and Development

The exchanges between the mod's creator and other players who helped her with technical issues and design are an example of apprenticeship in the affinity space surrounding the game. This includes, especially in her case, players who helped her indirectly by creating tutorials and other resources for novice *Minecraft* modders. These exchanges demonstrated how the mod's creator was able to utilize other player's expertise, therefore being able to create something with her initially limited expertise that she would not have been able to do as easily without help from other community members. The mod's creator interacted with users on the forum on which she posted her creation, answering their questions and responding to their comments. Most importantly, she described the development process as it happened. This shows how

learning can unfold in an affinity space, as fans develop skills that are based upon interests (see Gee, 2007).

In his study of the gaming site *Kongregate*, Duncan (2012) studied the ways in which players can learn design through an affinity space, believing that the site's "particular community provides researchers with a unique opportunity to see how gamers can be scaffolded into designers through intersection with an affinity space that features the use of shared reference materials, instructional materials, design tools..." (p. 56). The *Minecraft* modding community, too, is an example of gamers becoming designers.

The first version of this mod was very basic. The mod's creator introduced herself as a novice modder, one who did not have all of the technical skills needed to make what she wanted.

I'm Very, Very new to mine craft modding... I still need to figure out what the mod loaders do (.class wise) in order to change some things & lines and not others.

By 'things & lines', she was referring to the code of the mod. The mod she created requires two different kinds of expertise. One is expertise with 3D modeling software, which is necessary to create a new mesh (3D shape) for the character. The second is programming expertise, needed to add her character into the game as well as add a graphical interface through which the user can set his or her gender.

As she continued to work on it and added new features over time, she posted about her progress, explaining how she was able to add more features as her expertise increased. Other users provided feedback, suggesting features, reporting problems, and generally letting her know what they thought of her creation. The majority of these posts were encouraging. Other users complimented her on her work and encouraged her to

keep adding new features. They also offered her technical help. She leveraged this help, as well as other community resources that will be explained in the interview section, to eventually make her mod the way she wanted it. When she stated that she didn't know how to implement some features that she wanted to, other players offered up solutions to the problems that she was experiencing. Additionally, if someone reported an error or other problem using the mod, other users on the thread were quick to offer suggestions on how to fix these issues.

One example of this back-and-forth problem solving occurred when one user reported an error. The user reporting this error explained that the zombies (one of the monsters the player must fight in the game) were now female as well. This user provided a screenshot of the zombies, which now shared the player's female shape. There were a number of posts from users noting how funny they found they find this issue. The creator expressed her amusement and surprise and said that she will try to figure out how to fix it. At this, another user explained how to fix the problem.

About the bugs with other bipedal models, I propose a solution, just copy the class you edited, rename it and make the necessary changes for it to work, and make the player extend that class which extends the class that bipedal does, so you can have a custom player model and not screw up other models up. Just a tip.

However, another user had already been helping her with her programming; a few posts back, he told her to PM (private message, used for nonpublic conversations between two people) him. He states

Well with the modloader fix I taught you, it will not edit the other mods. Speaking of which, I have to send you that code... Sending it now.

She fixed the problem shortly. It is worth noting that she was receiving enough assistance that several solutions are offered to the same problem. This was not the only

time this happened, and the people who helped her over the multitude of pages of the thread came and went.

It is also worth noting that the users offered not just technical advice, but design help as well. For example, while this technical discussion about the female zombies was occurring, other users on the thread stated that they actually liked this bug and requested that it be left in as an option. One fan of female zombies explains:

Why should be all zombies guys, after all? (Skeletons don't have anything visible for gender, I guess, so that's sort of justified).

What actually makes me wonder if you're able to add the female body to zombies randomly so we can have both - male and female zombies.

This is an example of users offering not just purely technical help, but design assistance as well. As time went on in the thread, she implemented more and more advanced features as they were requested. Players frequently requested that she make the mod useable in multiplayer games, a request which she was able to fulfill.

Her updates became more and more frequent. When one user reported that the gender mod was conflicting with another mod in use, the creator explained that

If PlayerAPI/SmartMoving doesn't function properly when this mod gets installed second, I shall look at its code for that class and see if it would be possible to provide a simple patch, (and contact the dev. about this).

Here, her language was much more technical than it was early in the thread, and she did not apologize for this error like she did for earlier ones. She offered a solution: she would try to provide a patch (an update to fix the bug), and also stated that she would contact the developer of the mod, indicating that she was now talking to other modders. The development of her expertise played out over the course of the thread. When she stated that she would contact another developer to fix a problem that had been reported, she positioned herself as a more veteran player, one that now engaged in

technical and design speak with other modders. The confidence that she gained over time is readily apparent in her more technical language and the frequency with which she herself answered questions that arose on the thread.

Rewriting Gender Portrayals

The debate over whether or not gender should be modded into the game showcases the real meaning of modding: to rewrite a game in a way that the player will enjoy more. This can include rewriting the rules of the game to modify the actual gameplay, or changing the meaning and rhetoric of the game. Many players of *Minecraft*, especially women, do not accept the rhetoric of this supposedly genderless world. Here, unlike in other media in which someone can agree or disagree with the message but not be able to do anything about it, players of video games are able to change the game itself. This is because the rhetoric of a game is procedural- that is, it is generated by its rules, mechanics, and assets (see Bogost, 2008). Hence, in order to change the meaning of a game, a player can just reprogram or redesign a part of the game. Here, the mod's creator did not like having to play a male character and so she took it upon herself to change this meaning.

The idea of introducing gender into the game was hotly debated. As such, the reaction to the mod was sometimes mixed. On one hand, there were players who were very grateful for the option of a female character. They thanked the mod's creator for finally allowing them to play as a female and applauded her efforts. Some posters linked the lack of female representation in *Minecraft* to video games as a whole:

I appreciate what you're endeavoring to undertake here. Gender is often poorly represented in games. On the other hand, some posters don't understand the need for a female character, especially since the default character is supposedly without gender.

Some players stated that this mod fulfilled a long held desire, and lamented that this option was not implemented in the game already. These players frequently identified themselves as female when they thanked the mod's creator, thus positioning her as a member of this sub community of female players. On the other hand, there were many detractors. Some were against the mod because they did not want gender to be an option in *Minecraft*. These players felt that the world was supposed to be genderless, and because this mod introduced the idea of gender, it was changing the intention of the game in a negative way. Some posters questioned the need for a female character, especially since the default character is supposedly without gender.

does it really bother you THAT much about the voice that you cannot even simply stand playing as a guy (which is only noticable when you take damage I remind you) that you have to change it.... I find this mod unnessisary but that is my opinion... I will support the voice change, sure... but beyond that this mod is going a bit far.

The central divisive issue here seems to be whether or not players accepted the premise that *Minecraft* is a game without gender and the default avatar is not supposed to represent a male character. After all, it has been officially stated that both of these are true. With this mod, the idea of gender is imposed upon the world. This holds true even though the user can select male or female (with their respective voices) or turn the mod off (and have the neutral damage sound). The male character in the mod has the same appearance as the default character. An effect of this is that the supposedly neutral default character has, by binary opposition, been designated as the 'male' character.

However, many female players argued with this genderless premise to begin with. The following post summarized the argument that *Minecraft* is already gendered and that the main character is male:

Don't throw the "asexual avatar" bullcrap.

- It grunts like a man.
- it looks like a man.
- it has the complexity and the body of a man.

This was a common sentiment among both male and female players.

The amount of discussion of this mod, both positive and negative, was due to the fact that by “adding in” gender to the game, the mod’s creator was shifting the gendered meanings embedded within the game space. The amount of debate further illustrated how the meaning of the game itself was being changed. Users who were genuinely upset at the idea of adding gender to the game believed in the idea of the genderless world, and hence did not understand the urge of others to rewrite this. This also sometimes stemmed from confusion on the part of these players as to whether women did in fact play *Minecraft*, or video games more generally, to begin with.

Real Life Gender

Much of the discussion centered on the real-life gender of players who used and supported this mod. There was some, but very little, discussion of the idea that a female character in the game does not have to be played by a real life female, and that male players might want to use a female character. Males responding positively to the mod often explained that they were eager to show it to a girlfriend or female relative. At the same time, there were many expressions of concern over the mod’s only audience being ‘perverted’ men who would want to play with female character.

Its sad cause it'll be 10% girls using this. the other 90% will be pervs

In fact, almost every mention of a male playing a female character was accompanied by the idea that this notion was 'perverted'. Members of the community were enforcing the social norm of controlling a character of one's own gender. In this way, an overriding motivation for rewriting the meaning of gender in the game was to allow a female player to have an avatar that reflects her gender rather than to introduce gender into the game more generally. Embedded within this argument over whether this mod is 'perverted' is the assumption that women do not play *Minecraft* or other video games. There were also a number of posts that joked about how the female should be good at cooking, bad at mining, weak, and a number of other stereotypes. Many of these posts were dismissed as jokes by their posters when other members called them out. In fact, the number of these disparaging posts was small compared to the number of posts that attacked them:

If you like it, sure, download it and enjoy it too! If you don't, then be quiet and look elsewhere for a mod. Don't post if you don't have anything constructive to add to the topic (snarky remarks or comments don't count as constructive)

dont be sexist people!! really?

I mean imagine how you would feel if notch had made the avatar a girl and not a boy. A girl with girl sounds. Im sure at some point someone would want a male skin with male sounds. Girls play this game too ya know

To which the mod's creator added:

Man, I sure am collecting some die-hard fans. Lol..

The posters that were writing these posts to counter sexist or offending posts were both male and female. It is clear that this discussion about sexism and the lack of female players was not just about this mod but also about the community itself.

Interview: Gender Selection Mod

Using the knowledge provided by other users in the forum and in community-created tutorials, the creator of this mod was able to increase her modding skills. These tutorials and other user created content were especially important. While it seemed from the forum discussions that most of her knowledge was gained directly from users on the thread, in my interview, the mod's creator credited community help that she found elsewhere. When I asked about these community resources, she explained:

Yeah, if you browse the minecraft forum, and possibly other websites, you will find many tutorials on how to make mods for minecraft

In fact, she states that many times users providing input on the forums were not overly useful:

Most of the time, it their input wasn't helpful. It's not anyone's fault as you would need to know how Minecraft actually works

The only person from the forums that had really helped me personally was [name retracted] who taught me how to make a plain content-less modloader mod.

The modder she was referring to is the one that held a private message conversation with her in the above findings. I inquired further about these community tutorials through which she had acquired her modding knowledge. She then linked to a Google search on the topic that yielded a large number of results. These results were tutorials on how to mod *Minecraft* for users who did not know how to do so. These tutorials explained various technical skills such as using Java (a programming language), but in the applied context of creating a *Minecraft* mod. Hence, her design ability was scaffolded not simply by forum users but by the community as a whole with the abundance of tutorials others had written. She explained that:

I've made leaps and bounds in my recent java knowledge, setting high goals rewards oneself when they get accomplished

She further explained that while she did have technical background, but did not know any Java (which she used to create the mod) and that she had never modded for a game before. When I asked if she had learned Java specifically to mod, she explained that:

I've learned java through tutorials made by the community as well as Minecraft's code itself... I didn't start learning java to then mod, it was more of a double learning process

Hence, *Minecraft* was a primary but not sole motivator for learning Java. She did agree with the general premise that games can open up an interest in technical skills:

Minecraft was not the beginning of my technical skills, but in order to learn, actually learn, there must be interest

For if there is no interest, no passion, there is no attachment to the subject itself.

Minecraft provides individuals with the goals of their imaginations, whether it be building something cool, making a texture pack, programming or otherwise.

Gender and Sound Design

It seems that a primary motivation for using this mod was when players believed that the default character appeared to be male. The mod's creator explained that she found the main problem with the character as 'gendered' was the male hurt sound. However, as this sound has been replaced, she was now willing to accept the genderless premise:

Well, the player, as of relatively recent updates, is indeed genderless. Steve's "OOOh" sound has been replaced with a bone cracking of sorts

I then asked if she thought that the mod still affected gender in the game, since much of the debate was centered on whether or not gender should be introduced into the game.

She did in fact believe that she was adding gender into the game:

Since my mod adds the Steve character's original sound back in, as well as provide a female equivalent, it does effectively add gender into the equation.

She not only felt that she was adding gender into the game, but she believed that this addition of gender was something female players appreciated:

Ah, I found it rare to find a female that didn't like having this mod around

She found that other female players enjoyed using this mod. These players were using the mod to write gender into their own games.

Further Mods

A central question of this research was whether female mod creators felt supported by the community in sharing their mods. When I asked the creator of GSM if she had encountered sexism, she stated that she had indeed encountered some, but that

I feel that any sexism is solely due to the sexism that exists on the internet itself

She didn't feel that she was the target of sexism specifically for creating this mod. She characterized the response to her mod as this general Internet sexism by recalling that

...the general responses of the men were either 'my girlfriend/sister/cousin will love it' or 'G.I.R.L.' or 'hahaha boobs'...

G.I.R.L. stands for Guy In Real Life, and refers to <http://knowyourmeme.com/memes/there-are-no-girls-on-the-internet>

The link she provided was to a page explaining the 'no girls on the internet' meme, in which members of internet communities assert with varying degrees of seriousness that

users who claim to be female probably aren't, and that females in general do not use the internet (a meme is a concept, phrase, image, or site that spreads from person to person via forums and other social interactions. They are usually used for humor).

Overall, she was rather dismissive of the sexism. When I asked her if she wanted to make another mod, she stated that she had some ideas in the works and was interested in making more, although she would have to learn more before she could make them. When I asked her for details, she said:

Special projects? A few ones are in development, they may or may not get released :D

Unfortunately, they are secret until they are released

A lot of them are over my ability to program

Hence, she did not feel that she had been discouraged from further mod creation, but rather that she wanted to create more content.

CHAPTER 3 TEXTUREGIRL

The next mod I looked at is theTextureGirl mod. In the original posting, this mod's creator explained that she created the mod with her daughters in order to have a better-looking game world, because they did not like the original look of the game. At the time of this writing, this thread was first started just over two years ago. It has 386 replies, and has been locked (shut down so that it is still viewable but can no longer be posted in).

This mod is a texture pack, which changes the look of things in the game. The skills needed to make textures fall under the category of 'soft modding', as it requires the use of 2D graphics software but not programming or 3D graphics. It also requires knowledge of design principals. However, it can be quite complicated to get 2D graphics to display on, or 'map', to 3D objects, and so texturing the objects of the game is more complicated than changing the look of flat tiles and 2D objects. This type of modding has often been overlooked while researchers have focused on more programming based mods. However, these practices are common among women and are a different type of design skill. Gee and Hayes (2010) elaborate on this explaining that, "today there is no real divide between technology and art" (p. 15) because digital art creation relies on a set of digital skills.

On installation of this texture pack, the world of the game takes on a so-called "girly" look, with a bright color palette based on pink, purple, and cyan. The material blocks change; gold blocks become yellow and white checkered ones, diamonds become rainbow cubes. Overall, the world as depicted by theTextureGirl pack is much more colorful.

The monsters in the game acquire big eyes and cute faces. Objects change as well; for example, the previously menacing looking pumpkin becomes a watermelon with a happy face on the front of it. Even the most powerful monster in the game, a large dragon found deep underground, is made to look much less scary. These changes, both the more friendly looking creatures and objects as well as the soft color palette, modify not just the look of the game but its feel- the world seems much more peaceful even though the fundamental gameplay hasn't changed at all.

Hence, the manner in which the mod is rewriting meaning is by changing the feel of the gameplay. The mod does not actually change the rules or mechanics of the game, or introduce a new way of playing. However, it changes the tone of the game entirely. Games, like films or novels, have tones that determine the way a game feels and what is like to be in the environment of the game. The tone of *Minecraft* without a texture pack is that of a wilderness survival adventure. The tone of the game with this texture pack, however, is completely different. The world looks like a princess castle or dollhouse one might see in a toy store's section for young girls. As a result, the game seems less like a survival adventure and more like an animated princess film.

Learning and Development

The creator of this mod was less focused on learning than the creator of the GSM. The creator of this mod began by explaining that she had created this mod to play with her young daughters, but did not mention her skill level. However, as players requested features, she began to comment on her experience. For example, players began to request "mobs," which are the monsters and animals that roam the game world, as well as objects. She replied:

i dont think i will be doing items, i am just not that good at working with pixels, patterns (which is basically all i did for the textures) is about as far as my skills go, im still not sure about mobs, i plan to at least give them a go.

She stated this because objects and mobs are more difficult because they are 3D and it is harder to design them. However, much like in the previous case, players were quick to offer suggestions on how to tackle these difficulties, even offering diagrams of how she should make textures for these objects. They also answered her questions when she asked them.

The key difference between this and the previous case is that players began to simply make these things themselves when the mod's creator did not. The main learning principle that emerged from the interactions around this mod is that of collaborative design. Like in the previous case, the mod's creator expressed technical limitations, but these limitations were overcome in a very different way: by other users. She was very permissive in allowing others to change and add to her mod, and as such other users felt that they could post their creations. When someone asked if it was okay to try making some items for the pack, the mod's creator replied

sure! id love to see what you come up with

From there, users of this mod began creating everything that was missing from the original texture pack. These users tried to match the original look and feel of TextureGirl. It began when someone posted mobs for the pack, to which the mod's creator responded:

oh my goddddddddd i love them! they are so awesome and super cute!!! i especially love the spider

After this positive response, plenty of other users posted animals, objects, and materials to be added into the pack. The mod's creator complimented these contributions and

added them to the main file. The pack grew larger with these contributions, and soon it was made up of the contributions of several fans.

Many of these contributors were female, inexperienced, or both. This mod provided them a way to make various parts of a texture pack and experience immediate feedback from both the mod's creator as well as other users. These contributors received overwhelmingly positive feedback; they were not generally the targets of sexism or specific criticism. Additionally, the mod's creator supported these additions, stating that it made her happy to see these contributions. Both of these female posters commented on the inclusion of their creations:

Omg! I just noticed you added my squid. I feel all important and stuff now
Thank you!

I've never seen anyone use my skin anywhere before so it's just special to me! :)

Users who had not seen their creations included in other mods before were pleased to be contributors. These comments indicate that the posters of these additions are themselves learning modding. In the end, the design of this pack became increasingly collaborative as the mod's designer integrated these new additions. Some of these contributions, which were in a sense modding the original mod, were themselves also modded. When the user who made items for the texture pack posted their items originally, another user decided to modify the items from this poster:

i looked at your modifications and i really liked some of the things you did, the weapons especially, and some of the mods to the items etc. the purple diamond weapons kind of bugged me a bit as well as changing the flower colors, so i made a couple of modifications of my own! (i hope you dont take offense to this ;-;) i loved your modifications, but i just chanded some of the things you did to match color schemes, etc. again, i hope you dont take offense.

The poster of the original items was not offended by this alteration of her work, and instead reflected on the levels of modifications that were occurring:

Oh no, I don't take offense at all! Haha. It'd be hypocritical to take offense, as I'm directly changing both Notch's and [name retracted]'s work here lol.

This thread ends up being an interesting experiment in collaborative design and “remix” culture. It is fairly common for users to modify (with permission, either asked or given in the original posting) another person’s texture pack. These alterations are recolors of or additions to the original pack, and are called remix packs. TextureGirl is the basis of not only the ever-expanding main pack, but of several spin-offs. These spin-offs include a recolor that keeps the bright and colorful aesthetic but is based on blue instead of pink, and a few other colorful packs cite this mod as an inspiration even if they are not directly based on it.

This remixing leads to a distribution of knowledge and creativity. Jenkins (2006) posited that fan communities are a great way to access collective intelligence; that they can be defined as “expansive self-organizing groups focused around the collective production, debate, and circulation of meanings, interpretations, and fantasies in response to various artifacts of contemporary popular culture” (p. 137). The collaborative work done on this mod is an example of this collective production and meaning making, in which a group of people decide how to negotiate the meanings of the game and create content accordingly in a collaborative setting. Thusly, the learning that takes place in this example is found in individuals who are creating and learning from the creations of others.

Eventually, another user took over the updating of this pack entirely as the mod's original creator updated less and less frequently. It was taken over by a series of

subsequent (female) curators, and is still being updated at the time of this writing by a female fan. The first fan that did this, on the original thread, did it initially without permission but was quickly granted permission from the mod's creator. The subsequent curators posted in their own threads.

When a user asked one of the fan curators if she had gotten permission to update the pack, the mod's creator posted in reply to this question in a way that showcased her permissive, even encouraging, attitude toward other players modifying her creation.

Here is some permission for you

..:permission:.

In some ways, the learning in TextureGirl is the opposite of the Gender Selection Mod. In the previous case, the mod's creator was able to perform beyond her initial means because other players scaffolded her expertise. In this case, other contributors to the mod were provided with a platform for learning by making smaller changes to this mod. While there was some back and forth between the mod's creator and other users offering technical and design help, it was not as prevalent as other users learning and benefiting from this pack.

“For Girls”

At first glance, it might not appear that this texture pack is modifying the meaning of gender in the game because it is simply changing the look of the game world, not the player's character. However, it is clear from the response that this mod received that it is not only rewriting the meaning of the game, but that it is doing so in a surprisingly deep manner. While the mod is not changing the mechanics of the game, it is introducing a cognitive change upon players: a way of thinking about the game. This is similar to

when Gee and Hayes (2010) wrote about a female modder in the community of the popular game *The Sims*. This modder created a written challenge for other players to follow, and Gee and Hayes explain “she is socially organizing this community to play in a certain way, to think and reflect in certain ways, and to relate to each other in certain ways as they take her challenge, negotiate over it, and comment on it” (p. 54). This mod is suggesting a certain way of playing the game.

This is evident because the discussion around this mod became very heated. While there were many positive comments and plenty of users posted in order to thank the mod’s creator, many of the posts were contentious. There were two major themes that users argued over. The first was the inclusion of the word ‘girl’ in the mod’s name (while the name given here is a pseudonym, the original texture pack’s name contains this word as well). This sparked debate on whether the mod’s creator was stereotyping women or not. The second theme was generally sexist sentiment, from the idea that the mod “ruins” the game to gender commentary that was not related to the mod itself.

The idea that this mod was made “for girls” was upsetting to a number of people, mostly women. The main criticism that this mod drew was from players who felt that it was wrong to say this mod was for girls. These users believed that the idea of this being a mod for women played on stereotypes on what women liked or were supposed to like. In fact, these users believed that the pack was marginalizing rather than inviting female gamers, because it was implying that this is the only way that women will play games.

This worry might be a reaction the game industry’s attempts to design games ‘for women’ which are nearly always much worse than standard games, and many female players take offense to this marginalization. The mod’s creator explained that she had

created the mod for her young daughters, hence the pink and purple color scheme.

However, this did not stop commenters from expressing their dislike of, even disdain for, the pack.

Mmmmm... So now girls = rainbows and pink. /Disapprove

this is not [mod name retracted], this is pinkcraft. Just because its bright and beautiful doesnt mean its auto-maticaly girls. Sexist. Other than that, it's realy nice looking

I'm a Girl and this is so ugly !

Nice looking. Also, I suggest renaming it...

The sentiment here seems to be an aversion to the idea that pink is for females, and females therefore must like the design aesthetic of the game. However, several posters defended the mod. For example:

The mod creator is not responsible for making a mod that ALL FEMALES would like simply because of its name.

Game created by a male, played by mostly males and texture packs made mostly by males...I think you're already using "Gecraft".

The mod's creator defended her design choices, explaining that it was created for her daughters, and that she herself is a fan of this type of aesthetic:

was designed with my daughters, they are fairly young. i dont know of any little girls who dont like rainbows and pink, i spoze some women grow out of it, but i didnt >> i am wearing pink nail polish at the moment with a clear coat of rainbow sparkles over the top and i think its just the most wonderful thing ever!

Masculine disapproval

While disapproval from female players comes mostly from a personal dislike and rejection of the mod's look, the negative comments from men took the form of both general sexism and a rejection of the way that the mod changes the game.

In terms of the general sexism, this is exemplified by an argument between two posters. An early comment by a (male) user praised the mod and said that will help men realize the game is not just “for them”. This sparked a debate that dominated the thread for many pages. The debate, which was about gender issues generally and not about the mod, continued until both parties agreed to take a step back and stop taking over the thread. This sexist discussion is an example of of the ways in which male players attempt to keep women out of gaming spaces. As one user explained, this mod is “opening a door” for female players. As many other players noted, their girlfriends, wives, friends, or daughters became much more interested in the game after trying this mod.

This need to keep women out of gaming spaces has been studied in gaming scholarship. There are many social and physical barriers to games. Referring to regulation imposed on cybercafés in Taiwan, Lin (2008) notes that “combined with parental and other social constraints, these attempts to regulate the leisure activities of youth reflect culturally bound gender role expectations that restrict the number of opportunities for girls to play together in the same physical space” (69). However, these ‘culturally bound gender role expectations’ hold true even across various cultures in which women do generally have more equal access to technology. In places that lack physical access barriers, cultural and social barriers often inhibit women’s participation.

These barriers continued to exist all throughout this thread. After the two quarrelling users finished their debate about misogyny early on in the thread, other sexist and even homophobic comments continued to crop up. Sometimes these posts received warnings from the forum’s moderators.

omg there is a woman out of the kitchen get back in there and make me some cake

Mod edit: Warned for posting a derogatory statement about a social group (in this case, women).

Anyway, this being the Internet and all, it's best that girls keep their genders unknown here (and mostly anywhere).

Much like in the previous case, other users were quick to jump on these comments. Here, however, the mod's creator was very quick to put down these posters as well. Other users frequently criticized these sexist posts. For example, in response to the second post suggesting that female players should not let others know that they are women:

~That's still sexist, bro~

true. she needs nobody to babysit her.

In addition to these comments, there was a second type of masculine disapproval. This came in the form of posts that asserted that the mod was 'ruining' the game:

What a gay and retarded piece of crap. What person would actually download this? Minecraft is about SURVIVAL, and this texture pack makes it look idiotic. I can't believe Notch hasn't banned this.

And [name retracted] didn't even bother to reskin the mobs! What a drooling moron.

Mod edit: User warned.

There were many accusations that this mod's creator was not a 'real' player. This is because she was using the game in a way that was, in these users' perceptions, wrong. There were a number of other players who also accused her of perverting the game's message, implying that she and her daughters were somehow invading the game. The resistance and anger over this mod, then, grew from outrage at the feminization and perceived takeover of this male space. The idea of female players in this space was

upsetting to these players. Taylor (2008) explains, “women have to face a culture that works hard to keep them out” (57). There is a barrier to access for video games; a social structure that often works to keep games a ‘boy space’.

The idea that this texture pack was not used by ‘real gamers’ and was not true to the survival adventure side of the game was brought up multiple times, especially after several posters mentioned that their young daughters played with the mod. The mod’s creator responded to the accusations of not being a real player in a way that challenged this assumption and provoked these posters further. She agreed with, rather than debated, the premise that she did not play the game in the same way as the players who posted the negative comments did:

i also play on peaceful. quite often while watching carebears with my girls.
what do you think about that huh.

‘Peaceful’ here refers to a game mode without hostile monsters. She explained that she often ignored the combat and survival aspects of the game entirely. She did not try to prove that she was a ‘real’ player, but instead further emphasized how her play style was different than those users who were attacking her.

However, there was also plenty of backlash against this sexism. In responding to and calling out these comments, these players were supporting the female players who wanted to be in this space. Other users also jumped in to argue with these comments and defend the mod. The mod’s creator continued to respond to comments like this by affirming that she was playing the game differently:

well you should see me on the rare occasions that i dont play on peaceful, i
step one foot into a cave and if something scary comes out i just about
have a heart attack

Real-life gender

Much like in the case of the Gender Selection Mod, there was much discussion about the gender and sexual identity of users who would be interested in this mod. There were many positive comments, especially from those players who had female relatives that became interested in the game through this mod:

I have just shown my younger twin daughters this and they absolutely love it

I've been trying to get my wife into playing minecraft and this is the first mod that's really gotten her interested in it.

Male posters often stated that they would show it to female players that they knew. Interestingly, a sexuality discussion emerged along with the one about gender. After many accusations of the mod being “gay,” this actually prompted some male players to admit that they enjoyed the pack:

I am a guy, but I don't care that this is “[mod name retracted]” or that I might be called gay, for I am not gay but I do like this coloring.

I like it. Screams kawaii, and as an asian male, I approve.

The men here are emphasizing the validity of this mod by stating their own approval (kawaii means ‘cute’ in Japanese, and refers to the mod’s aesthetic). Along with this gender commentary, still other users directly commented on the issue of sexuality:

And even if she was [gay], there is nothing wrong with that either! If you dont like frilly pink stuff, then GTFO >I -proud transwoman, and proud lesbian-

The negative users on this thread were trying to emphasize the value that ‘real’ gamers were male, heterosexual, and played the game in a certain way. These comments about gender and sexual identity were attempting to challenge this notion.

Interview: TextureGirl

While many users benefitted from this mod as a creative platform, it seemed that the mod's creator had gotten much less out of it than the creator of the Gender Selection Mod. When I asked the mod's creator if she felt that she had learned much in the process of creating her mod, she stated that she really didn't feel like she had. She had never made content for a video game previously. When I then asked what she thought of the heated response to her mod, she stated that

I wasn't expecting it at all. I think there was a bit of overreaction from some. But i wouldn't do it again!

...I was quite surprised by the amount of discussion regarding [mod name retracted] and honestly its why i gave up on it.

She felt discouraged from mod creation, hence why she lost interest and allowed others to take over the mod. She also experienced harassment:

On youtube however, the girls come out of the woodwork to bash on it, they need everyone to know that THEY are a special snowflake who does NOT like pink and how dare i demand that they use this pack simply because theyre girls? What? i know right.... But thats youtube and i shouldnt expect better. I got sick of constantly deleting comments and i dont use that youtube account anymore!

She was mostly discouraged by female players who accused her of sexism. In fact, she felt that these players were much worse than the male players who responded negatively. The mod's creator stated that she found this female criticism to be the most discouraging that she received. She felt it was unfair because, as she had already explained, she created the mod for her young daughters and this is what they liked. It was not based on an abstract concept of what girls should like but rather upon the input of her daughters and her own preferences.

However, she did state that there were positive experiences. She was happy about the positive comments she had received. When I asked if she felt supported she stated that she felt

Mostly welcomed, in fact i got quite a few PMs from people saying that they thought it was great, the pack i'd made and the fact that i wasn't afraid to go 'girly' and they just wanted to let me know without getting into the debate on the forum

PM here refers to private messages, which users were sending in order to thank her. She was also very pleased with the participation of other users in creating her mod. I asked how she felt about other users adding on to the pack, and she stated

That actually made me very happy. I was also surprised by the handful or so requests i got to allow updates on the pack.

Hence, she was not only permissive but also encouraging of the work that others did for her mod.

The mod's creator also commented on the real life gender of those who used her mod, as well as players who enjoyed the game generally. The mod's creator felt strongly that *Minecraft* was a game that women would enjoy. She drew a comparison to a gaming community she had participated in previously:

...i do think minecraft can be interesting and fun to women who dont normally like video games because you have the ability to turn monsters off and simply explore and build. Who wouldn't want to do that! When i used to play Everquest 2 i knew lots of other girls who would play the game just for the housing aspect of it, we would spend hours and hours decorating our houses and discussing/bragging on the forums and i wonder how many of them have found minecraft. I think they'd love it.

She felt that the game was very inviting to women. This was partially due to how she felt about the game's portrayal of gender. When I inquired as to her feeling on the gender of the character, she stated that

In the old days it was very man-ish! It used to bother me slightly that even if i had myself a girly skin, my 'steve' would still make manly grunting sounds upon being hurt. They changed that, I like to think they did it so that the character could be either gender.

This echoed the sentiments expressed by the creator of the Gender Selection Mod.

Since her mod does not affect the appearance of the character, I asked how she felt that her mod affected the portrayal of gender in the game. She stated that

I guess it might have let people know that there are girls out there playing it, but i think that would have happened with or without my pack. Perhaps people just knew sooner?

Hence, she believed that the impact her mod had on gender was on the visibility of female game players. She also felt that, while it did not change the gender of the player's character in game, it could make the game more appealing and enjoyable to female players.



Figure 3-1. The game without a texture pack installed.



Figure 3-2. The same picture, with this texture pack installed.

CHAPTER 4 DISCUSSION

There are multiple ways that learning took place in these spaces. In the case of the creator of the Gender Selection Mod, she advanced from positioning herself as an unsure beginner to an advanced modder capable of handling problems and bugs that arose. Over the course of the mod's thread, talk shifted from debate over whether the mod should exist to begin with to discussion of new features and working out compatibilities with other mods. Furthermore, she learned a new programming language motivated by her interest in the game.

In the case of the second mod, the mod's creator practiced her skills but did not necessarily learn new ones by creating her mod. However, other users, many of them female, developed skills by collaborating to create content for this mod. These users were pleased to see their content included and were able to use this mod as a platform for their own success as modders. Thus, the learning that took place with this mod is not the story of a single creator working on and acquiring technical skills while creating content. Rather, it is a case of many users practicing and honing their skills in a collaborative learning environment. Although the mod's creator did not feel that she learned anything, the mod itself became a space for practice and design.

However, in both cases, learning occurring as a direct result of modding and the interest sparked by the game. Both women were inspired by a personal interest in changing the game. One wanted to modify the rhetoric of the game, while the other wanted to make the game more accessible to female players. Additionally, learning in this affinity space goes beyond work on the mods themselves. One very common way in which users of the forums interact is to ask for help installing and using mods. Installing

mods in *Minecraft* can actually be a rather complex process, requiring users to navigate to the game's main files (which are hidden on some operating systems), delete existing files, and put new files in the correct place. Due to the relative complexity of installing mods, and the fact that different mods require different methods of installation, almost all mods include a tutorial on how to use it. Many will also feature a YouTube video that explicitly demonstrates how to install the mod. Even so, users will often still need to ask more advanced members about how to use the mod, and these questions are readily answered. As such, members who are not themselves modders but who do use mods also benefit from the knowledge of the community.

Meaning

Both of these mods attempted to modify the game's meaning in some way. The first mod attempts to rewrite the depiction of gender. The second modifies the look and feel of the game. The negative response to both mods supports this assertion that the meaning of the game is changed. It is important to also look at how these women were treated by the community as a result of introducing these changes. The posters who angrily accused both mods' creators of ruining or perverting the game felt that the nature of the game had changed and that these mods were intruding on its intended message. Their anger is directed at a perception that the game's intended feel was perverted.

The first mod's creator encountered some sexism, but was dismissive of it as being part of the greater Internet culture. She was happy with her experience and plans to create more content. The second modder, however, encountered much more contention from the community. While she did have many supporters, her detractors still discouraged her and made her not want to continue making the mod. While other fans

continued her mod for her, the fact remains that she herself was discouraged from sharing content again.

There are many texture packs and mods that more dramatically alter the game, but they do not draw this kind of negative attention. The anger that users expressed is more than a reaction to the aesthetic qualities of these mods, but rather a reaction to the idea of opening play to women. The investment that players have in these mods also demonstrates how real life gender plays into the way users play the game and interact in the community. Players who stated that women do not play *Minecraft* and therefore the mods were for perverts, or that players who used these mods were not real players, were talking not just about female characters in the game but female players themselves. There were also a great number of comments that were meant purely to be sexist and had nothing to do with the mods. These included the posts that suggested that women in online spaces should not reveal their gender. These comments, as well, were a response to female encroachment on the space.

There is an overriding idea that if women are in gaming spaces, then they are going to have to face sexism. This sexism is a way to put up an access barrier as physical barriers to gaming disappear. In the end, it was perhaps the fear of losing their previously segregated gaming space that led players to make some of these comments. While neither of the mods' creators felt *Minecraft's* community was any more sexist than other Internet communities, there were still barriers to access. The content created by these women allowed female players to gain greater visibility; the creator of TextureGirl herself stated as much. This opening of access is essential in making women feel that they too can play.

Collaborative Learning

In both cases, there was a strong trend of collaborative learning. Other users were quick to offer assistance to the creators of these mods when they needed help or asked for opinions. Additionally, users helped each other figure out how to install and use these mods. The tutorials about installing the Gender Selection Mod were not made by the mod's creator but rather by fans that wanted to help others use the mod. These users were designing educational content to go along with this mod, in the much same way that users created and contributed content to the TextureGirl pack.

The model that these modders follow is not of an individual solely creating and claiming credit for a mod. Rather, it is one in which the process of creation unfolds for others to see, discuss, and contribute to. Hence, it is not just the creator of a mod that benefits from the process of making a mod. Other users can see the development process of the mod, and can learn from it themselves. These mods, both scaffolded on the community's collective knowledge and talent, can in turn teach other users about the process and perhaps inspire them to explore their own interests in mod development.

Gender and Access

There was some solidarity among female players, as evidenced by the fact that these users often called out sexist comments. Additionally, many male players offered their support as well, also calling for other posters to be less sexist. These male players seemed to recognize that female players are often alienated in gaming communities. Even so, this did not stop many players from being harshly critical of both mod creators. There was much resistance to both of these mods from male and female players. This resistance was most evident in the case of TextreGirl, where the negative response was so overwhelming that the mod's creator did not want to create any more content.

Female players felt that the pack was trying to segregate them and enforce gender stereotypes. Likewise, some of the negative response to the Gender Selection Mod questioned why females needed to have a female avatar, and felt that this was segregating women and setting them aside from other players. Even so, both women received plenty of positive response. Some players pointed out that the creator of TextureGirl was not responsible for creating something all women were going to like, and players that were sexist on both threads were often met with very negative responses.

Even so, this debate over the portrayal of gender does raise significant and valid questions. Namely, how should female players and modders navigate a primarily male dominated space? Does designing for women in modding communities ultimately invite more females to feel that gaming is a valid activity for them, or does it marginalize female players by keeping them separate and making them somehow different (and perhaps less valid) than male players? Ultimately, these are the sorts of questions that female players are going to continue to have to navigate as they become more and more present in various gaming communities.

Regardless, the backlash and outright harassment from these objectors, especially females, eventually discouraged the creator of TextureGirl from continuing her work on the texture pack and even from wanting to create and share content ever again. While females are generally legitimized in the community, her experiences are a clear sign that even in the generally accessible *Minecraft* community there are still many social barriers to overcome. This is especially deserving of further study because much of the harshest criticism came from the females in the community. It is often thought that

it is the males in gaming and other Internet communities that are alienating female players. However, it is clear from this case that the women in these communities can provide just as much, if not more, of a barrier for access and enjoyment.

CHAPTER 5 CONCLUSION

There are several important implications of these findings. One of the main things I wanted to investigate was whether or not women and girls were playing *Minecraft* and participating in its fan community to begin with. The next question I had was whether these female players were also creating content for *Minecraft* and, if they were, whether or not the community was supportive of them. One of the reasons I wanted to look at this space under the lens of mods that specifically related to gender, and not just all mods generally, is because I believed that these mods would get people talking about gender in the game and more clearly reveal how female players are treated in the community. My findings indicate that female players are in fact creators and not just consumers of content for *Minecraft*. There is also a vocal group of players, male and female, who strongly support gender related mods.

However, barriers for access into the community were certainly present. While there were no physical barriers or requirements to participate on the forums, there were still social practices intended to make female players and creators feel marginalized. The tactics of these users included non-constructive criticism of mods, attacks on female users and their status as 'real' players, and general non-game specific sexism. These tactics were employed in order to alienate female players, and may have stemmed from more general Internet and gaming culture. These posts were in the minority compared to the positive posts, but they attracted much attention and were consistently present.

It seems that female players can in fact benefit from the technical and creative skills that can be gained from playing video games and participating in affinity spaces.

As there are many female content creators, it is clear that women do feel that they are valid community members and that they can create, share, and discuss content. However, it is also clear that the community can also be sexist and discouraging, and the community is far from egalitarian. The community is supportive in that women are creating content, but it could be much more supportive. This might, however, have deeper roots in traditional gaming culture and the perceived 'maleness' of gaming spaces. It may also have roots in previous marginalization of female players that caused the women in this community to be very skeptical of design "for" women. If this is the case, then this community is not the only one that will need to change.

Limitations

It is necessary to point out that this research has limitations. As these are case studies about mods related to gender, it is possible that female modders who create mods that have nothing to do with gender encounter a very different response. It is possible that other female modders have not received as much reaction, positive or negative, as the creators of these mods. Finally, it could be the case that while the modding section treats women a certain way, other sections of the forum and sites in the affinity space may be more or less welcoming.

Even so, there is a case of a female player without a background in Java gaining knowledge and expertise motivated by her passion for *Minecraft*. She saw a message in the game that she did not like and set about changing it. She felt that creating this content and sharing it was a valid option, and was met with much support and encouragement. Additionally, the proportion of females to males on the thread was higher than one might expect in a gaming community.

The second mod was another case of a female modder rewriting the game's message and theme to be more accessible, in her view, to female players. Here, many other players helped her to rewrite this meaning. While she was met with resistance, it is clear that many players did support and enjoy this mod and that there was demand for it. It served as a creative platform on which others could learn and experiment. This is the kind of collaborative learning environment that affinity spaces can provide.

Further Technical Applications

Outside of the modding community, *Minecraft* is increasingly affording new opportunities to learn and practice different kinds of technical skills in real life settings. *Minecraft Reality*, an app released in late 2012 for iOS, is an augmented reality app that allows users to import their Minecraft creations into the app and then superimpose them on the world ("Augmented," 2012). The user selects a creation, looks through the phone's camera, and places it in the world. He or she can then walk around the object, move in and out, and so on, as if the object were really there. This lets users think about their object in 3D space and play with design. Augmented reality is becoming an increasingly prominent technology in both educational and commercial environments, and this is a great and inexpensive introduction to it.

In a similar vein is *Minecraft* 3D printing, which allows users to 3D print their creations. There are actually several competing services through which users can 3D print their creations. This allows players of *Minecraft* to learn about 3D printing. By designing structures to be 3D printed, users can think from a design perspective and consider how the process works. This would normally require knowledge of a 3D modeling program, but in this case it is entirely possible for users to learn about this design process in the game without pre-existing technical skills. Players who want to

print must think about real design questions in 3D printing such as what structural elements will be sound in a physical model, what parts can be hollowed out to lower the cost of materials, at which things that can exist in-game will be physically impossible to print (“Figureprints,” 2012).

These real-life applications of the game further demonstrate how designing for games can lead to real IT skills. These skills, much like programming or graphic design, form a set of essential digital literacies. Most importantly, even if players who create mods and design for games do not end up becoming professional programmers or designers, a familiarity and understanding of these technologies and their workings is essential for young learners who hope to compete in the 21st century global market.

At the very least, the presence of female modders in *Minecraft* deserves further research and investigation. If women are to keep up with men in areas of technical expertise, it is essential that they are benefiting from the skills that can be gained from participation in gaming affinity spaces. Further research into these spaces is critical. Most importantly, researchers must continue to look at how women and girls participate and interact in these spaces, and then take these findings into account when designing learning environments.

Designing Future Spaces

If affinity spaces such as the *Minecraft* community are spaces for learning, then how can this potential be applied in formalized learning environments? There is an increasing effort to take advantage of the power of these spaces for learning in a structured environment. Halverson (2012) believes that current studies are “changing our focus from documenting what happens in these spaces and how people participate to insights about how to design learning environments with specific learning goals in

mind” (p. 244). Such designed spaces could allow learners to practice and acquire these skills in an organized way in schools and universities.

These spaces should be designed in a way that reflects the practices of real players in these environments. A designed space should, for example, encourage its users to help each other with their problems. The main benefit of these spaces for learning comes from the ability of users to leverage each other’s expertise in order to accomplish things that they would not have had the skills or knowledge to do on their own. Affinity spaces allow users to develop technical skills by following instructions written by others and then sharing what they have made.

This sharing of content is key: it allows members to offer assistance and feedback to one another when needed. Users can learn from each other’s creations by assisting, critiquing, and even building off of the artifacts made by others. Thus, the space would need to be an environment in which interactions between users is a key design element of the space. The space should also have an area for sharing tutorials and guides. Participants learn not just from one on one interaction but also from the use of resources that are written by a user or users for the broader community. Hence, there should be space dedicated to hosting these resources, and their development should be encouraged through contests, rewards, and other incentive systems.

Also, it is important that a designed space should not rely on authoritarian enforcement of norms but rather allow the community to police its own members according to its values. While there were moderators that issued warning to users who got out of hand in the *Minecraft* forums, these were relatively few and far between and members were for the most part free to debate and resolve their own issues. In a formal

learning environment, some direct authority will likely be necessary to ensure that the affinity space stays on subject, but a designed space should not rely solely on an authority figure such as a teacher to enforce norms. Rather, the values that the designer wants to encourage, such as helpfulness and civility toward other members, should be rewarded through titles, badges, or other incentives in order to encourage these practices in all users.

Most importantly, the designer of an affinity space must be aware of the fact that existing social beliefs about identity, including race, gender, and sexual identity, will carry over into the interactions in affinity spaces. While affinity spaces can be incredible tools for learning, they do not erase existing beliefs and prejudices. It is important to understand that gaming and technology are perceived as masculine spaces, and as a result even a designed space used for learning IT skills in a formal learning environment will likely be perceived by its users as a masculine space due to existing cultural beliefs. It is essential that designers are sensitive to this and do not accidentally gender these spaces and embed further signaling into them.

However, users of affinity spaces, whether the spaces are designed or not, ultimately have agency over the interactions that take place within them. Women can break down the social access barriers into gaming by continuing to participate in affinity spaces and modifying the games that they play. When women mod games to be more appealing, is a strong signal to game designers that they are interested in games and have both consumer power and strong ideas about design.

Creating and sharing content; that is, design, is the single most important tool for both acquiring IT skills and carving out a space in these gendered areas. When a

female player decides to not only renegotiate the existing message of a game, but to offer this new message to others, she is making a strong statement about how she feels about the game. If she is using the very space in which she shares this content to learn how to create it in the first place, then she is already taking advantage of its learning potential. If women continue to practice design in affinity spaces, then that is the first step toward closing the gender gap in technology.

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