

Building Worlds: A Connective Ethnography of Play in Minecraft

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Abstract

Digital gameplay is enacted across many social platforms that can be described as affinity spaces, meaning informal learning environments where players share resources and knowledge. This article examines the ways that a young gamer stitches together several different spaces to play Minecraft. Our study focuses on the play of a single participant, collecting ethnographic data about how he enacts play across several different technologies as both a player and a server administrator. We find that Skype serves as the primary technology that enables gameplay between other spaces (e.g., building a server, playing on that server, and recording gameplay to upload onto YouTube). Relatedly, Skype's prominence as a communication technology causes some difficulties with backgrounding personal identities during gameplay. Our findings show how everyday interactions in gaming spaces are carried out across affinity spaces and the implications that networked play has for access to the learning opportunities inherent in play.

Keywords

affinity spaces, connective ethnography, critical game studies, Minecraft

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Introduction

Increasingly, play is seen as taking place not only in the confines of the game's software but also across the many different platforms that exist to support social gameplay (Salen, 2008) and across a player's nongame life (Thornham, 2011). As scholars are better defining who plays games, and the contexts within which play occurs, there is a related effort to articulate the ways that socially connected gameplay can serve as a valuable learning experience for players (Gee, 2007) and act as a pathway to official roles in the design and production of digital games (Consalvo, 2012).

A useful theoretical framework to examine the interactions that take place in games is the concept of *affinity spaces*. Affinity spaces are environments dedicated to supporting a shared passion among the participants (Gee, 2004). An emerging, and understudied, aspect of affinity space theory is the way that individuals stitch together a number of different spaces in order to enact digital gameplay (Lammers, Curwood, & Magnifico, 2012). Originally, affinity space research methodology was largely focused on single spaces, with the idea that participants background and foreground aspects of their personal self (e.g., race, gender, ethnicity, and sexuality) in order to make use of space affordances (Gee, 2004; Lammers et al., 2012). However, with changing conceptions of online gameplay (Consalvo, 2012) and critical studies of online interaction which call into question the equity of backgrounding and foregrounding (Nakamura, 2002), we must reconsider some of the previous assumptions of affinity spaces in order to strengthen the theory overall.

In the following ethnographic study, we find that gameplay, as performed by our primary participant, was far from isolated to a single space. Instead, his gameplay often used several spaces simultaneously, with all of the action being coordinated through the voice technology of Skype. Relatedly, we find that the youth in our study had differing ways of backgrounding or sharing aspects of themselves (e.g., gender, race, class, etc.). These processes played a role in the enjoyment of the leisure activity of gaming but also had implications for economic and social fairness. Research has shown that activity in the spaces that support digital gameplay can be a valuable springboard to new media literacies and technological skill (Gee, 2007; King, 2012). However, persistent issues of discrimination in digital gaming spaces cause us to question previous assumptions of backgrounding and foregrounding the physical self in online game interactions and relatedly the equity of access to the formative experiences that often lead to careers in the official aspects of the production of digital games (Consalvo, 2012). Therefore, we take on the following research questions:

Research Question 1: How is digital gameplay enacted across distinct spaces and

Research Question 2: What is the process of backgrounding and foregrounding the self in spaces focused on digital gameplay?

To examine the above questions, we provide a rich, ethnographic account of a young *Minecraft* player named Ben who is an African American adolescent from

a low-income neighborhood. Although Ben is our primary participant, and our findings are framed from his perspective, we also came to learn about his coplayers who he shared resources with in order to play online.

We begin with a review of the literature on affinity space interaction in online spaces that support digital gameplay. We introduce the concept of connective ethnography, which is a method of understanding online interactions as a layer of lived reality. In our findings, we describe the context of Ben's play, pointing to the overlapping technologies that facilitate gameplay, with the voice technology of Skype being predominant among them. We then present vignettes of his gameplay to demonstrate Ben's process of negotiating his backgrounded self in his network of affinity spaces. We conclude with further implications for games studies, pointing to the way that voice communications complicate the process of backgrounding and foregrounding in play.

Theoretical Framework

Affinity Space Theory

Affinity space research is concerned with the ways that people come together around a common pursuit to share information and resources with one another. The affinity space framework was born out of a desire to reframe a previous concept of communities of practice (Lave & Wenger, 1991), to fit more dispersed and technologically mediated activities, such as digital gaming (Gee, 2004).

Affinity spaces are places (physical, digital, or hybrid) where people interact with each other, typically at a distance, relating to a common endeavor and only secondarily (if at all) relating through shared culture, gender, or ethnicity. A shared goal or interest is what brings participants together and not because they are bonded to one another personally. Instead, culture, gender, and ethnicity are "backgrounded, though they can be used (or not) strategically by people if and when they choose to use them for their own purposes" (Gee, 2004, p. 85). It is the backgrounding aspect of affinity space theory that we will be addressing with our analysis. By expanding affinity space theory, we aim to better understand how youth who play games foreground and background their personal selves in play and the way that these actions tie into experiences of inclusion and exclusion in gaming.

Expanding the Concept of the Affinity Space

The theoretical framework of the affinity space has been usefully applied to understanding and analyzing the dispersed, online, social learning that takes place in digital games. However, technological changes in the intervening years since the concept was first outlined in Gee's *Situated Language and Learning* (2004) have necessitated continuing refinement and review of the concept (Duncan & Hayes, 2012).

Gee's initial work regarding affinity spaces focuses on spaces that are largely successful and with friendly group dynamics. However, further work by Gee and Hayes

(2012) examines ways that affinity spaces can be supportive or friendly as well as elitist and exclusionary. Elitist spaces are often devoted more to the achievement of popularity and status and are gated by strong feelings of belonging in the space. In such spaces, those who do not belong are not welcome to participate. Nurturing spaces focus on honoring the choices of its individual members and facilitating their goals related to those choices (Gee & Hayes, 2012). Social bonding within affinity spaces is often a primary motivator of participation, beyond even the instrumental and informational support that affinity spaces are conceptualized as providing. The cross-purposes of socializing versus getting information to complete a specific task can often cause tension within affinity spaces when groups who prioritize either activity come into conflict with one another.

The importance of sociality in early affinity space literature was underexplored; however through continued analysis, we have begun to understand the importance of social support alongside instrumental support and the conflicts this can cause in participant interaction (Lammers, 2012). In game-focused affinity spaces, the ways that participants interact with official members of the space, such as paid moderators or developers of the game itself, can reinforce outside power structures. Despite the wish for equilateral access to participation, the economic reality of digital game affinity spaces means that some users can exercise greater agency than others. Early work with affinity spaces largely ignored power differentials among users, but recent scholars have focused more intently on this aspect of affinity spaces (Duncan, 2013).

Early work on affinity spaces largely focused on single sites of interaction, such as a discussion forum for a real-time strategy game. However in practice, users of a space may start out in a single location but will push out to satellite locations (Duncan, 2012a). Affinity spaces are also commonly thought of as being apart from the designed game experience. However, recent shifts in digital gaming have caused a greater overlap of what is seen as the game, and what is seen as the meta-game, with the two often taking similar positions in the mind of the player (Magnifico, 2012).

The above factors present a less idealized and more contested vision of affinity spaces, but they also improve our power as researchers to use the framework as a way to understand the lived reality of participants in these spaces (Lammers et al., 2012). Affinity spaces are an important part of gaming practices, and participation within them can enable a powerful form of social learning (King, 2012). It is with the goal of expanding the affinity space that we approach the research described in the following article.

Method

Connective Ethnography

Games are artifacts that are situated in cultural understandings (Kirkpatrick, 2013; Thornham, 2011). Therefore, we frame affinity space interaction as a phenomenon that is influenced by the lived reality of a participant's whole life (Hine, 2000). We chose connective ethnography as our methodology because the interrelated nature of

the backgrounded aspects of the participant's life (the off-line) and his interactions across affinity spaces (the online). In connective ethnography, the researcher moves beyond a single site of interaction and instead draws on several interrelated sites. By drawing on data across a number of layers, and analyzing the interrelated context of the participant's broader lived experience, the researcher seeks to develop a richer understanding beyond what has occurred simply in the moment of online interaction (Hine, 2000).

In conducting a connective ethnography, the researcher considers "literacy, social space and identity as social practices" (Leander & McKim, 2003, p. 237). Instead of treating online and off-line practices as separate, the ethnographer works with the subject through the various contexts of their life to understand how online and off-line practices are constructed alongside one another (Hine, 2000). Collecting data across multiple sites of interaction allows for the development of theory that considers online activity as something that occurs across the same space and time as a participant's everyday, off-line life (Hine, 2000; Leander & McKim, 2003; Vitadini & Pasquali, 2014).

Context and Selection of Primary Participant

Minecraft is useful as a context of study for affinity spaces because the game encourages a rich level of interaction between players that occurs in a variety of spaces that make up the meta-game (Pellicone & Ahn, 2014). In Minecraft's design, much of the information that is necessary to play the game tends to exist in external sites (Banks & Potts, 2010). At all levels of play, Minecraft is both a complex system requiring the sharing of information and a platform for creative self-expression (Duncan, 2012b). In addition, Minecraft has a growing and active user base comprised in large part by "fan-producers" who both consume and generate content related to the game (MacCallum-Stewart, 2013). Since content from fan-producers naturally tends to collect in affinity spaces, the game (and spaces related to the game) is a prime site for studying affinity spaces as a theoretical construct.

We first came into contact with our primary participant, Ben, as part of his participation in an after-school program for inner-city youth—called Sci-Identity—which focused on using science fiction and new media projects to engage with science, technology, engineering, and mathematics (STEM) issues in society (Ahn, Subramaniam, Bonsignore, Pellicone, Waugh, & Yip, 2014). This larger, research project was run by June as primary investigator. The program worked with a cohort of 20 middle school students in two urban, minority public schools where the majority of students come from underrepresented backgrounds. Ben's portion of the program had a regular participation of eight students. Anthony was a facilitator for the school that Ben attended, and he interacted with Ben through Sci-Identity on a weekly basis both in formal contexts of administering the program, as well as informal conversational contexts.

The focal participant of our study, Ben, is a 14-year-old, African American youth who lives in a large, urban, inner-city neighborhood, and has been a Minecraft player

for over 2 years. He lives with his grandmother and grandfather as well as a brother and two sisters. Although we could not collect economic data directly, Ben attends a public school that draws students from a neighborhood where nearly all families live below the poverty line.

Ben was selected for participation in this study due to informal conversations about games during sessions of Sci-Dentity. We had introduced Minecraft to Sci-Dentity during the third year of the program, having noticed that some of our students were avid gamers and that gaming activated their interest in the program (Ahn et al., 2014). This observation among the research team led us toward Minecraft as a possible tool for engaging students who were very interested in digital games but had less connection with the more literary focused elements of the program. Ben was one of these students. In the course of implementing Minecraft, nearly all of our students had some interest in the game; however, Ben would often serve as an informal administrator for the small server that Anthony had set up for use in the program. During sessions, Anthony and Ben would talk about the technical details of running a Minecraft server, and Ben would talk about details of his own hobby as a server administrator in his free time. Apart from those conversations, Ben and Anthony bonded over a shared love of digital games. In the conversations that came out of our weekly sessions, Anthony saw that Ben excelled with Minecraft and was an active participant in affinity spaces related to the game. Therefore, Ben was ideal as a participant for this study because he spent a great deal of time playing online, he spoke about his time bridging several affinity spaces in gameplay, and he had a close relationship with Anthony.

Anthony approached Ben as a facilitator in Sci-Dentity, explaining the project as a way for him to share his voice with potential designers of games and educational experiences, and Ben enthusiastically agreed to be our ambassador into the world of Minecraft affinity spaces. Our close relationship with Ben as a fellow gamer and Minecraft enthusiast proved to be essential to gaining entrée to the wider world of Minecraft affinity space participation. Entrée is an important aspect of online ethnographic work (Hine, 2000), especially due to the fluid nature of interaction in these spaces (Gee, 2004). Ben's identity as a young, African American gamer was also valuable. As our second research question relates to the ideas of backgrounding and foregrounding aspects of the self, and minority perspectives are often underrepresented in games studies literature (Daniels & LaLone, 2012). Therefore, Ben gave us a perspective that was valuable for understanding the issue of backgrounding and foregrounding identity in affinity spaces, while also providing an important voice in the larger academic conversation.

Data Collection

Because connective ethnography is concerned with activity constructed across multiple sites of interaction, multiple qualitative research methods are combined: including "interview, online and virtual observation, and collection of documents

produced and/or selected by the participants” (Vittadini & Pasquali, 2014, p. 165). Instead of aiming for triangulation, as might be the case in single-site ethnography, we sought to create layers of understanding (Dirksen, Huizing, & Smit, 2010). Layers of understanding produce meaning at different sites where the interaction takes place. Our observational data collection took place in three layers:

- Through conversations in our face-to-face time in the after-school sessions. Informal conversations totaled around 5 hr of interaction and were represented by both field notes and recorded video of the sessions;
- Through weekly play sessions with Ben. We played a total of seven sessions altogether, covering various activities that comprise his time in Minecraft. The sessions totaled about 6 hr of play recorded through a screen capture program (Camtasia) and 10 pages of field notes and memos describing our experience with him; and
- Through artifacts either produced by Ben or at his request by other members in his network of fellow players. These include digital objects such as YouTube videos on Ben’s channel, Ben’s various avatars which he uses to represent himself in-game and also on Skype, screenshots taken by Ben of the construction work he had completed on his server, and various bits of ephemera (e.g., image files) which he wanted to share with me.

We approached this work from a symbolic interactionist standpoint (Fernback, 2007) and were interested in Ben’s conception of his activity, rather than solely our own empirical observations. Therefore, we balanced our notes and emerging theories against interview data collected with Ben in three informal, open-ended interviews (each lasting about 40 min). Our goal with the symbolic interactionist approach was to interrogate our own evolving understanding of the issues at stake in our research with Ben’s views and opinions. We aimed to give Ben a voice into the growing conversation of representation in affinity spaces related to digital gaming.

In the findings that we report below, it is worth noting that Ben has a large circle of fellow gamers who float in and out of his play. We will touch on a number of these other players in detail; however, for the sake of reporting our methodology, it is important to explain why Ben remained our primary participant throughout. Our research questions are necessarily tied to our ethnographic approach of connective ethnography due to the importance of forming ties between the *online* behavior of gameplay on the screen and the off-line factors that influence play in the day-to-day life of our participant (Hine, 2000; Vittadini & Pasquali, 2014). Therefore, we are delimiting our focus to a single, central participant but doing so in order to collect the data that we find best answers for our research questions. Due to the scope of the project, we could not do similar levels of analysis with all of Ben’s fellow Minecrafters—although we recognize that such a project would be a valuable next step in terms of building understanding around connected play in affinity spaces.

Because of this limitation, we report on a rich description of other players in Ben's network *as he saw them and experienced them*, but we do not obtain primary data from those participants themselves. Our reasoned choice to focus on a single participant necessarily delimits the claims we make with our data. However, we also find that our data provide valuable detail in inspiring further work regarding the intersection of affinity spaces, gameplay, and social inequality and enhance our understanding of a vital aspect of today's gaming and learning environments for youth. We coded collected data through two primary phases. The first was a broad reading of the data to pick out major themes, and the second refined those themes into operational codes (Wolcott, 1994). It was through the second round of coding that we began to notice Skype's function as a connective space between the other spaces. We will explain this theme in greater detail in our findings and conclusion section.

Findings

The Context of Play: How Ben Builds Worlds

To frame our findings on the backgrounding and foregrounding of the self, it is important that we describe Ben's play in Minecraft. Although Ben does "play" the game in the common usage of the word (by interacting with the game systems of building, harvesting, and crafting), his play tends to focus on a higher level of meta-gaming that involved acting as a server administrator and a YouTube personality. This section will report on Ben's history of play within the game, frame play within Ben's day-to-day life, and provide a glossary of key terms for understanding the data reported in our findings.

Ben came to the game through an in-person affinity space of fellow gamers at school: "One of my friends told me about it, and I asked him, 'do you think I should pay for it?' cause at first I was just playing a cracked [pirated] account . . . I bought it, and I actually like the game." Ben had very limited expendable income, both as a function of his age (early adolescence) and his family's economic circumstances. The cost of a legitimate Minecraft account, about 30 dollars, represented over a month's allowance for Ben and constituted a major investment.

The gameplay of Minecraft is often changed by player-designed modifications that add additional elements to gameplay, such as improved player versus player combat. In all of Anthony's time with Ben, he played exclusively on servers that had been "modded" to expand the core gameplay of the game. In the Minecraft online ecosystem, play occurs on worlds that are set up by other players. There are no officially controlled game spaces. Throughout this article, when we refer to a "server," we are referring to a player owned and operated instance of Minecraft with its own specific design (meaning the structure that has been laid out by its administrators). As an example, one of Ben's first servers had a large castle which housed a general store, a wall covered in sign boards with server rules, and portals to various types of

gameplay (e.g., free-form building as well as competitive first-person shooter style “paintball”). In one of our interviews, the subject of building the castle came up”

- Anthony: I liked the work you did on your previous server [Ben had recently switched to a new server project]
- Ben: Like the castle, and stuff?
- A: Yeah—You did most of the work on that?
- B: [Laughs] Yeah, cause that’s when I didn’t really have people to build for me.

The above excerpt brings up an important social aspect of Minecraft as Ben plays it, which is that Administrators, in addition to building and designing a server, are managing fellow players to do work that keeps the server operational. Administrators are also responsible for selecting modifications, and getting those modifications to run properly with one another, as well as with the constant updates to the game’s software. Ben referred to this as “configging,” which describes the practice of patching together a number of disparate modifications, maintaining them across updates to Minecraft’s game software, and hooking these modifications into the server’s game space in a way that is entertaining and satisfying for players.

Ben’s history of play took him first through the role of a player, and as he met other players online and added them to his Skype network, Ben began to be trusted with greater administrator responsibilities. As Ben became more familiar with a group of players who maintained their own server, he was given “operating rights (Ops)”. OPs are equivalent with being a moderator on a server and convey the ability to ban other players, grant resources, and ignore game rules that govern regular players. In exchange, moderators are expected to maintain law and order on servers. In Ben’s time as a moderator with his first group, he met another user named John. Due to deteriorating relations between Ben and the administrators of the initial server, Ben and John decided to strike off on their own to host a server where they split the operation costs.

Ben’s time as a coadministrator with John allowed him to develop skills as a programmer and also brought status within his network of fellow players on Skype. We asked Ben about his ability to tap into his Skype network and what Ben’s specialization was in his network of gamers. He replied that he was good at, “configging servers and building . . . I’m good at building sometimes.”

Therefore, Ben’s participation in Minecraft is dependent upon other players. He plays largely on multiplayer servers, and more than that, his primary mode of interaction with the game is to design and operate servers with other players that he meets online. Ben also interacted with the game through recording and posting videos of gameplay to YouTube, describing his desire to become a “famous YouTuber” through his game-related content. In these videos, Ben is often seen playing alongside others within his network—for example, one video on his channel at the time of writing this article depicts him and a group of friends playing what is called a “survival games” map, where players must compete with another team in player versus

player combat using scarce resources (modeled on the *Hunger Games* series of books and films).

During my work with Ben, I found that he interacted primarily with three different technologies related to the game. The first is the game itself. In Ben's interaction with Minecraft, he was sometimes a player, but nearly always his game extended to the meta-game practice of designing, configging, and building servers for other players. When Ben did engage as a player, and not as an administrator, he tended to record his gameplay for his YouTube channel. Ben's channel also featured other game-related media (e.g., a montage of impressive skill shots in *Call of Duty* set to electronic music), but he most frequently recorded his Minecraft gameplay and posted it to YouTube.

Skype was a primary aspect of Ben's gameplay. When we asked Ben how he would go about doing the design work for a server's architecture, he described a "build team," meaning a group of people that he trusted enough to design aesthetically pleasing game structures and to have higher level administrator access to the server. We asked him how he would go about assembling a build team, and he said, "First, I go on Skype and put the mood [moods are status messages in Skype which are visible under a user's name] as 'I need builders for my server ASAP', then I start getting messages from people on Skype."

As an example of Skype's role as social network and backbone of communication, Ben met a player named Taylor through his gameplay on a public server, and the two traded Skype handles so that they could voice chat while playing. Taylor became a regular part of Ben's network and appeared often in the play sessions that Anthony shared with Ben. While playing, Ben and Taylor would discuss graphic design work that Ben wanted Taylor to do for him (usually relating to Ben's YouTube channel of recorded play sessions). In return, Taylor received moderator privileges in Ben's last server that he created during our data collection. In this way, Skype acted as not only a convenient tool of communication but also the connective tissue that bound together the multiple affinity spaces that Ben utilized to build servers as an administrator. Through a combination of Minecraft, Skype and YouTube, Ben created a large number of artifacts including maps, mod packs, public servers, videos, and channels. Alongside this, Ben also used text-based affinity spaces (such as forums) as a support network for the above, although he didn't participate directly as a producer in those spaces.

Play Across Networks

As we have described above, Ben tended to enact play on servers that he had built (or the servers of friends), record gameplay to post to YouTube, use text-based affinity spaces for troubleshooting and informational support, and tie all of these activities together through the voice technology of Skype. To demonstrate the interrelated nature of Ben's Minecraft play, we now detail a typical session from our time with Ben. In this vignette, we demonstrate not only the way that Ben ties several disparate

technologies together to enact gameplay but also the primary role that Skype plays as a way of binding those technologies together.

The vignette in this section comes from a single screen-captured play session during a snow day when Ben had received a day off of school. Anthony noticed Ben online on Skype and sent him a message about connecting to play. In the interim between when we had last talked, and the current session, Ben's former server partner, John, had gone out of contact on Skype, and Ben had been forced to move to a new hosting service. Minecraft's software then updated to a new version, requiring Ben to use his configging skills to get his new server backup to working order. It was at this point that Anthony joined him, as Ben was looking for a solution to a problem that he was having with getting his server up to date with the latest game patch.

- A: Hey, how's it going? Is my mic loud enough?
B: Loud enough?
A: Yeah, is my audio loud enough?
B: Oh, yeah.
A: I was having problems with it earlier, so I had to adjust a bunch of stuff in Skype to get it working right.
B: [to self] Ah! What the heck!
A: So, are you on any Minecraft forums or anything where you would ask people about stuff?
B: I don't really ask people on *Minecraft* forums, I just, like, look . . .
A: Ah, ok . . .
B: . . . and see if people have had the same problems about it first.

At this point, Ben and Anthony were both looking through text-based affinity spaces, searching for the error code that his server is giving him. Both players communicate over Skype as this takes place, talking about the technical details of the problem:

- B: Actually . . . if I don't find a way to fix this I was just thinking about moving this to a different type of server . . . Maybe Tekkit . . . I was actually thinking about Pixelmon.
A: What's the difference between that and what you have now?
B: Pixelmon is like *Pokemon* with *Minecraft*.
A: Ah, ok.
B: It runs off of Forge, or the Tekkit launcher.

Ben continues to explain the technical side to Anthony, telling him about the different options that he has for launchers (which serve as a sort of compiler that gets all of the mods working together that a server administrator has configured together into a so-called "pack"). They make idle chatter about the game as this is happening, with Ben pasting the error code he is getting into chat so that Anthony can also search for it. Finally he hits on a solution:

- B: Oh!
A: What's up?

- B: I think I got it!
A: Is it working?
B: Yes, it is!
A: Congratulations! How did you solve it?

Ben gives a technical description, about how the launcher was looking for the wrong file. Having fixed that line of code in his configuration file, the server is now operational, and both Ben and Anthony log on to play. They are joined by Taylor, who does graphic design work for Ben and is a regular user on his server, as well as a person that he trusts enough to be a moderator. Fixing the server also involved a wipe of all of the block data that had been there previously, so Ben, Taylor, and Anthony begin to play the game by harvesting resources and creating new structures. However, after around 15 min of this, Ben activates his powers as server administrators and hands out several higher level tools (e.g., diamond pickaxes that can't be broken) to speed up the process.

As the team is working, there is an ongoing stream of chitchat in the Skype call that connects the three of us. For example, Ben comments on how loud Taylor's mouse sounds on the call:

- B: Can you reduce your mouse clicking?
T: I don't know how.
B: [exasperated] Don't click as hard.
T: Hmm, I've been thinking about getting a . . . what do you call that . . . a shock filter?
B: For your mouse?
T: Ha ha, no, for your mic. But I don't know. It doesn't really work out that well.
B: You talking about that little ball thing?
T: Yeah, it's like . . . this weird spider thing it stops like . . . [slams hand on desk] if I'm slamming my hand on my desk, you're not supposed to hear that . . . but you obviously can.
B: I obviously can, and you type so freakin' loud!

Ben and Taylor both record videos to YouTube, and apart from some gentle ribbing about how loud Taylor is, they are talking shop about a common piece of equipment that YouTubers use to reduce ambient sound when they are recording. Taylor is also a part of Ben's current server projects, and as we continue to build, they discuss more modifications that they would like to add to the next server that they build together. Taylor owns his own server and mentions a modification he would like to add:

- T: I was going to put Hide and Seek on mine . . . seemed like too much work, and [mod] wasn't working anyway.
B: Which one?
T: One of the plugins for Hide and Seek wasn't working.

- B: Oh.
T: It's the one that lets you disguise as an animal.
B: Oh, yeah.
T: So, how did you make it work?

Ben gives a brief technical description, and Taylor says that he will try that. The conversation then shifts to YouTube recording, and Taylor encourages Ben to subscribe to his YouTube channel. This leads Ben to mention a video that he has just recorded for his own channel (based on a mode of play called OP Prison, where players try to escape from a cage before their opponents) and a thumbnail that he has asked Taylor to create for him, since Taylor is skilled in graphic design,

- B: Yeah, I have a video that's about to be uploaded once I get the thumbnail.
T: Is it OP Prison?
B: Yeah, that's what I wanted you to make . . . When you finish the thumbnail send it to me, along with a link to your channel so I can subscribe.

Taylor and Ben then discuss the particulars of what they would like the thumbnail to look like. The conversation moves around to an expensive video capture card, the El Gato, that Ben has asked for as a gift for his birthday, and Taylor mentions that he already has one. They discuss their social media strategies (Taylor mentions that "Nobody uses Facebook any more"), and they talk about various videos that they are planning on recording and uploading to their respective YouTube channels and various YouTubers that they follow.

After a while, another player joins the server, Incognito, and he plays around for a while. Ben then mentions that he and Incognito are going to go to an OP Prison server to record, and they invite Anthony along. Unfortunately, Anthony has other obligations, and cannot join. Later, however, Anthony notes in his field notes that the OP Prison video with Incognito has been uploaded to Ben's YouTube channel, with both players providing a running commentary on their play over Skype, which has been recorded as the audio track.

The Build Team

Magnifico (2012) observes that modern affinity spaces tend to act as, "a fusion of game, interactive fiction, multiplayer chatroom, discussion boards, and social networking" (p. 228). The fusing of spaces is certainly the case in Ben's interaction above, where he played Minecraft itself on a server he had configured, recorded his gameplay for YouTube, received instrumental technical help from traditional text-based affinity spaces (like forums and wikis), and used the social networking features of Skype to maintain an active group of friends who shared labor and knowledge with him. For Ben, gameplay on Minecraft is as much about the designing of servers as it is accomplishing goals in the game space itself. To pursue server design, especially due

to his limited financial resources, Ben relied on an extended network of other players who shared server hosting costs and exchanged digital labor with him. For example, Ben helped Taylor with server configuration and made him a moderator on his server, and Taylor often designed thumbnails for Ben's YouTube content.

An example of how Ben exercised his position as an administrator came up during a play session when a user named Narwhal joined a game and Skype call. Anthony asked who he was, and Ben replied, "He's one of my friends on Skype. He asked if he could build something . . . I was just going to let him build a map." In that scenario, Narwhal was proving his worth as a builder to Ben, with the hopes of being included as a builder (and a moderator) in the server's hierarchy. As we were working with Ben, he moved through several different iterations of his server—four altogether. These servers were often dictated by who was able to partner with Ben. The first server folded after John largely disappeared from Ben's Skype list and stopped paying his half of the server fees, requiring Ben to cancel the hosting account.

Instead, Ben turned to another person from his online network named Dax. The project that Ben had planned was ambitious and involved putting together four distinct servers into a single gameplay experience. Dax was the owner of one of these servers and was working with Ben to spearhead the effort to bring two other owners together, with Ben being in charge of the technical details and sharing duties to oversee building the structures necessary for the project.

It was within the above context that we engaged in the vignette described below, where Ben, Dax, and several other players including Anthony engaged in a build team to get the server ready for public use. Normally, using standard game rules, it would take a very long time of mining resources, putting them together, and fighting off monsters to create the large structures (like arenas and towns) that Ben had in mind. However, by granting administrator privileges, builders would have access to flying, instant teleportation, copying and pasting swatches of the map, and infinite resources. Being part of a build team was positioned by all players as being a sign of inclusion within the group and skill within the larger Minecraft community. In the following section, we describe what being part of Ben and Dax's build team was like and demonstrate the role that Skype serves in both foregrounding and backgrounding personal identity in online play.

Backgrounding and Foregrounding in Action

The following vignette, written from Anthony's point of view as a researcher, describes the experience of participating in a build team. Anthony was invited to be part of a build team after he had expressed interest in the concept in an earlier play session. As the build team started, Ben announced that he was adding a player named Melissa to the call. Dax seemed upset and said, "Man, are you really going to do that?" As Melissa joined, it was evident that she was about Ben's age (approximately 14 years) and had a somewhat familiar relationship with him from prior interaction, as the two called each other by name. Throughout the build session, Dax continually

engaged in teasing with Melissa, making fun of her ability as a builder. For example, as Melissa was trying to create a symmetrical diamond shape for the entrance point of the server (called a “spawn”), she expressed frustration on the Skype call about her inability to make the two sides meet properly. Dax, who had been working on the shop structures in another part of the map, laughed, saying that it “wasn’t hard” to make a diamond-shaped structure, but offering no other support.

Ben had given each player different tasks: Melissa and Anthony were tasked with building the entrance area, Ben was making a fighting arena, and Dax was working on the shops, but since everyone was on the same Skype call, there was a running social conversation while building was taking place. At one point as the players were building, Dax asked Ben if he’d heard about a rapper named Lil’ Boozie getting out of prison, and Ben said that he had. Dax asked me Anthony if I “even [knew] who Lil’ Boozie is,” who replied that he’d only heard that Boozie had been arrested, but didn’t know his music. Dax replied with, “See, that’s how I know you’re old.”

At about halfway through the session, Taylor, Ben’s graphic designer friend, joined the call and the play session. Taylor, who seemed younger than the other players, was using voice-changing software on his side of the Skype call to make his voice very high pitched. Dax commented that he used the same program to “act like [he] was a real tough black guy named Tyrone.” Ben made an exasperated sound at Dax’s remark but didn’t provide any other comments. Later, Taylor commented that the design I was working on wasn’t symmetrical. I agreed with him, saying that it could use more white bricks. Taylor joked, “Oh, so you’re racist, huh?” Dax said that Taylor was the racist, causing Taylor to say that he “wasn’t white, so [he] can’t be racist.” Dax expressed surprise, asking what race Taylor was, causing Taylor to say that he was Hispanic. Dax expressed surprise again, saying he “thought [he] could tell when someone was white by the sound of their voice.”

The concept of voice and race came to the forefront toward the end of the call, when Ben was called away from his computer for a family issue. He said that he would be back and placed his headset somewhere in his room. In the background, Ben’s grandmother could be heard speaking loudly. After this happened Dax joked, “Man, who’s ghetto mother is that? Well, I think we all know.” Ben didn’t reply to Dax’s comment and was soon back in the build session.

Shortly after Melissa who had been talking about her day-to-day life (including sharing a picture of her pet dog on Skype’s chat) mentioned that a boy at her school had asked her out to a dance. Dax reacted poorly to this news, trying to play it off at first and then becoming more and more upset. He said that he thought that there was a connection between the two of them, causing Melissa to say “that isn’t going to work – two different states” in Skype chat. Dax then used a gendered insult against Melissa and disconnected from both the server and the Skype call. In the text-based chat on Skype, the following exchange occurred:

Melissa: dude
Ben: He said he’s heart broken

Melissa: omg

Ben: Then he said he hates u . . . and said that he's done.

Melissa also disconnected, and Ben and Taylor shortly followed suit. In my next session with Ben, he said that the server project had fallen apart, but didn't mention anything else.

Conclusions: The Stakes of Building Worlds

We asked Ben about his goals for his time spent in Minecraft. While he measures success on YouTube in terms of subscribers, for his servers, he states his goals as, "I just want it to be a successful server. That's pretty much it. I'm not really caring about my server being all the way at the top of the leader boards." He expanded on what he meant by successful and said, "Well, like you can see that I have at least 20 players . . . That would make me really happy, and like, let me know that they're actually, like, enjoying it and connecting every single day."

Toward the end of data collection, Anthony was only able to connect to Ben's latest server (in partnership with Dax, who had returned to the game) for a few minutes. Ben wasn't online, but Anthony decided to stay for a while and play, since it had been a while since he'd been online. All of the players got lost in the act of building socially and collaborating. After an hour or so, Ben popped onto the server briefly and sent the following chat message, "look at everyone playing. I'm so happy that people like the server," before logging off. We find that Ben's role as a server administrator in Minecraft gave him the ability to engage in an activity that isn't so much game design, as it is the design of sociotechnical systems. In his work of "configging," he brought together numerous pieces of software, negotiated across multiple affinity spaces, tapped into a network of talent, and managed conflicting politics to build gameplay environments for his users.

The focus of this study was not on learning outcomes, but the skills and experience that Ben accrued by pursuing Minecraft as a hobby were apparent in the data analysis. As stated by James Gee in *Learning in Video Game Affinity Spaces* (2012),

[Affinity Spaces are] important because passion can sustain people through failure and frustration to achieve thousands of hours of practice and eventual mastery. In the 21st century, in a developed country like the United States, mastery of skills, especially ones based on design and the production of knowledge, products, and new activities and ideas, is essential if one wants to avoid low-level service jobs, which are and will be a majority of jobs in a developed country. (p. 240)

When put in these terms, the ability to access affinity spaces equitably becomes not only a question of play and leisure but also one of economic fairness. Across all of our collected data, Skype is the technology that binds these activities together. In the span of a single play session, described above, Skype serves as a sounding board for

figuring out a problem collaboratively using the collected information of other players. Skype also acts as its own affinity space, allowing players to socially chat and share tricks of the trade as they are playing. And, finally, Skype serves as the commentary track of YouTube videos of recorded play. Throughout all interactions, Skype's friend list serves as Ben's social network that he reaches out to when he needs designers, programmers, and builders.

While Skype is instrumental in these activities, it also has the affordance of bringing much more of the personal, backgrounded self into play, as we show with our second vignette. Ben is forced to negotiate aspects of himself, elements of his race, and socioeconomic status that he doesn't share willingly with others in his Minecraft network. Melissa is denied equal access because of Dax's harassment based on her gender. Taylor is presented as default White, simply because his voice allows him to pass as such. Anthony is made to feel unwelcome because his voice betrayed his age. On a text forum, these aspects may come to the fore, but there would be an element of strategic negotiation (Pellicone & Ahn, 2014). In Skype, the background comes forward, much like Taylor's loud typing can be heard over chat. It's an element that is less easily negotiated over voice technology.

For future games studies research on representation in game production and design, we argue that many young gamers are coming of age where the situations we describe in this study are a day-to-day reality. When we ask why more young women or youth of color do not pursue computer programming or gaming as a hobby, it may be worth keeping in mind the barriers to full participation that occur in a variety of affinity spaces that support gaming practices. These subtle interactions may act to drive away and exclude young players in profoundly powerful ways and have major implications for equitable play, economic opportunity, and social participation in gaming communities.

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