

4-2017

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Margaret Furtner
DePauw University

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Recommended Citation

Furtner, Margaret, "All Hail Helix: The Internet's Role in the Creation of Culture and Narrative" (2017). *Student research*. 69.
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All Hail Helix: The Internet's Role in the Creation of Culture and Narrative



Margaret Furtner '17

Introduction

February 18, 2014 was a day quite unremarkable from any other. I was a college freshman, and a frequent visitor of the website *Imgur*—an online image sharing platform that aggregates popular web content. It was that particular day however, while browsing the site, that I stumbled across a picture I found rather odd. It was a photograph of a statue located in a building of the original poster's university: a large, gold, helix-shaped shell resembling an ammonite fossil. The caption read: "I will never look at this statue at my university the same way again. All hail!" I was puzzled—the picture by itself appeared ordinary, with no distinct feature that would distinguish it as funny or newsworthy enough to make the Front Page (the portion of the website where the most popular content of the day is displayed). Furthermore, the caption indicated that some form of previous knowledge was necessary to understand the photograph's meaning—as if the poster and their intended audience shared an inside joke. Hoping to gain insight from the post's comments section, I scrolled down to see what people were saying about the statue and was met with a baffling assortment of seemingly nonsensical phrases and exclamations. Comments of "GLORY TO THE HELIX" and "START START B START DOWN LEFT UP" were intermixed with GIFS and pictures depicting characters from the extremely popular gaming franchise Pokémon™. Suffice it to say, I had no idea what was going on.

It was not until I came across many other strange images that same day—images depicting some sort of story that seemed to involve Pokémon, an ammonite fossil, and Anarchy of all things—that I realized that something very extraordinary was taking place, and I was determined to find out what it was. After a bit of Internet sleuthing, I finally discovered that the myriad of images was commentating on a social experiment called "Twitch Plays Pokémon."

What I did not realize was that for the next ten days, I would become completely engrossed in an unprecedented, Internet-wide phenomenon that inspired its own participatory culture and produced a fictitious yet palpable pseudo-religion.

Twitch Plays Pokémon, otherwise known as TPP, was a live video game stream that was uploaded onto the popular streaming website *Twitch.tv* on February 12, 2014. The stream consisted of an emulator of the classic role-playing game Pokémon Red Version™, which was originally released on Game Boy™ in Japan in 1996—one of the first two installments in Nintendo and Game Freak’s long-running Pokémon franchise. These video games are turn-based strategy games that focus on the capture and battling of creatures called Pokémon—cartoonish monsters with supernatural powers. The user that uploaded the version of Pokémon Red that was used for TPP modified the code of website’s chat interface in order to allow viewers to input commands that would correspond to buttons on a GameBoy that a traditional single player would use to control their character and the events of the game. These changes meant that anyone viewing the stream could input one of the predetermined commands into the chat from their personal devices and see that command carried out within the game. If many people were watching/inputting commands at once, it would be as if they were all taking miniscule turns with the game, with each person hitting one button on the Game Boy before passing it off to someone else. However, unlike this “taking turns” metaphor, viewers participating in the stream were not aware of other viewers’ intentions when typing commands, and were often giving instructions simultaneously with the other players.

When Twitch Plays Pokémon first launched, its viewer/player count only reached 54 after almost 17 hours of gameplay (*Helixpedia*). This count meant that, at that particular point in time, 54 people were attempting to control the actions of the game’s avatar at the same time.

Despite this relatively low initial audience, the stream quickly began gaining followers after it was featured on various discussion websites. After 34 hours, the viewer count reached 3,345 viewers/players, and barely four days later the stream had reached 80,000 viewers/players (*Helixpedia*). This rapid increase in followers resulted in a peak concurrent viewership of 123,224 players/viewers after only 6 days, 2 hours, and 55 minutes (Chase 2014, *Helixpedia*, Ramirez et al. 2014). Over the course of the approximately 16 days and 8 hours of the stream—in which the players succeeded in completing the game—Twitch Plays Pokémon garnered over 55 million views and 1,165,140 active players (Chase 2014, Ramirez et al. 2014, Zhang and Liu 2015).

Twitch Plays Pokémon's immense popularity can largely be attributed to the basic question it asks its audience: Can thousands of people successfully play and complete a single-player video game simultaneously? The answer to this question—as was evidenced by audience reactions and interactions throughout the duration of the experiment—extends far beyond a simple yes or no. The gameplay of TPP often lent itself to chaotic action; it took players hours to accomplish tasks that for a single player might have only taken minutes, making it difficult to progress through the game at a reasonable pace. These difficulties were due to the fact that many people would input conflicting commands that worked against each other, or a certain command that only needed to be executed once would instead be inputted multiple times in succession from many different players across the globe. Viewers had to attempt to overcome such challenges in order to progress within the game, and used what limited means of communication they had—namely the chat right next to the stream (the same one controlling the game), and various online forums that attracted smaller groups—to come up with solutions to the many problems they faced during gameplay.

In order to make sense of the disordered and nonsensical events of the game, the community surrounding TPP constructed an ongoing narrative—separate from the one that was already established within the game and created for general audiences. This narrative was closely connected to various occurrences and mishaps within the stream—whenever the collective “hivemind” made a mistake, failed a task, or simply performed an action out of the ordinary for a singular player, it became incorporated into the growing story of Twitch Plays Pokémon. This “meta” narrative that superseded the game’s original story helped establish a concrete community and culture within the TPP fanbase. Different players debated over how best to proceed within the game, and what the meaning of the entire experience really was. The extent of the narrative and participatory culture reached far beyond a simple Internet fandom—various events turned into mythos, characters into religious symbols and deities. Players became divided into quarreling factions all under the guise of warring fictitious religions with sacred purposes and quests. Fans additionally created an immense amount of content (artwork, comics, videos, gifs, memes, and fanfictions) surrounding the meta-events and their effects upon the community that monopolized popular image-sharing and social news aggregation websites for weeks.

From February 12 to March 1, 2014 an anomalous, exponentially growing phenomenon was taking place in a completely virtual environment—one that inspired rapid cultural and artifactual creation. Besides being a simple source of entertainment, Twitch Plays Pokémon acted as a social experiment that explored and reexamined the meaning of communication and community in an online space. This phenomenon also highlights the crucial role that the Internet plays in the creation of culture and narrative in the 21th century. In this paper, I seek to examine how exactly Twitch Plays Pokémon evolved from a simple social experiment into an explosive,

fast-burning online cultural phenomenon by analyzing the external factors associated TPP's rise in popularity, including the narrative qualities of video games in general, the ascent and growing prevalence of streaming platforms such as *Twitch*, the incidence of virality (the tendency for a piece of information to circulate rapidly across the Internet), and the universality of Pokémon as a genre. I will also be investigating the role the Internet plays in the formation of community and the creation of culture and narrative in today's society, focusing on its role in globalization and the qualities with which it promotes and aids artistic enterprise. Finally, I will be exploring how narratives give meaning to culture, specifically within the context of Twitch Plays Pokémon, and analyzing the phenomenon and its fan-generated content through an anthropological lens.

Narrative and Meta-Narrative of TPP

The in-game narrative of Pokémon Red Version follows the adventures of the player's avatar, otherwise known as Red, as he travels through the region of Kanto, where mysterious creatures called Pokémon live. These creatures can be captured by the player, and leveled up (a type of training that makes one's Pokémon stronger) in battles between other in-game Pokémon trainers that he meets on the road. In Pokémon battles, each trainer has a team of Pokémon. Two Pokémon use attacks on one another until one loses all of its HP (hit points, or health) and faints. The battle continues until all of the Pokémon on one competitor's team has fainted. Over the course of the game, Red must assemble a team of Pokémon and defeat all 8 Pokémon Gyms—places that test a Pokémon trainer's skill through a series of battles. Once Red collects 8 badges as tokens for his victories at the Gyms, he must defeat the trainer team the Elite Four, and finally the Champion, in order to claim the title of the new League Champion. The game also

incorporates many other events, challenges, and side quests into its main narrative, however the basic plot follows this essential framework, which is linear in fashion when played conventionally by a single player.

Besides the above narrative, which takes place in every iteration of Pokémon Red Version, the players of Twitch Plays Pokémon were continuously creating a new narrative to explain certain in game events and frustrations. The following is a brief account of major events that took place throughout the duration of “Twitch Plays Pokémon.” All of the events listed below greatly contributed to the rapidly expanding meta-narrative as it was being created in real-time.

The Helix Fossil

On Day 2 of the stream (*Helixpedia*), Red encountered a trainer in Mt. Moon—a system of caves through which the avatar must pass to progress in the game. Upon the trainer’s defeat, the TPP community was given a choice between obtaining a Dome Fossil or a Helix Fossil; the hivemind chose to collect the latter (Pureowne75, *Helixpedia*). These fossils are key items within the game that can be turned into Pokémon during later gameplay (Barsanti 2014, Ramirez et al. 2014). Until the time when they can be transformed however, they are essentially useless, providing no extra functionality. In fact, when the item is accessed outside its sole directive, a message pops up on the user’s screen, exclaiming “This isn’t the time to use that!” During conventional gameplay, a sole player would have to make a very intentional choice to select this item: first selecting START to bring up the menu, and then pushing the A button in combination with various arrow keys. However, within the chaos of TPP, and as a result of the

seemingly random inputs from the hivemind, the Helix Fossil was frequently selected during gameplay. In order to explain this persistent interruption of progress, the TPP community decided to give meaning to it.

The TPP hivemind decided that instead of the action being a random happenstance, the protagonist of the game (Red) was taking the Helix Fossil out of his inventory because he didn't know what to do next, and was therefore consulting the fossil on how to proceed. Within the community, the Helix Fossil became an entity of goodwill—whenever progress was made or positive developments occurred within the game, they were attributed to the fossil (Barsanti 2014, Ramirez et al. 2014). Eventually, the Helix Fossil was promoted from a simple advice giver into a full-blown messiah, and messages of “Praise Helix” (or more specifically, ㄟㄗ●●ㄟPRAISE HELIXㄟㄗ●●ㄟ) resonated throughout the chat (Barsanti 2014, Ramirez et al. 2014, Pureowne75). The deification of the Helix Fossil was the first major event within the meta-narrative that gave rise to the constructed mythology of Twitch Plays Pokémon.

The False Prophet

In order to gain access to certain vital areas within the game, Red must teach one of his Pokémon a move called “Surf” that allows him to travel across water. Only certain “water-type” Pokémon have the ability to learn this move. On Day 5 (*Helixpedia*), the hivemind decided to obtain a free Eevee from a store (Barsanti 2014, Pureowne75)—a Pokémon that has the ability to “evolve” or transform into three different types of Pokémon. One of these Pokémon, Vaporeon, is a water-type. In order to evolve Eevee into this particular Pokémon, Red has to purchase a special “Water Stone” from an

interface that includes many items. The hivemind, unable to make the correct purchase with so many people inputting commands at once, wasted all of their in-game money on unnecessary items and a Fire Stone (*Helixpedia*, Pureownege75). This stone evolved Eevee into Flareon, a fire-type Pokémon that cannot learn Surf and is widely considered inferior to Vaporeon (Barsanti 2014, Pureownege75). In order to make sense of this failure, Eevee/Flareon was marked as a pariah within the game, blamed for all subsequent misfortunes, and given the title “The False Prophet,” by fans (Barsanti 2014, *Helixpedia*, Pureownege75).

Anarchy vs. Democracy and the Start9 Riots

On Day 6 of the stream, progress within the game had been essentially halted for 24 hours due to a movement-based puzzle that the hivemind could not pass (*Helixpedia*, Pureownege75, Ramirez et al. 2014). The TPP creator briefly shut down the stream and modified the system with a new mode of play called “Democracy” (*Helixpedia*). In Democracy Mode, the system gathered commands for 5 seconds and executed the most popular choice (Chen 2014, Haque 2014, Ramirez et al. 2014). This change was most likely enacted to allow the community to vote on which direction the avatar should walk in order to traverse the puzzle relatively quickly and continue progress within in the game. However, instead of welcoming a way to lower the difficulty of this task, the majority of fans greeted the change with distaste and outrage (Ramirez et al. 2014, Pureownege75).

With the system update, the creator also modified code to allow users to attach a number to a command (i.e. Up3, or A6), which would execute any command the number

of times specified (Pureowne75). To protest the Democracy system, players began typing “Start9” into the chat, along with messages of “RIOT,” (Ramirez et al. 2014, *Helixpedia*, Pureowne75). If Start9 was the most popular command within the specified time range, the interface would open up the “Start” menu 9 times. These “riots” further halted progress, causing the creator to return the stream to the previous—yet newly dubbed—“Anarchy” Mode, which executed commands in FIFO (first-in, first-out) order (Chen 2014, Haque 2014). A little over an hour later, the stream was modified yet again with a voting system that allowed for players to type into chat which game mode they preferred; whichever mode had the most votes at any given time would be the mode in which the game was played until users voted in the other direction (Barsanti 2014, Haque 2014, *Helixpedia*, Pureowne75).

Despite having the ability to switch to Democracy, the majority of TPP continued to be played in Anarchy Mode (including the events described below). The two different game states presented themselves as warring religions within the meta-narrative (Ramirez et al. 2014). The Helix Fossil was promoted to “God of Anarchy,” and represented the “true” nature of the social experiment (Barsanti 2014). The Dome Fossil (the fossil that the players did not choose in Mt. Moon) became known as the Evil Dome, “God of Democracy.” In contrast to the Helix Fossil, whenever progress was hindered during the game, it was attributed to the malevolence of the Dome Fossil (Pureowne75).

For most of the fans, the Democracy system went against the basic purpose of the experiment, and thus became a major antagonist within the narrative (Ramirez et al. 2014). The False Prophet became known as a disciple of the Dome and Democracy, somewhat analogous to an antichrist figure in Christian theology. Although the majority

of the fan base identified as self-proclaimed followers of Helix, those that preferred Democracy Mode as a means of completing the game led a smaller faction of Dome followers (Ramirez et al. 2014) that incited discord within the chat throughout the duration of the stream.

The PC and Bloody Sunday

In Pokémon games, a player's team—which they use to battle other Pokémon trainers and Gym leaders—can be comprised of a maximum of six Pokémon. If a player with a full team catches another Pokémon, the newly caught Pokémon is sent to a computer called the “PC”, which is located at specific buildings throughout the game's map. In order to put a Pokémon that is located in the PC into a player's party, Red must access the PC and deposit one of his current Pokémon into it before withdrawing a new one. This action, similar to using an item, requires a long combination of commands that, due to the disorder of TPP, was very hard to execute correctly.

On Day 11 of the stream (Barsanti 2014, *Helixpedia*), the community sought out and captured Zapdos, a very powerful “Legendary” Pokémon (Pureowne75, *Helixpedia*). The hivemind accomplished this task on its first try—a quite miraculous feat in Anarchy Mode, since legendary Pokémon are difficult to capture under normal circumstances. Because they had a full party, Zapdos was immediately sent to the PC upon capture (Pureowne75). While attempting to retrieve Zapdos from the PC, 12 Pokémon were “released” into the wild, essentially deleting them from the game (Barsanti 2014, *Helixpedia*, Pureowne75). Some of the released Pokémon had been previous crowd favorites, and their losses were heavily mourned within the community

(*Helixpedia*). Day 11 of TPP was henceforth designated “Bloody Sunday,” and the event marked a major blow to morale for the players (Barsanti 2012, Ramirez et al. 2014, Pureowne75). Because of the events of Bloody Sunday and many other similarly arduous encounters with the PC, the hivemind viewed the PC as yet another antagonistic force within their meta-narrative that actively worked against Red and hindered their overall progress (Ramirez et al. 2014).

Popular Characters

Bird Jesus: About 15 hours into the stream, the hivemind caught a Pidgy—a Pokémon resembling a bird—and added it to their Pokémon team (*Helixpedia*). On Day 5, the community challenged the fourth Pokémon Gym. To the community’s astonishment, the Pidgy (now technically a Pidgeot after training and “evolving” into a stronger Pokémon) battled all of the Gym Leader’s Pokémon and won. Because of its tremendous victory, the hivemind began referring to the pidgy as “Bird Jesus,” and it was henceforth considered a prophet of the god, “Lord Helix,” (Pureowne75).

DigRat: On Day 3 of the stream, the hivemind taught one of their Pokémon, a Rattatta (which resembles a rat), a move called “Dig,” (*Helixpedia*). Dig is a move that can be used in Pokémon battles, but can also be used outside of battles to quickly leave buildings or areas. Numerous times during the stream, due to the large influx of commands, the Rattatta would use Dig—causing Red to leave the area he was in and forcing the community to completely start that section of the map over (Barsanti 2014, *Helixpedia*, Pureowne75). Because of these interruptions in gameplay, the Rattata was given the title “DigRat,” and considered the “black sheep” of the party. Much later in the

game, DigRat redeemed itself by being an effective battler, but was unfortunately lost in the “massacre” of Bloody Sunday (*Helixpedia*, Pureowne75).

The Keeper: After the False Prophet had been evolved into Flareon, it was essentially useless to the team. Because it was strategically unnecessary (and more so because it was now considered evil) the hivemind decided to banish the Pokémon to the PC. On Day 6, after several failed attempts, the TPP community eventually managed to deposit the False Prophet, along with another Pokémon called Drowzee (*Helixpedia*, Pureowne75). The hivemind, content with this turn of events, labeled the Drowzee “The Keeper.” From then on, it was celebrated as the guardian of the PC, sacrificing itself in order to keep the False Prophet contained and the players safe from Flareon’s negative influence (Pureowne75).

Endgame

On the 14th day of the stream, Red faced the final gym leader, Giovanni. After much frustration and many attempts to enter the gym, Bird Jesus defeated Giovanni during the community’s second attempt at the fight (*Helixpedia*, Pureowne75). Day 15 of the stream was largely known to fans as the “Day of Grinding,” in which they set out for the Elite Four and on the way encountered many wild Pokémon and trainers (*Helixpedia*). By gaining experience points in these battles, Lord Helix (the Pokémon that was resurrected from the Helix Fossil) evolved from an Omastar to an Omanyte (*Helixpedia*, Pureowne75). The final team that was used to face the Elite Four consisted of the Omanyte known as “Lord Helix,” a Pidgeot named aaabaaajss known as “Bird Jesus,” a Zapdos named AA-J known as “Battery Jesus,” a Nidoking named

AAAAAAAAA nicknamed “The Fonz,” a Lapras named AIIIIIRRR nicknamed “Air Jordan,” and finally a Venomoth named AATTVVV known by fans as “All-Terrain Venomoth” or “ATV” for short (*Helixpedia* b).

After four failed attempts at beating the Elite Four, the hivemind finally defeated them on their fifth try (*Helixpedia*). The battle between Red and the final member of the Elite Four, Lance, will be remembered in TPP history, as ATV single-handedly beat Lance’s Dragonite (a very powerful Pokémon) that was around 20 levels higher than him. After this battle, ATV was henceforth known as “The Dragonslayer” by fans (*Helixpedia*, Pureowne75). This unlikely victory, and the vanquishing of the Elite Four, allowed the hivemind to move on to the final battle of the game against the League Champion: Red’s in-game rival, named Blue. With few healthy Pokémon remaining after four consecutive battles, the fans quickly lost to Blue, and had to start the entire process of battling the Elite Four over again (Pureowne75). It was not until Day 17, on their 22nd attempt, that the hivemind finally defeated the Elite Four and The Champion, Blue (*Helixpedia*, Pureowne75). Twitch Plays Pokémon was completed in Anarchy Mode on March 1, 2014. Including the end-game animation and credits, the stream was completed in 16 days, 7 hours, 53 minutes, and 4 seconds with 92,588 active players/viewers (*Helixpedia*).

Video Games and Twitch Plays Pokémon

The video game industry has been a major component of mass media production for over 30 years. Digital games, such as Spacewar and Pong, were created quickly after the invention of the first networked computers in the 1960s (Castronova 2007). In the 1980s and 1990s, video

games became increasingly popular due to advances in computer gaming technology and the introduction of gaming consoles such as those produced by SegaTM and NintendoTM (Nickson 2010). However, it was not until the turn of the 21st century that the video game industry became a true powerhouse of entertainment, as Sony Playstations, Microsoft Xbox, and Nintendo consoles such as the GameCube and Wii entered the global market (Aoyama and Izushi 2003, Nickson 2010). In fact, in 2013, the video game industry sold over 20 billion dollars' worth of hardware and software, and its annual revenue has risen continuously over the past several years (Castronova 2007, Nickson 2010, Rogers 2016). When the multiplatform game Grand Theft Auto V hit the market in 2013, it made over 800 million dollars the day it was released. By its second day, the game had made over one billion dollars—much higher than what many other top-selling forms of entertainment video (such as films or television shows) make during their entire run on the market (Rogers 2016). These extremely high revenue streams show that video games have become a common feature within the entertainment industry—a mainstream commodity that appeals to millions of individuals and has become a ubiquitous facet of popular culture in today's society.

Video games, once considered a simple past time for children and adolescents, have undergone a large transition in the past 20 years in audience demographics and overall perception (Rogers 2016). Video games have often carried a certain stigma when it comes to adult players. Associated with negatively connoted terms such as “geek” or “loser,” these older individuals were not spending their free time in a way that people regarded as socially acceptable or productive (Shaw 2010). However, as the generation that grew up playing video games during the industry's initial boom in popularity became adults, they did not quit their childhood hobbies. As consoles grew more sophisticated with increased memory and graphic capabilities,

a higher proportion of games with more mature themes and older intended audiences began being produced by major companies such as Sony and Microsoft (Aoyama and Izushi 2003). In fact, according to industry statistics, the average age of video game players is rising by about one year each year, with adult players having been playing for an average of 16 years (ESA 2014). Today, the typical player is currently in their 30s (ESA 2014, Castronova 2007, Rogers 2016), with over 25 percent of the total gaming population over 50 years old (Castronova 2007). Further evidence of video games' growing universality is the fact that in 2014, 48 percent of video game players were women, and that there are significantly more women over the age of 18 than boys under 18 playing video games (ESA 2014, Castronova 2007). All of these characteristics describing modern video game players show a very different picture than the popular stereotype depicting players as socially withdrawn adolescent males (Rogers 2016, Shaw 2010).

One possible explanation for Twitch Plays Pokémon's extreme popularity is the fact that the experiment centered around a video game: Pokémon Red Version. Not only does the classic 1996 game garner feelings of nostalgia for adults who played the series as children, it also helped attract individuals to the stream who simply enjoyed the prospect of playing a game and sharing their mutual interest with other members of the TPP community. The aforementioned industry and user statistics have effectively demonstrated video games' wide user base which transcends gendered, cultural, and generational boundaries. The millions of devoted video game players visible on the world stage today therefore raises the question: what exactly makes video games so enticing and attractive?

Communications scholars Byron Reeves and Clifford Nass of Stanford University conducted a series of studies that tested how the brain reacts to media images (Reeves and Nass

1996). In these studies, they found that psychologically, media images (including films, television shows, and of course, video games) are initially perceived as real by the brain (Castronova 2007, Elza 2009, Reeves and Nass 1996). Media is capable of making us feel intense emotions because the brain automatically presumes everything that it sees is real and must afterward work to remind itself that images on screens are just that—images. When analyzing this argument evolutionarily, it would make sense that our control center, which evolved long before media images existed, would not contain the necessary structures to inherently distinguish between an image of a charging rhinoceros and a real one. Annie Lang, an expert on media psychology at Indiana University, also claims that making distinctions between real and unreal images takes up mental resources (Castronova 2007). Lang's theory states that the mind has limited resources with which to allocate to all of its tasks. As media images become increasingly similar to our reality, our minds must do more work to separate the real from the fiction. Besides having this blurred distinction between real and unreal images, Lang also claims that our minds will not want to put forth the effort of separating the two categories if the media image is pleasant or motivating at a base psychological level (Castronova 2007). The brain's motivational structures allocate its resources largely toward receiving and processing such agreeable content, rather than dispensing effort determining its authenticity and adequately diminishing emotional response to match. In the case of video games, what this research tells us is that first and foremost, people subconsciously view the stories and characters presented within the games as real, even though consciously they know them to be fake. This difficulty distinguishing between real and virtual allows players to create strong emotional connections with a game and the images that they convey, causing them to invest heavily in gameplay and seek out additional resources with which to immerse themselves in video game narratives.

Although Lang's theory offers unique insight into how the brain processes media, it does not account for video games alone. In order to fully answer the question of what makes video games so attractive to people, we must also examine what makes video games unique and distinct from other forms of consumable media. One of these main distinctive features is interactivity (Aoyama and Izushi 2003, Berger 2002, Castronova 2007, Rogers 2016). Unlike reading a book or watching a television program or film, video games give players agency and partial control over the events and characters within the game (Berger 2002, Davidson 2009, Pizzato 2009). Players manipulate avatars onto which they can project their own fictionalized selves and participate directly in the action of the game (Rogers 2016). Oftentimes, players must also make decisions that can alter the trajectory of the game itself. Elements within a game respond in turn to a player's choices, which then prompt new reactions from the player in an ongoing feedback loop (Berger 2002, Rogers 2016). The many paths that a player can take, even in video games with linear narratives, create highly individualized experiences from person to person. For example, in all Pokémon games, players create teams of six Pokémon with which they will battle other in-game characters throughout the game. In Pokémon Red Version, 151 different kinds of Pokémon can exist in-game, allowing users to create almost 15 billion unique team combinations. This high degree of personalization allows players to modify a game to make it suitable to their specific needs and desires.

The interactive elements of video games also help create an extremely immersive experience in which the player is an essential part of the narrative (Berger 2002). Within a game, players are bound by rules that govern the game space and guide behavior (Anthropy 2012, Berger 2002, Rogers 2016). These rules are different than those that control the "physical" world, creating what some theorists call a "magic circle." Magic circles are considered isolated

spots in which special rules—or a lack of rules—abound. Within a magic circle, certain behaviors are allowed and even encouraged that may not be considered acceptable outside its boundaries (Rogers 2016). Video games allow people to break the social rules to which they are too often bound, and escape into a fictionalized world where they dictate how they present themselves as characters. Video game avatars typically have weak characterization (Berger 2002), which allows players to place themselves into the story, transforming the self into something difficult to attain under everyday circumstances—a hero, a villain, an adventurer, a warrior, or simply a citizen of a fantastical land. Besides the opportunity to reinvent oneself and manipulate one's circumstances, video games provide objectives and obstacles that challenge the player and grant them rewards upon completion (Davidson 2009). These rewards span from in-game knowledge or objects that help the player advance to emotional rewards such as a sense of accomplishment and esteem.

Twitch Plays Pokémon accentuated, amplified and tested the limits of almost every characteristic attributed to video games. The stream's crowdsourced interactive elements—in which thousands upon thousands of people attempted to exert influence over in-game decisions simultaneously—offered fans an intriguing new way to play a classic and beloved favorite (Ramirez et al. 2014). Instead of interacting only with game elements, fans had to react and respond to the actions of their peers and the collective goals of the entire community. TPP also played with a defining and widespread feature in video games: control. Unlike typical video games, each individual participating in TPP had little to virtually no control over the events in the game—thousands of people attempting to exert their own personal agendas simply resulted in chaos. This chaos widened the scope and tested the limits of the magic circle often associated with video games. Instead of adhering to the typical rules of a Pokémon game (follow the path,

capture Pokémon, defeat Gym Leaders, etc.) the format of TPP allowed for a complete dismantling of the normally structured system. Trolls (deliberate provocateurs; Haque 2014), people with differing opinions on what actions to take, warring factions of the new TPP religion, and uninformed first-time players (who were ignorant of the typical rules of gameplay) broke not only social and cultural norms, but in-game ones as well. This incessant rule-breaking caused unrest and discord amongst players and competition between those factions that self-identified as adversaries.

A prominent example of how TPP pushed the limits of video game control and order occurred on many different occasions throughout the stream. Multiple times, game progress was halted for up to 6 hours trying to pass an obstacle called a ledge (Pureowne75, *Helixpedia*). In Pokémon games, the avatar can jump off ledges but cannot climb them, and must find an alternate route up a path. Typically, all that necessitates overcoming this particular obstacle is sidestepping a few frames and then proceeding upwards, however, due to the lawlessness of TPP, the avatar would often fall off a ledge as soon as he managed to find his way back up due to a stray “down” command being entered into the queue, causing the entire process to be repeated until the players managed to steer clear from the ledge once and for all.

Despite the frustrations, the associated chaos of the stream was a large factor in what made TPP such a unique experience to players. The lack of agency that plagued TPP players also created an iteration of the game that had never before been seen, creating a one-of-a-kind, personalized experience—which, as we have seen, is a very important component of successful video games. However, unlike typical video games, Twitch Plays Pokémon created this experience not just for one individual, but for an entire interconnected collective. This “hivemind” of sorts was more than a conventional community or fanbase centered around a

common interest. It attempted to act as a single entity, a lone player trying to complete a game of Pokémon (albeit a player that appeared to be plagued with conflicting thoughts and feelings). Despite the difficulties associated with TPP, the inherent and unique narrative qualities that the game provided remained intact, and were even emphasized through the meta-narrative that was shaped through crowdsourcing. Additionally, the nature of the video game itself, as well as the spirit of the “sport,” was the first step toward bringing interested parties to the site of the action. In these ways, video games in their most basic, elemental form served as an important contributor to the overall popularity and phenomenon of Twitch Plays Pokémon.

Twitch as a Structural Framework

Electronic media generation has undergone a transformative evolution within the 21st century and, more specifically, within the past few years. Advances in personal devices and mobile technology capable of capturing high quality video and audio, coupled with the rise of user-friendly product platforms (which allow creators to stream or upload content with relative ease) have ushered in a new era of online media characterized by collaborative production and impulsive action (Zhang and Liu 2015). Websites such as *Twitch.tv* and other streaming platforms aid this transition by offering a structural framework upon which non-professional content providers can deliver their product directly to the viewer (Chase 2014, Zhang and Liu 2015).

By allowing users to broadcast and stream content to a massive viewer base, *Twitch* has grown rapidly in popularity over the past few years. Roughly three years after its 2011 launch, near the time of Twitch Plays Pokémon, the site had grown to be the fourth largest traffic generator in the US Internet, with an average 8% monthly growth rate (Zhang and Liu 2015).

On a similar note, according to Twitch's 2013 Retrospective—an overview of traffic and user data in the year before TPP—in just three years, the number of unique viewers grew from 20 million to 45 million, while the number of unique broadcasters tripled to 900 thousand (TR 2013, Zhang and Liu 2015). In the more recent 2015 Retrospective, Twitch reported a peak of 35,610 concurrent broadcasts, an average of 550 thousand concurrent viewers—whose individual monthly average viewing time amounted to 421.6 minutes (compared to that of *YouTube* at 291 minutes)—and an annual total of 241 billion minutes of content (which is over 459 thousand years' worth of material; TR 2015). Today, and more specifically as of March 2017, Twitch has an Alexa ranking (a company that provides commercial web traffic data and analytics) of 73 (*Alexa* a). This number is an estimate of a site's global popularity, calculated using a combination of average daily visitors, and page views over the past three months. In addition, 26,176 separate sites link to Twitch, making it extremely accessible and well-connected to the wider Internet community (*Alexa* a).

The majority of content uploaded onto Twitch are live, extended-length (about 30% last over four hours) video game streams, in which the streamer can interact instantaneously with their audience through real-time chat (Chase 2014, Ramirez et al. 2014, *Twitch*, Zhang and Liu 2015). This high degree of interactivity allows creators to receive rapid feedback from their audiences and cater to specific interests and suggestions (*Twitch*, Zhang and Liu 2015). This reciprocal approach to content creation is shifting the multimedia service paradigm from single source—in which a sole user generates and regulates the product—to multisource (Zhang and Liu 2015). This multi-sourced structure helps form a more cooperative relationship between creator and viewer to generate a shared product that gives viewers a close personal connection to the material.

The next step on this “source” spectrum—crowdsource—has recently experienced a major burst in popularity as massive user bases form communities and participate in large-scale collaborations with creators (Rogers 2016, Zhang and Liu 2015). A unique feature of crowdsourced production is community members’ ability to influence the ongoing and upcoming broadcast content through constant interaction, reaction, and manipulation (Zhang and Liu 2015). These features have allowed viewers to become active participants in the creation process that directly affect the events of the stream in real-time.

When Twitch Plays Pokémon was uploaded, the anonymous creator modified code for an Internet Relay Chat (IRC) Bot (Ramirez et al. 2014). IRC Bots are commonly found among streaming websites such as *Twitch*; their purpose is to parse chat data in order to moderate chatrooms, run statistics, and provide information to its host (Haque 2014, Ramirez et al. 2014). The Twitch Plays Pokémon IRC was designed to accept predetermined commands, such as “Up,” “Right,” “A,” and “Start,” that were input via chat and to forward those commands into a queue that the emulator executed in sequential order (Chase 2014, Haque 2014, Ramirez et al. 2014). However, commands often had to be skipped in order to empty the queue faster and prevent lag—thus adding an element of randomness (Haque 2014). The chat still functioned as a way for players to communicate with one another, but with the added bonus of allowing viewers to control the game from their devices. Because of these mechanics, as well as the site’s growing clientele, the use of *Twitch* as the structural platform upon which TPP was executed was likely a key factor in its success as an experiment and, additionally, the growing culture and narrative surrounding the event.

The overall popularity of *Twitch*—its wide user base consisting of millions of committed fans, its heavy daily online traffic, and its accessibility through tens of thousands of other sites—

coupled with the fact that its content consists mostly of often lengthy video game live streams, made the website an ideal location for the Twitch Plays Pokémon experiment. Not only did the site help draw in fans during the stream's first few days, it gathered fans that had deep interests in video game content, that were familiar with how to participate in a video game community, and were connected to other websites that brought TPP to the attention of fans and players unfamiliar to the site or the stream's concept (*Twitch*). *Twitch*'s collaborative approach to content creation and the close relationship between streamers and consumers via chat highly encouraged viewers to be a part of the production process even before such crowdsourced events like TPP became popular. When TPP was uploaded onto *Twitch*, its nearly complete integration between production and consumption was a logical next step for those who had previously utilized *Twitch*'s synergistic format, allowing for an extremely smooth transition from multisource to crowdsource that other websites were not as capable of handling.

The popularity of *Twitch* was not the only contribution the site made toward the success of Twitch Play Pokémon. *Twitch* is also an ideal virtual location to form and foster communities built on video games, fandom, and content creation (Chase 2014, TR 2015, *Twitch*). Viewers of *Twitch* streams typically have an invested interest in a particular game or gamer, and can form relationships over these shared interests (*Twitch*). Video games have had social components from since their inception—from multiplayer games, connections between consoles and devices (via physical cables or wireless connection), to toys and merchandise (Elza 2009)—however, streaming sites like *Twitch* provide an easy access point from which players can locate their favorite video games and talk to other fans via chat (*Twitch*, Zhang and Liu 2015). The Twitch Plays Pokémon page on the *Twitch* website therefore acted as a perfect space for TPP viewers to create their own virtual community by allowing them to participate in a simultaneous action (the

experiment), form bonds over their collective participation that action, and create shared narratives.

Besides the unique, overarching characteristics attributed to the *Twitch* site, the structural layout of *Twitch*'s streaming pages helped stimulate the TPP phenomenon as well. Because the format of *Twitch* is such that the chat box appears right next to the stream and is constantly updated each time a new comment or command is inserted, there is no disconnect between the live events taking place within the game and the running commentary about those events (Chase 2014, Ramirez et al. 2014, *Twitch*). For many other sites and their content, such as *YouTube* videos or even online news articles, one must seek commentary out, either below the content or through a series of links. These comments are static—they are not discussed or argued in real-time, but are remain on the site undisturbed or are responded to at the replier's leisure. In a *Twitch* stream, especially in a popular one such as TPP, the commentary is active, and constantly moving at a rapid pace. The viewers are watching and discussing with one another—as well as with the stream's creator—in real-time, reacting to events as they unfold (*Twitch*, Zhang and Liu 2015). This particular *Twitch* construct was therefore instrumental to the creation process of TPP by linking the stream directly to the chat. During the stream, the extremely lively TPP chat was just as much a part of the experience as the actual game (Chase 2014). By making these the video and the chat physically (albeit, in virtual space) inseparable, *Twitch* helped foster the narrative that was emerging alongside the actions of the TPP stream, and encouraged viewers to instantly share their thoughts, feelings, and explanations with one another. It was these comments that then formed the culture and mythology surrounding the meta-narrative of Twitch Plays Pokémon.

Furthermore, by utilizing the built-in chat that accommodates every *Twitch* stream as the primary “place of action” (the place where players could insert commands to the emulator) for Twitch Plays Pokémon, the stream’s creator advertently or inadvertently made the activities and commands of the TPP players take place in the exact same virtual space that viewers of the stream used in order to communicate with one another. This happenstance was essential for the formation of TPP’s meta-narrative. TPP’s chat was constantly interspersed not only with commands of “A” “Left” “Start” etc., but with votes on Anarchy or Democracy mode, comments about the events taking place (“OHGOD” “theres no way we can beat elite four”), and pleas for the collective group to take a certain action as well (“CEASE THIS AT ONCE” “KILL THE FALSE PROFET” “THIS IS WAR DO NOT GIVE UP LEFT USERS”). This cacophony of input allowed viewers and players to work off of one another—with viewers offering feedback that affected others’ decisions in what commands to type or, inversely, players giving the emulator orders that would execute an action and incite a large reaction in the crowd, spurring an onslaught of discourse and dialogue within the chat that would be woven into the meta-narrative of the game. By the end of the experiment, *Twitch* reported that the entire TPP chat consisted of roughly 122 million chat messages (Chase 2014). It was this massive amount of user input and interactivity, along with the many other features that streaming sites and specifically *Twitch.tv* offer, that contributed to making Twitch Plays Pokémon a such unique and collaborative experience for its wide range of fans.

Virality and Rapid Virtual Distribution

When Twitch Plays Pokémon began, during the first initial days of the experiment the stream’s viewer/player count was vastly different than the same count not even a week later.

The stream's popularity grew from a couple dozen on the first day, to over 3,000 on Day 2, to its peak of over 120,000 participants not five days later on Day 7 (Chase 2014, *Helixpedia*). This explosion in viewership—where a homemade “video” (of sorts) with zero national or global advertising gathered hundreds of thousands of viewers in a span of days—would have been an unprecedented feat not two decades ago. However, new forms of communication such as social media and news aggregation websites have transformed the ways in which information is consumed and spread throughout the Internet, and on a broader spectrum, the globe (UPenn 2017, Weng et al. 2013). Twitch Plays Pokémon was a key example of how “viral” content is created and distributed on multiple platforms, and how certain online products can gain rapid popularity in a short amount of time.

When Twitch Plays Pokémon's viewership consisted of only those who had stumbled upon the stream within Twitch itself, the total player count remained relatively low (54 on Day 1) and grew at a slow pace. The first known mention of TPP on an outside website occurred around nine and a half hours after its launch, and took the form of a screenshot inside the first Pokémon Gym on *4chan*'s /vp/ (Pokémon) message board (*Helixpedia*). *4chan* is a bulletin-board-format website in which users post comments and images on a variety of topics. *4chan* and similar discussion websites, such as *Reddit*, *Tumblr*, and *Imgur* (some of which even allow users to share and vote on the most popular content on the internet) have become prominent forces within the online cultural sphere. In 2016, *Reddit* alone hosted 542 million monthly visitors, ranking #11 of most visited sites in the U.S (*SimilarWeb*) with an Alexa score of 20 (as of March 2017; *Alexa* b). The massive user bases of these social news websites enable them to form online communities that have the collective power to determine what content is important,

newsworthy, or interesting, which in turn causes such content to circulate rapidly throughout the Internet via many individual users and ultimately go “viral.”

After posts about TPP began gaining popularity on these various outlets, the stream quickly began accumulating viewers/players. 29 hours after the stream began, a thread was created on *4chan*’s /v/ (video games) board, and in only one hour and 15 minutes, TPP had risen from 124 viewers/players to 1,000 (*Helixpedia*). Twenty minutes after this milestone, TPP was mentioned for the first time on *Reddit*. Four hours later, after multiple mentions on *Reddit* and GameFAQs (a video game discussion website), as well as after multiple instances of preliminary documentation—including recorded videos of the stream and documented chat logs—the player count had almost tripled to 3,345 viewers/players (*Helixpedia*). Two days into the stream, a subreddit—a forum dedicated to a specific topic on the *Reddit* site—was created specifically for TPP, and provided a permanent space in which viewers and fans could share content and discuss the events outside of the chaotic chat located on the stream’s page. These various outlets and their ability to spread information to a large audience (and subsequently have that information permeate throughout the Internet), caused a seemingly exponential growth in viewership that fed back into itself through discussion threads, viral posts, and eventually even news articles, (*Helixpedia*, Chase 2014). According to *Twitch*, so much traffic was eventually generated for TPP that—besides having over 55 million total views and a peak of over 120,000 concurrent viewers—the entire chat system for the website had to be reworked by site administrators (TR 2014).

Twitch Plays Pokémon’s fast rise to virality begs the question: what makes certain content go viral while others remain uncirculated? Since this phenomenon of virality has a relatively recent history, the science behind it has produced inconsistent results. However,

multiple theories have arisen that explain not only the virtual trajectory of a viral piece of content, but also the characteristics of said content that predisposes it toward mass circulation. The word “viral” in its most basic sense simply means caused by or related to a virus. Much like diseases, ideas, innovations, and even behaviors can spread from person to person, albeit in a cultural instead of biological manner (Weng et al. 2009). The widespread accessibility that the Internet grants its users is analogous to the manner in which physical proximity between individuals promotes the transmission of viruses. Theorists studying meme diffusion—which examines how units of culture called memes are transmitted and assimilated—often apply epidemic models when seeking to understand viral circulation of content (Wei et al. 2012, Weng et al. 2009). This method is applied because viral memes typically have a tendency to spread like epidemic diseases, with a rapid and ascending “infection” or exposure rate.

The complex contagions that are these viral memes are often sensitive to social reinforcement (Weng et al. 2009); each exposure in the form of a positive vote (such as a “like” or “upvote”) or a repost onto a new or different platform significantly increases the meme’s chance of adoption or acceptance in a particular community. Recent studies have also found a possible correlation between meme adoption and homophily—a tendency in individuals to associate and form relationships with those who they find similar to themselves (Weng et al. 2009). In the case of Twitch Plays Pokémon, the various communities that sprang up on social platforms throughout the stream—and the relationships that those communities fostered—would have greatly contributed to the experiment’s rapid rise in popularity and diffusion in virtual space. As people with similar interests formed places in which to share TPP content, it increased the likelihood that such content got passed around amongst individuals, and created virtual echo chambers that amplified the effects of exposure (Lule 2016). As memes reverberate within the

boundaries of these defined affinity spaces (such as the TPP subreddit), the probability that content will “break free” of these predetermined spaces increase as they are shared on different, unrelated platforms (or in the case of large websites such as *Reddit*, gain enough popularity to be featured on the cumulative front page of the site).

Besides the platforms upon which viral posts begin their “journey,” the subject matter of the posts themselves also play a role in a meme’s attractiveness and, subsequently, its chances of being shared. People tend to be interested in reading about and sharing content that connects to personal experience, or with which they feel reflects their own conceptions of self (UPenn 2017). Besides this personal connection, overall positive affect associated with certain content has been found to be strongly linked to virality. More so than for the purpose of information exchange, people tend to share content that provides sentimental value or generates positive feelings for themselves or the people within their immediate online network (Hansen et al. 2011). *Twitch Plays Pokémon* follows this model because despite not being the groundbreaking or urgent news, the premise of the experiment and its subject matter connected with viewers and fans on multiple levels. People who associate Pokémon with positive memories, or who enjoy watching video game streams on *Twitch* were more inclined to share the story of TPP with their online networks because of these positive feelings. This advantage of fostering sentimental value in fans, coupled with the multiple online communities that promoted an exchange of ideas, helped TPP gain fast acclaim via many different online niches and channels.

Twitch Plays Pokémon’s “viral” status helps explain not only aspects of the experiment’s fast rise to popularity, but many of the phenomenon’s community-driven elements as well. Besides serving as a form of digital advertisement for the stream itself, TPP’s connections to outside online forums, discussion threads, and communities helped stimulate the growing meta-

narrative phenomenon surrounding the experiment (Chase 2014). Fans posted artwork, homemade comics, memes (a colloquial Internet term used to describe a humorous image, video, piece of text etc. that derives from the word's original definition: a basic unit of culture that can be passed between individuals in a non-genetic fashion), and other forms of related content that were inspired by the events of the stream. Various community members could then judge the user generated content based on the sites' multiple methods of rating, such as giving positive or negative votes or sharing the content with one's followers. Popular posts were therefore more heavily circulated throughout the online cultural sphere, which helped add material or details to the constantly growing meta-narrative of TPP. In a similar fashion, unpopular content that contributed negatively to the meta-narrative (perhaps by positing theories that the fans overall did not agree with or proposing new narrative that did not coincide with what had already been established by viewers) was prevented from spreading by these very same website mechanics that regulate content popularity. Social sharing websites therefore served as an important player within the phenomenon of TPP. These sites not only helped the experiment gain worldwide attention in a very short amount of time, but they also greatly contributed to the growing culture and narrative of TPP through artistic expression (in the form of submitted user generated content) and regulated which content aligned with the story and would be shared with a larger audience.

Universality of Pokémon as a Genre

One factor that may have influenced the extreme popularity of Twitch Plays Pokémon is the fame of Pokémon itself. From its conception as a handheld RPG in 1996, the Pokémon franchise has exploded into an expansive universe, characterized by video games, animated

series, films, a trading card game (TCG), and nearly every form of merchandise imaginable (Allison 2003, Elza 2009, Pizzato 2009). The franchise has become so pervasive in our global society that it has extended beyond the pop-cultural realm and entered other, separate spheres of influence. For example, in 2001, Niue, an island country located in the South Pacific Ocean, released a set of five “Pokémon Coins” that featured pictures of the popular creatures on legal currency (*Avax News* 2014). In 2008, a protein first described by Shigeru Sato et al. was given the official name Pikachurin, after the popular Pokémon Pikachu; the researchers found similarities between the protein’s function and Pikachu’s electric powers and speed (Sato et al. 2008). In crossing these boundaries between the fictional world of a children’s game and real-world applications to material culture, Pokémon has transcended its original role of children’s toy into a globally recognizable phenomenon.

The younger generations in industrialized countries have known the Pokémon franchise for all or the majority of their lifetimes. During this time, they have partaken in and helped create an entire participatory culture surrounding the fictional creatures (Elza 2009). There are many potential reasons behind Pokémon’s popularity and seemingly complete integration into modern popular culture. The games’ core plot, which has remained essentially unchanged the past 20 years, offers children a chance to place themselves into an interactive adventure set in a kid-dominated world. In the original Pokémon games, the player’s avatar is a 10 year-old child, who leaves their home and embarks on an independent journey across the region. Within the storyline, there are scarcely any adult authority figures—and the seldom few that exist typically belong to the games’ main group of antagonists. By placing young players in this child-dominated atmosphere, Pokémon games allow children to explore and push the limits of rule-governed systems and escape from a reality in which parents and adults hold infallible power and

exert limitless control over their lives (Elza 2009). This form of escapism effectively overcomes the hierarchy of age which children must constantly face, giving them the possibility for the adventure and glory they have been taught is solely reserved for adults.

Another reason why Pokémon has become such a pervasive force in society is its characteristic ability to build and foster community (Elza 2009). The main components of Pokémon video games are 1) collecting Pokémon, and 2) the Pokémon battle, which allows players to test their Pokémon's strength as well as their own knowledge against an opponent. When Pokémon was first introduced on the Game Boy, players could use a Game Link Cable to connect their devices for multiplayer purposes. Players could battle one another instead of the in-game characters, and could even trade Pokémon with one another. In fact, due to the Pokémon Company's dual release system, in which two (or more) versions of essentially the same game are put on market simultaneously, certain Pokémon are exclusive to specific versions of the game (for example, the Pokémon Meowth can be found in Pokémon Red Version, but not in Pokémon Blue Version, which was released at the same time in North America). Because of this exclusivity, Pokémon trading (which in more current games utilizes Wi-Fi) is a necessity for those trainers attempting to complete their collections (Allison 2003, Elza 2009). In these ways, socialization and real-life interaction are key components to completing the game.

The importance of interaction within the Pokémon franchise manifests in the form of widespread community-building. Online battling competitions, sponsored events at gaming stores, and community-driven websites give fans and players physical and virtual spaces to meet, trade strategy, and share their love of Pokémon (Allison 2003, Elza 2009). In fact, when Pokémon first became popular in the United States, Game Boys and Trading Cards were largely banned from public schools, which were prime locations for children to carry out the necessary

social components of the games. By battling other players (whether in the video game or the TCG), Pokémon fans gain glory and respect among their peers, which in turn legitimizes their preoccupation with an imaginary gaming universe (Elza 2009). Although the world of Pokémon is fictional, its diverse and often communal forms of consumption make it more grounded in reality than previous forms of video game escapism.

The blurred line that Pokémon creates between fantasy and reality, as well as its ability to offer children a reprieve from their adult-controlled lives, helps to form a very real culture surrounding the games' narratives and the fans' interactions with one another. Besides the ever-growing storyline within the Pokémon games, shows, and manga, an expansive amount of technical knowledge is required to compete competitively and play strategically (Elza 2009). Each Pokémon has a set of statistics such as Speed, Attack, Special Attack, and many more, and certain types of Pokémon have different degrees of effectiveness against others. For example, Charmander has a base Speed of 65, meaning that if it were to battle a Squirtle, whose base Speed is 43, it would be able to attack first. However, Charmander, a fire-type Pokémon, only has ½ effectiveness against Squirtle, a water-type. This is just the tip of the iceberg for true Pokémon devotees; the complex collection of knowledge surrounding the fictional creatures could (and has) filled volumes. This vast amount of information creates a cultural currency of knowledge; children who spend the most time developing strategy act as the “keepers of tradition” in a sense—turning the tables of the common trope of the wise, traditional elderly citizens being the bearers of knowledge in a community.

Besides the sheer amount of specifically relevant information the Pokémon Universe holds, it also has—through made-up words and repurposed terms—a cultural language of sorts that helps transmit this knowledge and connects members of the fandom to one another (Allison

2003, Elza 2009). To those who do not subscribe to Pokémon culture, the words Dratini, Kanto, and Team Rocket have little to no meaning. However, to Pokémon fans, they describe creatures, places, and people. This language helps community members exchange cultural capital in the form of knowledge (Elza 2009, Jordan 2013), further solidifying this fantastical participatory culture based in reciprocity.

The final means by which Pokémon has become ubiquitous as a genre is the myriad of ways the franchise presents itself on the global market. What started out as a simple pair of video games quickly transformed into a merchandising empire, giving children multiple pathways through which to become acquainted with the franchise (Elza 2009, Pizzato 2009). Whether it was trading Pokémon cards during recess, watching the animated series on the channel the WB, going to the movies in theatres, or playing the games on their Game Boys, the multiple forms of media through which Pokémon was dispersed was essential for its complete integration into popular culture. This multi-system model continues to be successful, as the animated series begins its 20th season and the film franchise creates its 20th film, as the 7th-generation video games Pokémon Sun and Moon became Nintendo's fastest-selling games ever in the Americas (Grubb 2016), and as the TCG retains a strong cult following.

Besides their multi-faceted approach to merchandising, Pokémon's success can be attributed to the way in which they market their products toward child consumers. James McNeal, a Professor Emeritus of Marketing at Texas A&M University, claims "being a child consumer isn't an accident in our society; it's a requirement. All the skills, knowledge and behavior patterns that together we call consumer behavior are purposely taught to our children," (Elza 2009). This claim can be easily related to how Pokémon advertises to children. In fact, the Pokémon animated series is arguably a "half-hour exercise in Pokémon product placement,

particularly for the Game Boy games,” (Elza 2009). The adventures upon which the characters in the show embark are remarkably similar to those within the handheld games. By watching the show, viewers form attachments to its characters and storylines and are given an introduction to the fictional universe. In this model, the video games then serve as a way for viewers to more directly insert themselves into the Pokémon world and interact with the characters that they previously learned to love (Allison 2003, Elza 2009). The slogan of the Pokémon franchise itself, “Gotta Catch ’Em All!,” even encourages the obsessive need for collection that is the central theme of Nintendo’s marketing strategy (Pizzato 2009).

The brilliance of Pokémon is that its appeal to children, its emphasis on socialization, and its interconnected marketing strategy all play into one another in a seemingly endless feedback loop. The widespread availability of Pokémon merchandise makes it adaptable, allowing it to conform to an individual’s needs. The importance of peer influence within the franchise plays heavily into child consumer choices (Elza 2009). Its ability to give children a sense of agency and control serves as a common denominator for those seeking to form human connections over the Pokémon world. As Pokémon fans grow up, the franchise is not so easily forgotten—its many themes and attributes mark it as a cornerstone in childhood. For many, Pokémon was a formative experience, and even with adults the franchise continues to gain fans. When Twitch Plays Pokémon entered the virtual scene, latent, as well as active, Pokémon followers found a new and exciting way to consume a Pokémon product—the original Pokémon product (Ramirez 2014). Twitch Plays Pokémon reignited a sense of nostalgia for those who associated their childhood with the game, while highlighting and amplifying Pokémon’s communal culture through the experiment’s crowdsourced approach and reintegrating the product with current media platforms. The success of Twitch Plays Pokémon is therefore highly connected to the

worldwide success of Pokémon itself and its ability to resonate with many individuals across generational and national boundaries.

The Internet and Globalization

Besides the many external factors that contributed to the resounding success of Twitch Plays Pokémon, the overall virtual space upon which the entirety of the phenomenon took place—the Internet—must be closely examined as well. Although the TPP stream took place on one specific website (Twitch.tv), its effects resonated throughout the entirety of the virtual sphere in the form of original content, news articles, discussion threads, and more. Mass dissemination of information and the ability to transcend physical borders are just a few characteristics of the Internet that have helped this global computer network become a major international socioeconomic and cultural force (Castronova 2007, Borcuch et al. 2012, Lule 2016, McKenzie). The popularity of video games and streaming platforms, the phenomenon of virality, and the pervasiveness of Pokémon would have meant nothing to TPP's success (and in the case of streaming and virality, would not have even existed) were it not for the Internet laying the groundwork of modern communication and globalization. Not only did the Internet play an essential and thorough role in how TPP was created, circulated, and popularized, it also was a vital player in how the community and culture surrounding the event was formed. The Internet's role in Twitch Plays Pokémon's growing meta-narrative and far-reaching, interconnected community serves as a prominent example of how the Internet facilitates and expedites the creation of culture and narrative in today's society.

One cannot begin discussing the Internet's influence on culture without first addressing its role in globalization. Since its introduction into the public sphere, the Internet has been a key

factor in driving modern globalization (Borcuch et al. 2012, Lule 2016). Although globalization has been a lasting force throughout human history, the advent of the Internet has made the phenomenon very visible on an individual level and has shrunk the scope of the world from small (in the pre-Internet age) to miniscule (Borcuch et al. 2012). One of the Internet's main accomplishments in the journey towards globalization is its ability to break down communication barriers across a wide range of physical and metaphysical categories. The first of these boundaries includes regional boundaries separated by mere distance (Jordan 2013). Before the Internet, despite the many global institutions and technological advancements that had already connected the world in an unprecedented manner (Clarke 2000), one could not easily transmit a message that would arrive in seconds at the other side of the world. Today, due to the World Wide Web, people can communicate freely and instantaneously with one another regardless of the physical distance that separates them (Jordan 2013). Another barrier that the Internet helps to break down is the language barrier. With online instant translation services readily available at people's fingertips, multi-lingual communication has become less burdensome than ever before (Lule 2016). Messaging platforms, such as email and instant messaging, have also greatly alleviated communication difficulties by lowering the cost of long-distance communication (Borcuch et al. 2012), thus putting less socioeconomic stress on individuals and allowing for a free exchange of ideas.

By breaking down these barriers, the Internet has allowed people to connect with others on a personal and individual level. Before the Internet era of globalization, international institutions, agencies, and governmental bodies connected (and continue to connect) different countries and cultural regions. However, these agencies often work on a bureaucratic level, brokering international agreements and creating amicable relations between states through policy

and business (Clarke 2000), without public or individual citizen involvement. The Internet—through social media websites, discussion forums, and entertainment services—has brought globalization into the home by including individuals in the process. The fact that the Internet takes away the obstacles of distance, language, and socioeconomic class helps people with similar interests, however niche or uncommon they might be, to find places online where they are free to share these passions with each other (Jordan 2013). By allowing people with vastly different backgrounds to come together over a single cause, topic, or activity, the Internet helps create pocket participatory cultures, in which individuals form groups that create collective decisions and narratives that control the ways in which larger audiences react to products, ideas, and subjects (Ramirez 2014). These participatory cultures would have had much difficulty forming had it not been for the subreddits, *4chan* threads, *Facebook* pages, and other virtual spaces meant to act as a conduit between people who otherwise would not have had the means to come into contact and communicate with one another. In this way, the Internet also helps speed up the process of creating these cultures by greatly reducing the time required to locate and assemble like-minded participants.

Mileage and language are not the only global barriers that the Internet helps break down. Closely related to distance, and largely defined by physical spaces, are national boundaries. States are separated from one another not only by region, but also by culture, ideology, and nationality. The Internet decreases this separation by providing people with narratives that can challenge or even overwrite those which they have been offered by their own governments or national media, allowing them to gain new and global perspectives on domestic and international events. For example, in 2010, the well-known search engine Google declared that it would stop censoring search results for its Chinese subsidiary, Google.cn (Lule 2016). Any search made

onto the site would redirect to its Hong Kong site, which was free of Chinese governmental censorship regulations (*BBC News* 2010). Although this change led to a nationwide ban of Google in China, the action that was taken by Google against governmental regulation of information displays how the Internet is changing people's access to ideas, knowledge, and viewpoints.

In fact, in 1996, when public Internet was still in its infancy, John Perry Barlow, known today as an essayist and cyberlibertarian political activist, wrote a paper titled the "Declaration of the Independence of Cyberspace," (Castronova 2007, Goldsmith and Wu 2006). In this essay, Barlow asserts that governments should not be allowed to have jurisdiction over the Internet, declaring "Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather," (Barlow 1996). Although this document was not official or legal, it was widely distributed at the time, with over 5,000 websites displaying copies of it (Yang 1996). This mentality that the Internet inhabits a space free from constrictions, boundaries, or laws, and that it has its own unique sovereignty apart from that of nation-states, has permeated the virtual sphere since the network's inception.

Because of the inherent sovereignty of the Internet and its relative freedom from censorship/governmental regulation, the World Wide Web has helped create more than just sporadic cultural microcosms across various sites. After providing over twenty years of cross-cultural discourse and international access to information, the Internet has formed its own overarching culture in and of itself. However, before being able to discuss how the Internet and its role in globalization has created its own culture, we must first explore what culture really is.

Anthropologists have been attempting to answer this fundamental question since the birth of the field, and although even today there is no concrete definition, multiple theories from prominent figures can help to create a working description. Postmodern anthropological theorists describe culture as a unique system of meanings and symbols that can be interpreted but never objectively proven or falsified (Moberg 2012). This definition can easily be applied to the context of the Internet, because the Internet—having no physical artifacts or institutions—is symbolic in nature. These symbols take the form of images, original content, and even text, and are given multiple meanings from the groups that associate with them. The exchange and common acceptance of these meanings helps form the basis of a culture. Franz Boas, the “Father of American Anthropology,” believed that culture reflected the relationship between an individual and the larger whole of society (Moore 2012). This definition is later reflected in Clifford Geertz’s work, who claims that “man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs,” (Geertz 1973). In these contexts, culture is dependent upon how an individual creates social meaning through their interactions with others as well as larger societal institutions. The Internet acts to facilitate and enhance these connections through globalization processes, and allows people from all over the world to create relationships and significance through virtual space.

“Internet” culture, though influenced by the cultures of many industrialized countries that generate high internet traffic, has its own distinguishing set of behaviors, codes of conduct, and language. The ways in which people interact within virtual space is fundamentally different than the ways in which they interact in the physical world. These Internet behaviors, though not ubiquitous throughout the entirety of the online sphere, are prominent practices that can be observed on popular sites (such as *Facebook*, *Tumblr*, and *Reddit*) as well as within the “seedy

underbelly” of the Internet (less mainstream and rather incendiary sites such as *4chan*; Coleman 2014). The first important characteristic of Internet culture is text communication. Status updates, private messages, public tweets, all take the form of text, and thus must convey all the emotions and subtext of a typical vocal conversation (Nielsen 2011). Because of this necessity to create clear and precise messages via text, a cultural language has begun to emerge.

Intentional misspellings of words (i.e. “small” vs. “smol”), unusual acronyms (“lol,” “lmao”) atypical usage of grammatical signs, and the additions of emojis—although to the untrained eye appear as mere clutter and unnecessary tom-foolery—provide new meanings to well-known words and add tone, connotation, and implicit understanding to online messages.

Besides forms of expression, the Internet gives way to certain behaviors that in the physical domain would oftentimes be considered socially unacceptable or inappropriate. Some of these behaviors include “trolling,” “shitposting,” and creating and sharing “memes,” (Coleman 2014, Haque 2014). As I described above, memes in their current, more colloquial definition are simply images, textposts, or videos that are created and rapidly circulated online. Shitposts, similarly, are posts or pieces of content that are seemingly worthless in nature, that are made for no particular reason other than to exist (*KnowYourMeme*). The time and effort that can go into making memes or shitposts can sometimes be extensive, despite their uselessness. The popularity of these two behaviors adds virtual “artifacts” in the form of content to the ongoing narrative of culture online. By producing material culture in the form of content, memes, and shitposts, Internet culture parallels cultures of the “real” world—adding legitimacy to virtual space as a place that fosters community, narrative, and culture.

The act of trolling is to make a deliberately offensive or provocative post with the intention of eliciting anger from others (Coleman 2014, Haque 2014, Jordan 2013). Internet

trolls span from people who play harmless pranks on others by hiding links to Rick Astley's song "Never Gonna Give You Up" in unorthodox places, to activist/terrorist groups such as Anonymous. Anonymous is an international group of hackers and activists that began as a group of trolls that frequented the website *4chan*, and have since begun declaring virtual "war" on companies and corporations they deem unrighteous. In a video message to Fox News, a disembodied voice claims "We are everyone and we are no one... We are the face of chaos and the harbingers of judgment," (Coleman 2014). The ability of the Internet to create an anonymous atmosphere both opens up many unforeseen opportunities and risks (Boellstorff 2008). Anonymity, whether through groups like Anonymous or simple screen names that mask a person's true identity, takes away consequences and allows people to act in ways that might otherwise be considered socially unacceptable. This freedom can be abused and can lead to cyberterrorist attacks and intentional offensive behavior, but also gives Internet users a sense of control and power to effect change in ways that seem impossible in a non-Internet setting.

The Internet is not only connecting individuals with people they might not have otherwise met, but with electronic tools that act as a bridge between virtual and real spaces as well. Devices connected to the Internet are becoming increasingly ubiquitous in industrialized society, especially among those belonging to younger generations (which largely consist of those who grew up with Pokémon). In 2011, nearly half of all British mobile phone users could access the Internet from their handheld devices, and 59 percent of British internet users had access via multiple devices (Newman et al. 2014). In their essay in *Society & the Internet*, Newman et al. coined the term Next Generation User (NGU) to describe people who connect to the Internet via multiple locations and devices. These NGUs mark a "second wave" of Internet users who have lived with the Internet for the majority of their lifetimes and who have more fully integrated their

lives with the World Wide Web. In Newman et al.'s study, NGUs were found to be up to 25% more likely to be content producers than "first-generation" Internet users (whose online activities are concentrated more on consumption than production; Newman et al. 2014). NGUs are also more likely to update or create a profile on a social networking site, post pictures and videos online, post comments on discussion boards and forums, and post creative content or artistic endeavors publicly. For more complex forms of content, such as maintaining a website or a blog, NGUs are almost twice as likely to be producers than first generation Internet users (Newman et al. 2014).

Overall, Next Generation Users, which consist largely (but not exclusively) of younger individuals, are more empowered by the Internet to create content, enjoy online entertainment, and access free information. By using multiple mobile devices with Internet access to document and publicize their lives, NGUs' online presences are becoming much more heavily integrated with their offline identities, making virtual and physical space become less distinct from one another (Jordan 2013). These NGUs therefore signify a paradigm shift in which more and more people are beginning to coexist and live their lives in virtuality. Additionally, due to the multitude of tools available today that connect to the Internet easing online access, more people than just those who understand certain software or computer languages are able to contribute to Internet social and material culture (Newman et al. 2014). Apps, programs, and easy-to-use interfaces help make content generation an inclusive action, welcoming anyone to participate in the generation of new narratives and cultural activities online.

Twitch Plays Pokémon is a prime example of the ways in which the Internet facilitates and expedites the creation of culture and narrative through globalization processes. The Internet's lack of boundaries allowed people from different regions, states, and language areas to

quickly come together based off their shared interests—Pokémon, video game streams, and social experiments, to name a few. Because most people involved in the stream shared multiple interests, it was easy for a participatory culture to emerge from TPP, despite the many other differences that viewers may have faced. This participatory culture included the stream itself—and more specifically the chat, where viewers and players could discuss the events of the game and immediately attempt to explain any misfortunes and frustrations through the use of narrative—the subreddit, which allowed fans to take a step back from the chaos of the live stream to exchange ideas and original content with one another and confirm which pieces of proposed narrative were deemed “canon” through the acts of judging TPP-related posts using “upvotes” and “downvotes”, and even peripheral outlets such as news articles and smaller discussion forums, where fans could comment and interact with people who are unfamiliar with the experiment.

Although Twitch Plays Pokémon was able to create its own pocket of culture in a corner of the Internet, this microculture continued to follow the “rules” of online behavior set out by the macroculture of the Internet. Online forms of language and dialogue pervaded the chat with commonplace misspellings and frequent emoji use. Trolls and shitposters, though not a majority of the fanbase, were ever-present within the chat, attempting (and at times, succeeding) to incite further chaos and negatively influence the events of the stream (Haque 2014). The additional disarray caused by trolls only helped add to the meta-narrative, however, by forcing the fandom to create more explanations for the difficulties of the game. In this way, trolls and shitposters actually became an essential part of what made TPP so compelling; the additional challenge of having players in the mix whose sole purpose was to delay progress added excitement and made the experiment worthwhile. This acceptance of trolls is evidenced by the fact that, despite the

introduction of Democracy Mode, the majority of TPP players preferred to play in Anarchy, and would “riot” or quickly vote to reinstate Anarchy whenever Democracy Mode was engaged. To most of the players, it did not matter that Democracy mode would eliminate the discord that the trolls brought with them, because they were a part of the overall experience. Memes about Twitch Plays Pokémon also pervaded the online sphere, as fans of all ages and computer acuity levels created content that reflected their feelings about in-game events and shared their creations with one another. These unique aspects of TPP’s culture, as well as the multiple virtual spaces which allowed participants in the culture interact and exchange information, show how the Internet is changing and expediting the way people connect with one another, and how Internet-fueled globalization is helping to create new narratives that express these global changes.

The Internet and Virtual Worlds

One prominent example of fully integrated online cultures takes the form of virtual worlds. Virtual worlds, as described by Tom Boellstorff in his pivotal work, *Coming of Age in Second Life*, are “places of human culture realized by computer programs through the Internet,” (Boellstorff 2008). Edward Castronova also provides a working definition, stating that a virtual world is “any computer-generated physical space that can be experienced by many people at once,” (Castronova 2005). To consolidate these two definitions, “virtual worlds” act as physical space in a virtual environment, and therefore allow people to form new online cultures based off their connection to this space and each other. Some examples of virtual worlds include those in Second Life, World of Warcraft, and Runescape. These games, often dubbed MMORPGs—or “Massively Multiplayer Online Role-Playing Games”—are set in expansive virtual landscapes in which a very large number of people participate simultaneously. Players can interact with each

other in real-time in these environments through their avatars and form social relationships that—despite not taking place in the “actual” world—feel just as real as ones that would. Many anthropologists are even questioning the terminology we use when discussing virtual space and virtual worlds because of the real social interactions they beget. Anthropologist Thomas Malaby asserts that virtual worlds share the same essential structures as allegedly “real” societies, and claims that we should refer to these virtual spaces not as “worlds” but as “domains”—merely other places where human behavior plays out (Castronova 2007). In his opinion, they’re all “real.”

Virtual Worlds have, in one form or another, existed for over 30 years. One of the first true virtual worlds was the 1979 MUD, also known as MUD1 (Multi-User Dungeon; Boellstorff et al. 2012). This virtual world, enabled by university networks, was entirely text-based, in which players would read a description of their surrounding environment on their computer screen and type in responses that told the program what their next action would be. This game was primarily inspired by the fantasy literature genre—its basic format and characteristics are highly reminiscent of the tabletop role-playing game *Dungeons & Dragons* (Boellstorff et al. 2012). MUD1 originated many social and technical conventions that continue to persist today in virtual worlds and online games. Since 1999, new 3D virtual worlds have been appearing at a rate similar to that of Moore’s Law (in which Gordon Moore observed that the number of transistors per square inch on integrated circuits had doubled every year since their invention and predicted that the trend would continue; Castronova 2007). In the case of virtual worlds, their occurrence appears to be doubling at a rate of every two years. At this rate, Castronova predicts that the number virtual worlds would have reached 30 million by 2008 (Castronova 2007).

Besides the sheer number of virtual worlds, Castronova also predicts that more and more time and attention are migrating from the real world into the virtual world, and that in the coming years a virtual “exodus” of sorts will take place—with users spending most of their time, money, and sociability engaging in virtual life (Castronova 2008). In a survey conducted in 2001, 20% of participants who played the MMORPG Everquest claimed that they actually lived in the virtual world of “Norrath,” and simply travel regularly outside of it into the physical world (Castronova 2005). Some other statistics from this survey are quite revealing, showing that 58% of participants wish they could spend more time in Norrath, 39% claiming that if they could make a sustainable living playing the game they would quit their job, and 22% wishing they could spend all of their time in Norrath. At this time, typical EverQuest player spent 4.7 hours in a day and 28.9 hours in a week in the virtual environment (Castronova 2005)—which in total adds up to one-quarter of a person’s waking life assuming they get roughly 8 hours of sleep per day.

With so many people devoting their time (and in some cases, lives) to virtual worlds, it is important to explore what makes these online landscapes so unique. The three basic characteristics of virtual worlds, as described by Boellstorff, are that (1) they are “places,” despite their lack of physicality, (2) they are inhabited by persons—both actual players sitting behind computer screens and virtual avatars—and (3) they are enabled by online technologies (namely, the Internet; Boellstorff 2008). Besides these three cornerstones, virtual worlds have many other characteristics that enable them to promote social and cultural interaction among participants. Virtual worlds allow for synchronous communication and interaction (Boellstorff 2007, Boellstorff et al. 2012); they have chat mechanics that allow participants to talk with each other, and oftentimes avatars have built-in action sequences that embody physical movements

that they can play out with other players (Castronova 2005, Jordan 2013). Another key factor of virtual worlds is that they are persistent; when a player logs off, the virtual environment continues to endure for other people, and does not simply cease to exist like it would in a typical video game (Boellstorff et al. 2012, Castronova 2005, Castronova 2007). Finally, virtual worlds allow participants to project themselves onto virtual embodiments (Boellstorff et al. 2012). Avatars allow players to create new identities for themselves, or incorporate their “actual” identities with fantastical or naturally unachievable elements. While conducting anthropological research within the virtual world Second Life, Tom Boellstorff encounters a woman named Fran in a support group for Parkinson’s disease. While their avatars attended an Opera Masquerade Ball—a benefit for Parkinson’s disease charities—Boellstorff recalls her saying to him, “It thrills me to see me dancing. This is who I am,” (Boellstorff 2008). With this statement, Fran—who in “real” life was 85 years old at the time—is not denying her physical body, but is claiming that her virtual and physical bodies are both real in their own ways; her virtual body allowed her to reclaim the youthfulness and agility that she continued to feel in her mind, despite her physical ailments, and helped her make connections and form relationships with others (possibly thousands of physical miles apart) using virtual social interaction.

Because of their many cultural qualities, many current anthropologists have used virtual worlds as a stepping stone toward navigating virtual space through an anthropological lens and creating ethnographies of Internet culture. This is because virtual worlds are analogous to physical spaces in many ways—people act, interact, communicate, and create cultural institutions in virtual worlds in much the same way they would in any other setting—and they carry with them many of the same features that enable cultural creation in “actual” settings. The first of these features is that they are truly “worlds” in their scope and virtual size. Each can

support thousands of players at the same time (Boellstorff 2008, Castronova 2007), and have expansive areas in which these players have ample room to explore the landscape, form intimate groups, and participate in game quests and objectives. Oftentimes, these quests and objectives—which are based on a pre-existing cultural lore created by the game developers (Castronova 2005, Castronova 2007)—necessitate cooperation because they require multiple players to interact and work together in order to complete a goal that would oftentimes be unattainable for a single player, allowing for a group of individuals to contribute to the growing narrative of the game. In less game/fantasy-oriented virtual worlds (that do not have clear quests or achievements) such as *Second Life*, cooperation still plays a pivotal role because the purpose of the space is to allow users to experiment and create a new virtual reality in which they are both the architects of and participants in alternative lives (Boellstorff 2008). In order to live their virtual lives fully, players must therefore engage in social activity as they would in the physical world. Because the combination of the environmental and social components of virtual worlds create an experience that is both visually and emotionally engaging (Castronova 2007), players become connected to the space, other participants, and events on a level akin to that of “real” life, despite the fact that people are simply viewing these events through their personal screens. These visual and emotional stimulations help make the subcultures that are formed within virtual worlds meaningful, and give them a sense of reality that transcends actuality and shapes personal identity.

Like cultures in the physical world, virtual worlds also generate artifacts that circulate throughout a community, are incorporated into everyday life, and are given cultural value and meaning (Boellstorff et al. 2012). These objects, be it articles of clothing in *Second Life*, weapons and gear in *World of Warcraft*, or simply strings of text, make up essential portions of

life within a virtual world—contributing to the economy, politics, and social constructions of the in-game environment. These items, and their effect on in-game institutions, have led to a synergistic relationship between online and offline presence. For instance, when Boellstorff was conducting ethnographic research in Second Life, U.S. \$1,000,000 of economic activity was occurring daily. In fact, one player he encountered had even quit his “real-life” job because he was making over \$5000 a month in the trading and selling of in-game materials (Boellstorff 2008). Although these artifacts cannot be held and interacted with in physical space, they hold monetary value because they carry meaning and importance within the virtual world, which transfers over into international markets. Besides just economic and cultural ramifications, virtual worlds carry growing political substance as well. One form of “local” politics within virtual worlds can be observed when game developers—the local government, for all intents and purposes—alter the design of the game in response to community concerns (Castronova 2005, Castronova 2007).

The reason that I bring up the topic of virtual worlds in a paper about Pokémon, the Internet, and culture, is because virtual worlds are a prime example of how culture can be created in online space. The many aforementioned ways in which virtual worlds mirror real-life cultures not only show how the virtual environment is conducive to the formation of groups which produce narratives and subcultures, but how the Internet plays an integral role in such formations and productions. Although very early virtual worlds could not have been connected to the Internet, they were still linked through computer networks that enabled people (albeit at much closer physical distances) to interact in virtual spaces. Since the advent of the Internet, virtual worlds have almost exclusively been located on the Web, with companies dedicating large amounts of server space to store the massive amounts of data needed to maintain the large

environment. Without the Internet, virtual worlds would not have a means through which to exist—the Internet acts as a conduit through which all the cultural action on virtual worlds takes place. The ramifications of virtual world culture—their real world economic effects and the discourse they incite about the legitimacy of virtual space—takes place largely on the Internet as well (Castronova 2005). The ways in which virtual worlds have successfully generated culture can also be found in other platforms and Internet locales. Even without a virtual landscape that mirrors real-world physical environments, the Internet creates spaces in which people can meet, collaborate, and share ideas with one another. Video games that do not fit the full description of virtual worlds often still offer cooperative game modes, where players connect their games over the Internet and work through game objectives together. In other instances, fan bases of certain video games come together via the internet to create free guides to other players, creating communities outside of the game that continues to interact in a virtual space (Rogers 2016).

In the case of Twitch Plays Pokémon, the stream itself acted in many ways rather similar to a virtual world (although by any definition of virtual world it is not). The page containing the stream and the chat acted as the central “place” where the culture creation occurred—fans and players could “travel” there from other locations on the Web to interact with other people who inhabited the same space. These players, though not characterized by avatars or other representations of bodies, had their own virtual identities through usernames that appeared next to their text in the chat. Certain players and viewers therefore became recognizable to the rest of the community, depending on how active they were within the chat, whether they were community organizers or outspoken trolls. Another way in which the stream was analogous to a virtual world is that it was persistent—even after players left the page, the stream continued to exist, with thousands of others continuing to take up the task of guiding Red through the

challenges of the game. The fact that Pokémon Red comes with its own backstory and lore—information about what Pokémon are, the fictional region of Kanto etc.—and that the game follows its own storyline creates a cultural basis similar to that of fantasy virtual worlds such as World of Warcraft. With this knowledge base, fans and players could add to the already established narrative with the constructed meta-narrative, giving new meaning to events, actions, and outcomes of the game that already carried a significance to non-TPP Pokémon fans. The idea of virtual worlds creating “artifacts” can also be found in Twitch Plays Pokémon. In-game objects that held very little meaning to typical game players were given new statuses of great importance. One example of this reappropriation of artifacts (Boellstorff et al. 2012) can be found with the Helix Fossil. Normally, the Helix Fossil sits in the “item bag” for the majority of the game, until it is transformed into a Pokémon at a later point. For TPP players, however, the Helix Fossil was a guide, a god, and for some, a large motivator to persist and finish the game. In this way, the Helix Fossil became a cultural staple, an artifact that could be interacted with in virtual space and that influenced people’s attitudes and reactions toward the experience.

Another way in which the Internet facilitates and expedites culture creation is by supporting an unrestricted freedom to artistic and creative enterprise. Within virtual worlds, Boellstorff calls this phenomenon “creationist capitalism,” which, in his words, is “a social order of constituting relationships between persons through what are held to be prior acts of creativity,” (Boellstorff 2008). In Second Life, players are allowed to craft and build items, as well as create building structures and influence the environment around them. Creation and creativity are therefore a large part of the overall experience of Second Life. Within the virtual world, labor is understood in terms of creativity—with users spending time and effort building without conventional limits—and production is understood as creation—the final product being whatever

was created out of the creative labor (Boellstorff 2008). In the context of the game, creativity was treated as a commodity or exchange value, with skilled players lending out their services or selling crafted items.

Within virtual worlds, entire communities are formed around the concept of individual creativity. Through creativity, self-expression is highly encouraged and empowers players with a freedom that they cannot find elsewhere (Boellstorff 2008). This creative atmosphere is not solely reserved to virtual worlds, however. The Internet has a long history of supporting artistic expression. Today, there are many software programs and applications that through the aid of technology, ease and redefine the process of creation and design. Beyond these technologies, the community-centered format of the Internet, as well as its ability for users to give rapid feedback to content creators, creates an environment that is constantly updated with new artistic products. Just as the Internet brings the scope of globalization to an individual viewpoint, it also dissolves the unattainability often associated with the creation of art, literature, and other forms of creativity. Through sites like *Reddit*, *DeviantArt*, *YouTube*, and *Tumblr*, people can share their content, react to others' work, and circulate it throughout the online sphere. The Internet therefore provides a space for people to showcase their work, when physical places would not allow them to do so. This support for artistic creation that the Internet provides (as well as its relative freedom from censorship) helps create cultures because these works essentially act as artifacts and pieces of the overall narrative of whichever community by which they are claimed. Fan art played a vital role in the meta-narrative of Twitch Plays Pokémon; the myriad of original content surrounding the events of the stream flooded popular online discussion sites for weeks, bringing the narrative to other formats and opening up the subculture to a wide range of participants. In the sections below I will be analyzing this content for its cultural value, and—

now that the external factors and the role of the Internet in TPP's success have been thoroughly discussed—will be dissecting the meta-narrative and religion of Twitch Plays Pokémon through an anthropological lens.

Twitch Plays Pokémon and Religion

Those who experienced the phenomenon of Twitch Plays Pokémon first-hand were witnesses to an incredible anthropological event: a religion forming in real-time in front of them, in a span of weeks instead of decades or hundreds of years. Twitch Plays Pokémon therefore acts as a unique anthropological case study. The speed in which TPP's pseudo-religion formed and gained narratives and followers allows anthropologists to examine the rise and fall of a fictional religion and to compare its characteristics to those of well-established and heavily-observed religions. Although the religion of TPP acted as an enhancement to the gameplay, and not truly taken seriously by the majority of participants, the ways in which it mirrors other anthropological religious tropes reflects the cross-cultural characteristics of many religions and gives us insight into the nature of religion itself.

The first question that must be asked when looking at TPP through an anthropological lens is how anthropologists actually define and explain the phenomenon of religion. Of course, one explanation for the existence of religion—the most commonly identified explanation, despite its frequent absence from the academic gaze—is that humans are indeed beneficiaries of divine revelation and that there is indeed truth behind the beliefs, dogma, or sacred texts of any given religion (Klass 1995). While anthropologists do not deny this possibility, their practice focuses on what they can observe from cultures—and what they can observe focuses on the relationships that members of a community have with each other and important cultural institutions, and the

roles that such institutions play in that community. Therefore, this analysis will look at other anthropological theories regarding the emergence of religion in regards to Twitch Plays Pokémon.

In his book, *Ordered Universes: Approaches to the Anthropology of Religion*, Morton Klass describes religion as an ordered system of values, beliefs, and relationships that set out rules for topics such as death and meaning, and that orders the known universe as a means of control to eliminate chaos and human helplessness (Klass 1995). In other words, religion establishes certain guidelines within a community or culture that helps its members deal with situations outside of their own control. On a similar note to Klass, Bronislaw Malinowski posited that religion's main purpose is to counteract fear, dismay, and demoralization within a community by providing reinforcement of a group solidarity and an establishment of morale (Klass 1995; Moore 2012). Religion provides explanations for phenomena that humans struggle to explain, and offers a means of control in situations that go beyond normal human influence. By giving people this form of explanative power, religion allows for a release of psychological stress and internal conflict, and helps us give meaning, purpose, and order to a seemingly chaotic universe. Malinowski also extends this argument into his discussion of the utility of magic. He claims that "Magic, as the belief that by spell and rite results can be obtained...always appears in those phases of human action where knowledge fails man....He therefore deals with them magically," (Malinowski 1944). In other words, magic—and by extension religion—is an attempt to extend control over uncontrollable elements in nature: "The sick man...wants to feel that something can be done. He craves for miracles," (Malinowski 1944, Moore 2012).

In Twitch Plays Pokémon, the meta-narrative and associated pseudo-religion provided community members with the exact same outlet that religion provides cultures. The experiment

of TPP itself (with thousands of people attempting to control a single entity and complete a structured set of tasks) is an exaggerated example—a hyperbolic simulation—of the chaotic forces that humans encounter in their everyday lives. Chance and a lack of control were key factors of TPP; despite the combined efforts of the hivemind, it was often difficult to perform tasks that for a single player would have only taken minutes or even seconds. In order to make sense of their many failings, and in an attempt to give the experiment a renewed sense of meaning, the TPP community did not give up when they hit roadblocks, but instead created a story, and in the process took control and ownership over the events of the stream while simultaneously giving agency to forces beyond their control. These forces manifested themselves into characters within the meta-narrative, which were both bringers of goodwill and punishment. The pseudo-religion centered around Helix therefore helped give the chaos of the stream—and the misfortunes that stemmed from it—meaning, and turned the experiment into so much more than a typical game of Pokémon.

When considering the effects of religion on community itself, Émile Durkheim claimed that religion emerged as a symbolic expression of the social organism, providing cultural members with a “sense of unity” that acted as a societal glue of sorts (Klass 1995, Moore 2012). Along this same vein, Edward Norbeck asserted that religion acts to “uphold and reaffirm at regular intervals through collective ritual the sentiments and values of the society,” (Klass 1995). The ways in which religion theoretically fosters a sense of community and cohesion in society can also easily be seen in TPP. By participating in the meta-narrative, players, viewers, and other interested parties could come together despite their different roles within the experiment. Although TPP players were the ones actually inputting the commands into the emulator which made the avatar move through obstacles, others viewers who simply commented within the chat

and reacted to events also helped progress by associating words and ideas with in-game events, which content creators subsequently turned into tangible pieces of material culture through which the entire community could interact and form relationships. The intersectionality of these different roles provided by the emergence of TPP's meta-narrative and religion helped fans form a community and culture surrounding the phenomenon, where each role fed back into the others—providing them with ideas and explanations that would subsequently inform their future actions.

Besides facilitating the formation of a cohesive cultural unit, religion also allows people to play out certain roles within a society, and sorts people and entities into categories that help them understand different types of societal relationships. The first of these religious roles is the congregation, which simply encompasses any body of followers—be it a major world religion or a small, regional one (Klass 1995). TPP's virtual religion also followed this formula: the self-proclaimed followers of Helix, who praised the digital fossil for every good fortune of the stream, acted as the main congregation of the made-up religion. The Helix Fossil acted as a beneficiary to its followers, bestowing success upon those who believed in the power of Anarchy. A somewhat contrasting role to that of the congregation, which is commonly found in many religions, is that of the sinner. A sinner, broadly speaking, is any person or group of people who have violated the rules or beliefs of a religion and are therefore not in good standing with the rest of the congregation (Klass 1995). The sinner does not necessarily have to be a living person, but could be a prominent figure within the religion itself—a foil to the beneficial forces or someone or something about whom cautionary tales are told.

The religion of TPP has many parties that fall into the category of “sinner,” both within the actual congregation and as part of the emergent lore and meta-narrative. Within the mythos

itself, the main sinner that can be observed is the False Prophet—the Pokémon that players wanted to transform into a water-type but was accidentally transformed into a fire-type. The mistake that was made here by the hivemind was a huge blow to morale, as the chat had dedicated much time to the planning and execution of this task—all for an unwanted result. Because of this mistake, the newly-evolved “Flareon” became a symbol of defeat for the entire community and a reminder of their overall lack of agency. When Flareon became incorporated into the meta-narrative, it therefore became an entity that defied what the congregation was striving to achieve; “The False Prophet” promised hope and subsequently defied the players’ trust and the goodwill of Helix. It was a manifestation of all the obstacles that had to be faced by players, and was therefore an opponent to be defeated and conquered. By creating this narrative surrounding the character and the event, the TPP community created their own “sinner”—an antagonistic force to be fought against in the battle for Red’s fate.

Besides having a single mythical religious figure occupy the category of “sinner,” real-world TPP followers fell into this category as well. Players and viewers that rejected the values set out by the majority (the main “value” being continuing the game in Anarchy Mode) placed themselves into the meta-narrative as well, as self-proclaimed followers of the Dome Fossil (the other fossil from which players can choose in-game). The Dome followers worked in direct opposition to the main “congregation” by voting for Democracy in the chat and rebuking claims of praise and loyalty to Helix. By splitting into separate factions, the followers of Helix not only had a symbolic sinner to counteract, but real-life adversaries—who broke the rules and did not uphold the outlined values and morals of the congregation—as well. As seen through this particular example, and as Durkheim would attest, religion not only adds coherence and unity into a community, but conflict as well (Klass 1995). This conflict is not always unwelcome,

however. Conflict, just like hope or explanation, can give meaning to disarray or chaotic happenstances by organizing them into easily understood sides. With conflict also comes conviction and alternate viewpoints. For Twitch Plays Pokémon, the conflict between Helix and Dome followers gave community members a larger sense of purpose—attempting to convince others of their own understandings—and gave the stream a second strategy for when the chaos of Anarchy was too much for players to handle.

A third role that one might find themselves in within a religion is the officiant. The officiant is a widely-held category of people that might be privy to special religious knowledge or are the spiritual leaders of a congregation (Klass 1995). Although Twitch Plays Pokémon's religion was created by fans as the game progressed, some of these fans took it upon themselves to preserve the information that was being generated and deeply familiarize themselves with the growing mythos. An archive of the events of the stream created by community members in Google DocTM, with information about the characters, notable events, and even common phrases and prayers made up by Helix followers. Many different wiki sites (which allow for collaborative editing of its content by users) also cropped up, that offer intricate details about the time and description of in-game events. By putting it upon themselves to be the keepers and distributors of TPP knowledge, these players gave themselves certain status within the community that set them apart from the rest of the congregation.

Although TPP follows many of the general observations anthropologists have laid out about religion, it is important to note that the religious narrative to which that the fans chose to subscribe is largely Western in nature—mainly with the view that deities in the form of gods are of central concern (Klass 1995). For the purposes of the experiment, this inclination makes sense. First, because Internet culture is often largely influenced by Western ideals and values.

Besides this matter, the narrative of Pokémon is already filled with characters that act as central actors to the storylines. It was therefore quite easy to take these same characters and give them new religious meaning, promoting them to god-like statuses. Even though in TPP's case the religious narrative appears to be largely Western-influenced, the more fundamental aspects of religion—the societal and emotional benefits it appears to give communities—are still very recognizable in the way the religion was created and used within the fanbase.

Overall, what truly makes Twitch Plays Pokémon unique from other religious case studies is the fact that the preexisting conditions for the emergence of culture and religion were, in this instance, implemented intentionally in an artificial environment. The setting or physical space in which culture took place was entirely virtual and designed by human hands; the chaos and uncontrollable events were a part of the design of the experiment; the community members could choose to be a part of the participatory culture despite obstacles such as distance or language. Every aspect of the project's setup was by design, without any intent of forming a legitimate culture. However, despite the artificiality of it all, a religion managed to emerge. Though the religion was fictitious in nature, this detail does not take away from the fact that it was a necessary part of the overall experience of TPP and provided many of the exact same cultural benefits and characteristics that anthropologists observe in physical societies. Twitch Plays Pokémon therefore helps demonstrate how religion acts as an immense cultural force, and supports the argument that religion is a pan-human, cross-culturally valid institution that provides legitimate emotional and social resources within a given culture.

TPP Content Analysis

The staggering amount of original content that was produced based off of the meta-narrative of Twitch Plays Pokémon and the experiment itself was staggering. During the period of February 17 to March 1, 2014, TPP-related content made up on average 6.2% of the total Front Page (most popular) material on the website *Imgur*. *Imgur*, a well-known image sharing site, combines the most popular items on *Reddit* with its own most viral user-submitted content to make up its Front Page. This double-referenced system therefore makes *Imgur* a useful conglomerate space for analyzing widely-distributed Internet content. At TPP's peak popularity (Feb. 23), 11.5% of the Front Page's total content was related to TPP, with 19 out of the total 165 Front Page images for that day relating to the experiment. The fact that over one-tenth of the most viral content on the Internet on this day was dedicated to Twitch Plays Pokémon shows how pervasive the phenomenon was at its zenith—anyone who frequented content aggregation websites such as these during this time period was exposed in some form to the experiment through artwork, textposts, comics, and gifs. In the following content analysis, I will be summarizing the approximately 157 total TPP images that passed through the *Imgur* Front page during the duration of the experiment (Feb. 12-Mar. 1, 2014), and analyzing the common themes around which they were centered. I will also be looking at some comments that *Imgur* users wrote about these images, to explore how the community interacted with each other and the content that was being produced.

The type of content that was produced and distributed on *Imgur* about TPP can be placed into many different categories. The most popular categories of content were altered photographs and memes, which combined amounted to roughly one-third (54 out of 157) of the total content produced. “Altered photos” largely refers to any photograph which was superimposed with other

TPP-related images—characters, screenshots etc. Memes, though similar (and slightly more difficult to categorize), carry with them a sense of mutual understanding between themselves and the audience. To elaborate, memes are, in a way, an Internet inside joke—they are created, widely circulated and approved of, and then altered to fit whatever context is necessary. Memes can often take the form of images overlaid with text, or even a well-circulated gif with a modified title to give it new meaning. Altered photos and memes are more simply made than other, more complex forms of content, while still being able to successfully convey thoughts and ideas in an entertaining format.

The next three content categories, making up 48 out of 157 posts, include screen captures, parodies, and text posts. Whenever an exciting development happened within the stream, someone would capture a photograph or video of the event to share with the larger public. People also connected Twitch Plays Pokémon to a variety of other forms of pop-culture through parodies, making references to South Park, Lord of the Rings, Star Wars, The Hunger Games, Spongebob SquarePants, and many other forms of mainstream media content. These parodies came in the form of comic strips, gifs, and images, with references to tag lines and iconic scenes that were modified to fit the ongoing events of the game. The numerous parody posts that were created show that Twitch Plays Pokémon could easily be connected to other forms of media with similar concepts and themes. These connections demonstrate how TPP offered fans common ideas that they could relate to previous experiences. The third category, text posts, included content that was mostly composed of dialogue—in which a single user attempted to convey feelings or attitudes about the experiment that simple images could not convey. These posts included strategy plans, attempts to convince community members of certain actions, and general commentary about the gameplay. These text posts were unique in

that they oftentimes directly addressed the TPP community in an attempt to create a more organized and purposeful experience. By posting on sites such as *Reddit* and *Imgur*, these users included the rest of the Internet in their discussions, offering non-TPP fans a chance to become an active part of the community.

Besides the many different types of modified content that were produced during the time of TPP, many original TPP-related products also flooded the virtual sphere. Roughly one-third (48) of the content analyzed were original artworks, comics, and gifs that were created by Twitch Plays Pokémon fans. These works were made without reference to any other form of pop-culture, and did not use any elements from content that had been created by another person. Many of the pieces portray characters within the meta-narrative of TPP as the hivemind envisioned them, retellings of events within the meta-narrative, or depictions of “off-screen” side-narratives that could have potentially occurred within the guidelines of the overarching story and religion (“fanfic,” if you will).

One of the major themes that permeates throughout many of the original pieces is that of Noise and Quiet. To elaborate, some TPP fans interpreted the many commands that were being constantly input into the game as intrusive voices with which the main character, Red, was plagued. In a comic drawn by *Imgur* user Kiyokon at the end of the game, Red has defeated Elite Four and become the new Champion. His rival asks him how it feels to be victorious, and Red responds “Quiet,” as the audience sees the constant stream of commands fade away (See Fig. 1 in Appendix). This comic, as well as similar fan-made content, helps audience members immerse themselves into the meta-narrative by humanizing the avatar and turning him into a true character. Comics such as this also help audience participants imagine specific events within the stream (i.e. Red becoming Champion) as their own “micro-narratives” within the overarching

meta-narrative that was established within the chat. In the comic “The False Prophet,” by *Tumblr* user cheruderpart the theme of Noise resurfaces as Red’s Eevee (who will become the False Prophet), comments that there is something wrong with its owner, that he is tormented by voices that try to control him, taking away his free will. While exploring this theme, the comic simultaneously takes a unique stance on the true nature of the False Prophet—an idea that many other original pieces play with as well. In this comic, the False Prophet is not an evil disciple of the Dome, hellbent on destroying the hivemind’s collective efforts, but an innocent Pokémon who wanted to make its own decision as to what kind of Pokémon it would later become. In the comic, it is revealed that Red chooses for Eevee to become a Flareon as an act of defiance toward his oppressors (the voices, the hivemind): “I would be his Flame, untamed and free. I would signify his fight against his captors” (See Fig. 2).

The comic titled “The Keeper, the Dream Eater,” by *Reddit* user fangasm, also offers an alternative narrative for the False Prophet. In the story, both the Keeper and the False Prophet are trapped in the PC (which “canonically” fits the established meta-narrative). In a twist of events however, the Keeper is revealed to be a maleficent character that deceives Flareon and orchestrates Flareon’s destruction (See Fig. 3). This comic provides a fresh take on the False Prophet narrative because it shows “traditionally” antagonistic characters as sympathetic and sympathetic characters as antagonistic. The many different interpretations of the False Prophet that are shown through these original artworks help reveal the complexities of the meta-narrative of TPP. Although there is one “canonically” accepted narrative surrounding the False Prophet, other people were able to insert their own perspectives through content, and have that content be judged and discussed by their peers within the community. Despite the praise that was often given to these creative perspectives on the story, many commenters appeared displeased that the

work did not follow the original narrative. One *Imgur* user commented on a pro-False Prophet fanfiction “HERETIC!! Flareon was the false prophet, sent by the evil Dome to lead us astray. But we overcame it with the love of Helix. Praise Him!” The comment chain that was created in response shows many different viewpoints, from both TPP fans and casual observers. Helix followers responded with comments of “Praise Helix,” while Dome followers claimed that Flareon was indeed the true prophet, and that Helix and the Keeper spewed only deceit and lies. One final comment stated about the entire conversation: “See, this is the kind of talk that worries me.” Many similar comments on TPP-related content alluded to what observers labeled “cult-like” aspects of the TPP meta-narrative, with some, like the one above, expressing concern that the fictional religion was becoming “too real” to fans and followers.

This fictional religion is another large theme that was depicted in much of the original content of TPP. Since religion was such a central part of the meta-narrative, many fans attempted to express these religious sentiments through artwork, memes, and gifs. Many of the religious references exhibited in these works include tie-ins to Christianity, such as a meme depicting Omanyte (the Pokémon into which the Helix Fossil transforms) coming out of a cave like tomb with a stone guarding the entrance and the text “He is Risen,” (See Fig. 4). This meme, created on the same day that the Helix fossil was transformed, portrays Helix as a Christ-like figure, who had not shown its true form to its followers until that moment. Now Helix was more than just an item that was called upon, but an actual character with which players could interact—as if God had come to walk among mortals as he does in Christian dogma. Other content depicts Bird Jesus (aptly-named) as a Christ figure—one example includes a gif of Bird Jesus dressed in Christ-like attire (robe and sash) walking with the False Prophet (drawn with demonic features) on his back (See Fig. 5). This gif largely references Christ carrying the cross,

with Bird Jesus inserting as Jesus and the False Prophet taking the place of the cross on his back. Another piece of content shows a picture of Jesus with Bird Jesus's head superimposed over his body, rising above his disciples with a new Golden Rule: "Do unto others exactly what they just did to you." This new slogan references one of the "moves" that the Pokémon can use in-battle called "Mirror Move" which strikes back with the opponent's last move (See Fig. 6). In this way, Twitch Plays Pokémon not only borrowed Judeo-Christian symbolism and narrative, but reappropriated certain values to better fit into the context of the stream's meta-events.

Judeo-Christian iconography was not the only kind that made its way into TPP-related content. "A Most Sacred Tablet," by *Imgur* user WhoaConstrictor depicts much of the TPP meta-narrative in the form of an Ancient Egyptian mural (See Fig. 7). The piece borrows much from the style of ancient Egyptian iconography, with the characters taking on forms of ancient Egyptian gods. At the top of the digital mural, Helix looks down at the other characters, reminiscent of the Eyes of Horus and Ra in Egyptian iconography. The Eye of Horus is a symbol of protection, royal power, and good health—all of which TPP fans attributed to Helix. The Eye of Ra is a being that functions as a counterpart to the sun god Ra and subdues his enemies (Darnell 1997). Since Helix is placed over the Sun in this fan-created piece, the large eye might allude to Ra as well. The scales in the image largely refer to the Judgment of Osiris, in which, according to ancient Egyptian mythology, Osiris weighed a person's soul against a feather to judge whether they were worthy to pass into the afterlife. In the TPP depiction, the scales are part of the PC, whose key is guarded by the Keeper, along with many other popular characters from the meta-narrative. On the bottom "panel," the False Prophet occupies the space that is presumably the inside of the PC, (based on the other items surrounding him). Here, he is depicted as an antagonistic force, based on his proximity to the Dome.

The original content produced by TPP, besides providing insights into the intricacies of its meta-narrative and religion, also show how the phenomenon extended beyond the confines of the virtual sphere into the physical world. An example of this relationship can be found in a documented exchange between a pizza delivery worker and a customer that was photographed and uploaded online. In the exchange, the receipt shows the phrase “PRAISE THE HELIX FOSSIL”—either a comment that the customer left or the name with which they placed the order. Written inside the delivered pizza box can be found: “Dome Fossil 4 Lyfe,” (See Fig. 8). This exchange shows how Twitch Plays Pokémon was able to change the meaning of real-world objects—modifying them to fit into the ongoing narrative and connecting complete strangers over a fictitious religion based off of a children’s toy. TPP also made its way onto multiple newspaper articles and broke a Guinness World Record for Most Participants on a Single-Player Online Video Game. One fan even created a doll of the character ATV, modified to look like a combination of its Pokémon (Venomoth, which resembles a moth) and an actual All-Terrain Vehicle (See Fig. 9). This new design matched the fans’ representation of the character within the meta-narrative, again showing how TPP changed people’s perceptions of established items and bridged the space between the virtual and physical worlds.

Conclusion

Twitch Plays Pokémon was an unprecedented, explosive cultural phenomenon that carried with it many unique characteristics that have since failed to be reproduced within the virtual sphere. This crowdsourced attempt to play a single-player video game became so much more than its simple description—as players attempted to make sense of the seemingly-nonsensical chain of events that was unfolding behind their screens, they did what humans often

do: they created explanations, which when assembled together, turned into a story. This narrative then fed back into itself, informing players' decisions as to how they would continue progressing through the game. Eventually, this constant narrative feedback loop turned into a full-blown religion, with deities, prophets, warring factions, and material artifacts. The fact that a fictitious religion with complex lore and strenuous interpersonal relationships—whose subject-matter centered around a children's video game—was able to emerge in the span of mere days in a virtual space makes Twitch Plays Pokémon a prime example of how the Internet facilitates and expedites the creation of culture and narrative, as well as how the Internet is becoming an evolving landscape for anthropological research.

The many factors that contributed to Twitch Play's Pokémon success—the popularity of video games and streaming websites, the growing phenomenon of virality, and the universality of Pokémon as a genre—coupled with the Internet's capabilities for globalization and creative expression, reveal the complex and intertwined circumstances that allowed TPP to become the anomalous success that it was. The large amount of original content focusing on TPP's meta-narrative demonstrates a tangible expression of the culture that surrounded the stream and serves as a documentation of the interactions that occurred within said culture that (even though the experiment has long expired) will forever remain in virtual space as a reminder of the event and the online cultural phenomenon that it produced.

Despite Twitch Plays Pokémon fast-acting and far-reaching influence, the phenomenon was short-lived. After Pokémon Red Version was completed, the creator of TPP moved onto the next game in the Pokémon series. Although certain devoted fans participated in this second experiment—and even created original content to go along with it—the excitement and follower-base began to wane. A few weeks after its initial run, the amount of content and discussion

relating to TPP had greatly decreased, and three years later it is seldom mentioned. However, despite its silence, Twitch Plays Pokémon is long but forgotten. The original Twitch channel continues to stream crowdsourced Pokémon games (however, with viewer counts in the hundreds instead of the tens of thousands) and community forums remain active for ongoing fans. Although it appears that Twitch Plays Pokémon is now only a memory, the experiment provided unprecedented opportunities that can still be felt throughout the virtual sphere today: it popularized the concept of crowdsourcing within online video game culture, offered people new ways to think about the roles that virtual fan-based communities play in creating narratives, and finally, provided a concrete stepping-stone that anthropologists can use to legitimize virtual place as cultural space—helping future anthropologists better understand the intricacies of online cultural production as the field settles into the 21st century.

Appendix: Figures

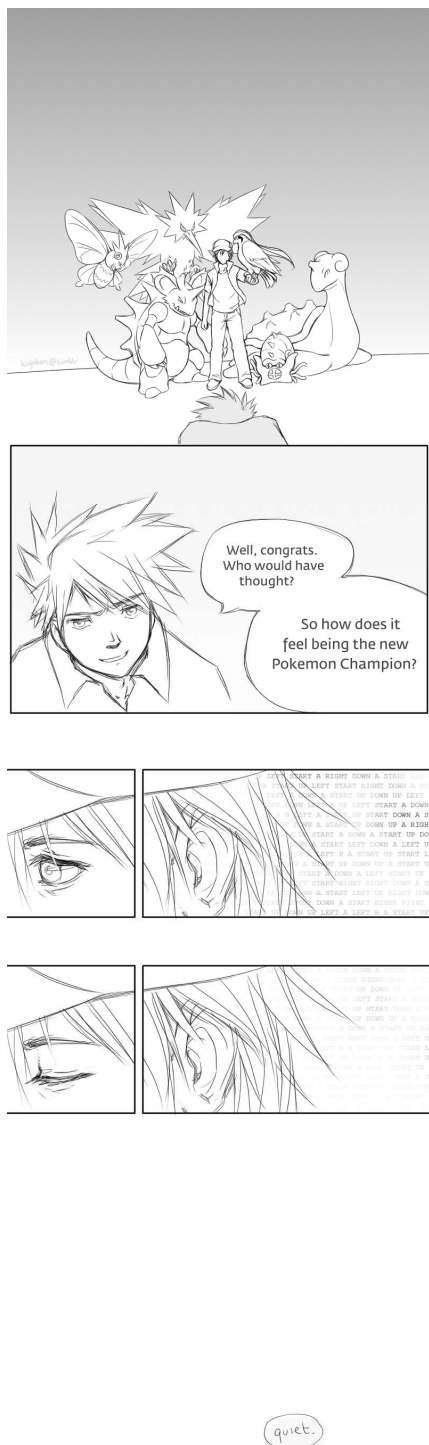


Figure 1: Comic by Kiyokon



Figure 2: Excerpts from “The False Prophet” by Cheruderpart

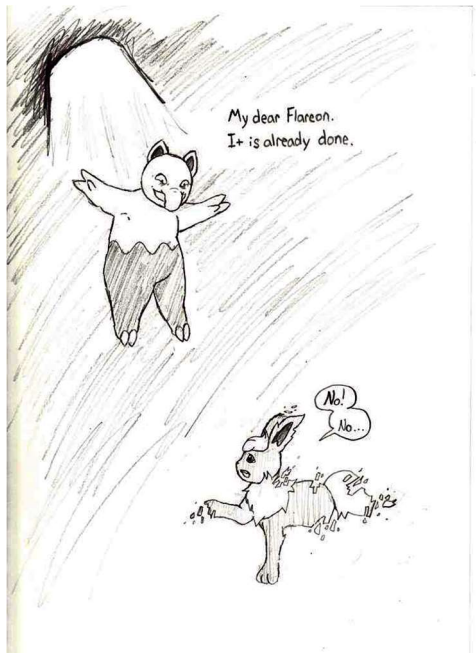


Figure 3: "The Keeper, the Dream Eater" by fangasm

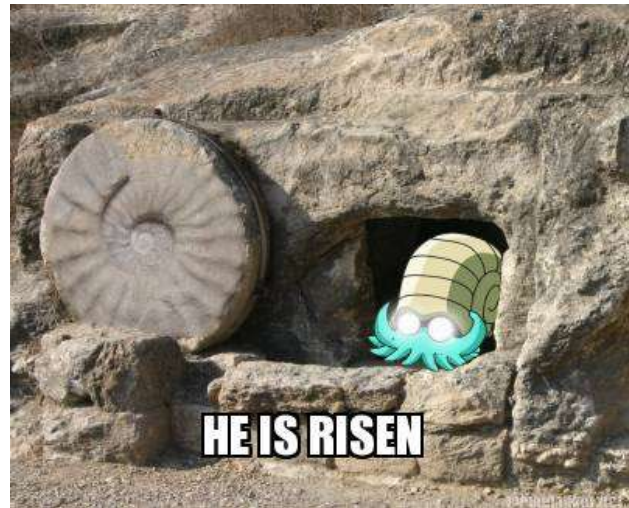


Figure 4: "He is Risen" Meme by GeorgeCrook

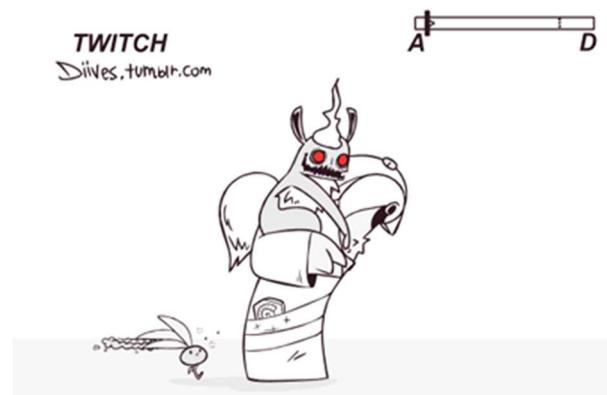


Figure 5: Still from Gif "The Painful Road of Bird Jesus" by linkhare

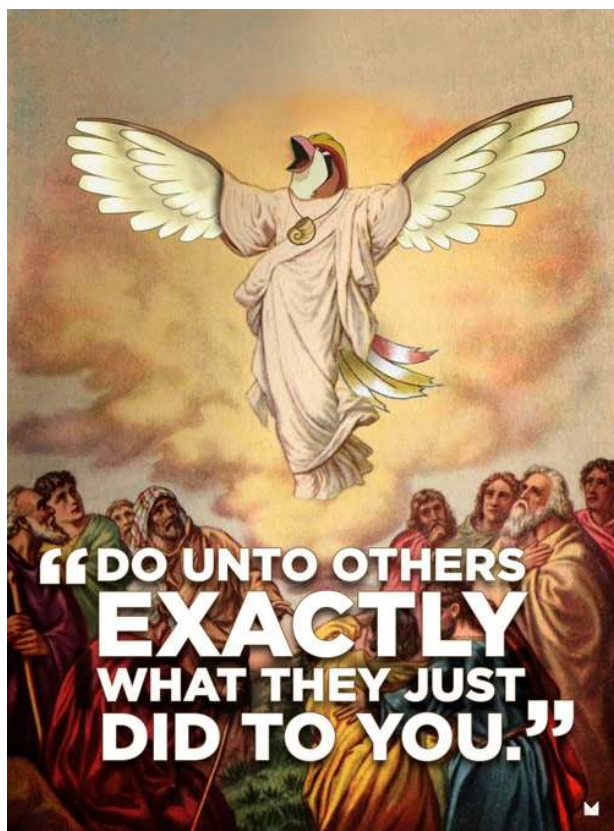


Figure 6: “Whenever Bird Jesus Uses Mirror Move” by MarkRantal



Figure 7: “A Most Sacred Tablet” by WhoaConstrictor

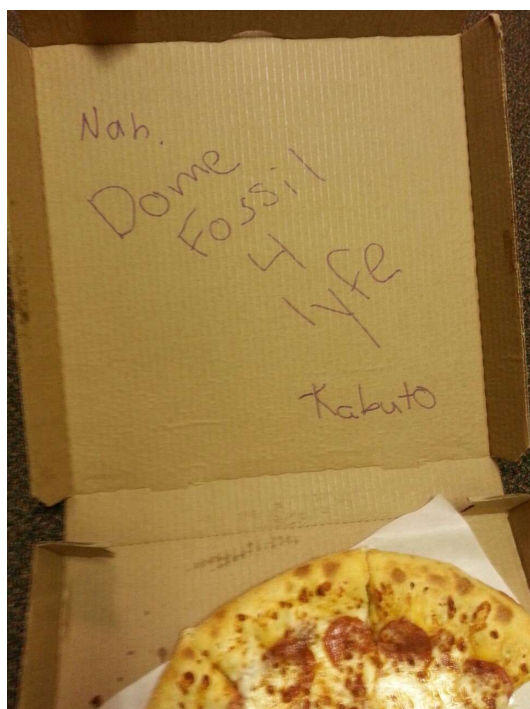


Figure 8: “Pizza Hut Confirmed for False Believer”



Figure 9: ATV Plush

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