

Twitch Plays Pokemon: A Case Study in Big G Games

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ABSTRACT

Given enough time, a thousand monkeys sitting at a thousand typewriters will produce the complete works of Shakespeare. Under a similar premise, the phenomena that is Twitch Plays Pokemon has set out to see if order can arise from chaos. Can a thousand gamers at a thousand computers collectively beat the game Pokemon? In this paper we analyse the phenomena of Twitch Plays Pokemon using Gee's (2003) framework of big G Games ((G)ames).

Keywords

Pokemon, Twitch Plays Pokemon, Big G game, Participatory Culture, Narrative, Affinity Space, Player Types, Stumblecore

Man. This isn't a thousand monkeys at a thousand typewriters. It's twenty thousand monkeys at a single typewriter, and half those monkeys are screaming and desperately trying to progress while the other half throw shit everywhere. It's wonderful.

—Anonymous, *Twitch Plays Pokemon Red Archive*

INTRODUCTION

Why would anyone willingly play a game with over 60,000 other players? Anyone who has played games knows how hard it is to share a controller with one other person, let alone 60,000 other people. The self-proclaimed social experiment “Twitch Plays Pokemon” (TPP) provided players with the unique opportunity to attempt just that, and quickly became an internet phenomenon (*know your meme*, 2014). Sixteen days after its debut on February 12, 2014, TPP garnered over 36 million views, 1,165,140 active players, and over 9 million inactive players, with a peak of 100 thousand people participating simultaneously (Chase, 2014).

Jim Gee's (g)ame and (G)ame theory provides a useful framework for understanding how the “Twitch Plays Pokemon” game and community came about and why it became so wildly successful in a short period of time (2003). Although current literature has described how (G)ame arises around (g)ame, there is a shortage of theoretical work regarding the cyclical influence of (g)ame on (G)ame. “Twitch Plays Pokemon” is therefore of theoretical interest because it provides a case study in the cyclical nature of (G)ame informing (g)ame.

(G)ame and (g)ame

Gee defined (g)ame, in the case of videogames, as a piece of digital media (or even transmedia) and

Proceedings of DiGRA 2014: <Verb that ends in 'ing'> the <noun> of Game <plural noun>.

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(G)ames as the “system made up of a game, a meta-game (various and sundry social interactions around the game), and affinity spaces that organize the meta-game explicitly for learning and mastery” (Gee, 2012). “Speed-running” is an example of a (G)ame. While beating a (g)ame as quickly as possible may not have been the designer's intent, this measure of success is no less legitimate to the player from the point of view of the (G)ame. The artificial constraint of beating the game in a certain amount of time, or beating a previously held record, changes how players interact with the game. Although pleasure is derived from achieving a best personal time, it is also derived by working together to develop strategies to achieve the fastest possible time (Turner 2005). For members of the TPP community, TPP had become more than completing *Pokemon Red* the (g)ame: it became about participating in the (G)ame.

The (g)ame of Twitch Plays Pokemon

Without a (g)ame, the artifact that exists outside of social interactions, there can be no (G)ame. It is worth noting, then, the components that made up the (g)ame of TPP: *Pokemon Red*, Twitch.TV and the TPP command parser.

Pokemon Red

Pokemon Red (Gamefreak, 1996), the game used in this experiment, was the first installment of the most successful role-playing game (RPG) franchise of all time (Nintendo of America, 2013; VGChartz, n.d.). As such, it has an immense fan base. *Pokemon Red* is an RPG where the player takes on the role of an aspiring pokemon trainer. This is accomplished through capturing, training, and battling creatures known as Pokemon. The game has been discussed at length in various academic literature (Tobin, 2004; Allison & Cross, 2006; Kent, 2006).

Twitch

Twitch.tv is a website that allows users to stream videogame playing sessions. It is often used for airing e-sport competitions, but is also used by players to stream their own gaming sessions. A Twitch.tv stream is composed of two parts: a window where broadcasters display their gameplay, and a chatroom where spectators comment on the events that occur. A normal Twitch.tv session is a passive experience for viewers who cannot influence the events displayed onscreen.

The Command Parser

Internet Relay Chat (IRC) Bots are no strangers to sites like Twitch.tv. By parsing chat data, IRC bots are able to moderate chatrooms, provide information, or keep running statistics about the room. In the case of TPP, an anonymous Australian modified code for an IRC Bot to accept predefined commands, such as “up” or “right”, and forward those commands to a video game. By setting up a stream on Twitch.tv in which anyone watching could input commands, a new way to play an old favorite was born.

TPP

When combined, these three components resulted in a new gaming experience. TPP turned the streaming of *Pokemon Red* into an active experience by allowing users to input commands via chat (e.g., Figure 1). As one could imagine, parsing hundreds of commands a second results in chaos. The protagonist stumbled his way through the game: he spun in circles, attempted to use items at inappropriate times, and generally performed actions no competent player would do (such as naming a member of their team “ABBBBBBK (“). Despite this, there seemed to be just enough consensus in the mind hive to make progress. As a result, the TPP community completed *Pokemon Red* within 16 days.



Figure 1: Multiple players entering different commands in TPP (Twitch, 2014)

TWITCH PLAYS POKEMON AS AN AFFINITY SPACE

A new affinity space centered around TPP quickly emerged. This affinity space drew heavily on three previously established and distinct communities. Fans of the wildly successful Pokémon series became interested in TPP as a way to experience the game in a new way. Members of Twitch.tv were interested in directly influencing a videogame stream, something that had not been possible before TPP started streaming. Live stream fans also benefitted from this merger, allowing them to play audience to a comedy of errors. Stumblecore¹ fans, and other gamers, took interest because of the new chaotic atmosphere and increase in difficulty that the (g)ame of TPP created. The new affinity space around TPP allowed for the combined activities of these affinity spaces, while the excitement surrounding the new experience helped to foster a community.

TPP garnered worldwide exposure through a collection of gaming news outlets, including Gamasutra (Ramirez, 2014), Joystiq (Suskeez, 2014), Gamespot (Haywald, 2014) and Polygon (Farokhmanesh, 2014) among others. This exposure helped to grow the community exposing interested parties to the phenomena. During the initial launch, #twitchplayspokemon and “Bird Jesus” (a meme from TPP) were trending on Twitter (Suszek, 2014). As of this writing, the TPP Facebook group has 44 thousand members (Twitch Plays Pokémon, n.d.).

Within days, players of TPP created: a subreddit² where players discussed strategy and significant events that happened in-game; a Google doc in which game stats were tracked³; a significant amount of fanart; a collection of inside jokes; and a running narrative. As TPP became more popular and more players started playing the (g)ame, a participatory culture emerged (Jenkins, 2009). According to Jenkins, a participatory culture is

“a culture with relatively low barriers to artistic expression and civic engagement [and] strong support for creating and sharing creations...In a participatory culture, members also believe their contributions matter and feel some degree of social connection with one another.”

For many of the players, the creation of the fan art, memes, and surrounding narrative was as important as completing the game.

THE TPP METAGAME

The new gaming experience, and social interactions that resulted, created the metagame of TPP. A significant portion of the metagame included constructing, recording, and reciting the narrative of TPP.

The emergence of narrative

Narrative is the method through which players make sense of an in-game world (Nitsche, 2008). According to Nitsche, narrative "...can create a supportive context for the necessary interpretation and prevent a chaotic and meaningless explosion of possibilities" (p. 43). Typically, games themselves have narrative components which help players interpret the nature of the game world and their role in it. *Pokemon Red* itself had such narrative components: the protagonist's job, he is informed, is to collect as many Pokemon as possible and to become the "Pokemon Master" by battling and defeating eight "gym leaders" and four other Pokemon trainers who are known as the "elite four". However, the method through which TPP was played introduced a "chaotic and meaningless explosion of possibilities" to the game resulting in random events, which were unaccounted for in the (g)ame. Those events were given meaning by the growing TPP community playing the (G)ame.

For instance, the Helix Fossil, an item in the (g)ame, cannot be used in most circumstances, but due to the game's chaos, it was repeatedly selected during gameplay. This act, a result of random input combinations from the mind hive, was interpreted by the community to hold significance to the game's protagonist, as if the protagonist were consulting The Helix Fossil when he "didn't know" what to do next. The Helix Fossil "appeared on screen so frequently that it came to be viewed as an object of worship and guidance by TwitchTV users" (*know your meme*, 2014). According to one reporter,

"...the Helix was promoted from "magic advice giver" to "messiah," which is certainly a reasonable leap to make. Cries of "Praise Helix!" arose from the chat whenever things went well, and it became so integral to the adventure that some people thought bringing the fossil to the Pokémon Laboratory was more important than actually beating the game. After 11 straight days of lugging around a useless rock, *Twitch Plays Pokémon* reached the lab and earned its Omanyte. He was proclaimed Lord Helix, god of anarchy, and there was much rejoicing." (Barsanti, 2014)

Within this description, the author describes, and adopts, the terminology used by the TPP community. Following the attribution of the Helix Fossil as holy, terms such as "messiah", "praise", "lord", "god", and "rejoicing", which are usually terms used within the context of Judeo-Christian discourse, were adopted by the community to explain the motivations underlying the seemingly strange pattern of behavior exhibited by the protagonist. The following prayer, which can be found in the *Pokemon Red Archive* Google doc, makes this allusion to Judeo-Christian belief even more salient, as it is a take on what is known as "The Lord's Prayer" in certain Christian groups (Kang, 2007; *The Book of Common Prayer*, 1979).

Pokemon Red Archive Prayer

Our Helix, Who art in fossil.
Hallowed be your shell,
Your evolution come,
Your will be done
In Kanto, as it is in Sinnoh,
Give us this day our daily gym badge,
And forgive us our start spam,

The Lord's Prayer

Our Father who art in heaven
hallowed be thy name.
Thy kingdom come.
Thy will be done
on earth as it is in heaven.
Give us this day our daily bread,
and forgive us our trespasses,

As we have forgiven those who pressed down on the ledge,
against us,
And lead us not into the way of the domed one,
But deliver us from Eevee,
For thine is the move-set,
the rare candy, and the SS Anne ticket.
Amen

as we forgive those who trespass
and lead us not into temptation,
but deliver us from evil.
For thine is the kingdom,
and the power, and the glory,
for ever and ever.
Amen.

The prayer, as it appears in the Pokemon Red Archive, alludes to many events that occurred within the game, as well as objects and characters the TPP community deemed to be important. “The Lord’s Prayer” provided a framework through which members of the TPP community could interpret the meaning of events. For example, “As we have forgiven those who pressed down on the ledge” refers to the incident in which game progress was impeded by a movement-based puzzle for about 6 hours. Those players who “pressed down on the ledge”, the move which specifically impeded the game’s progress, were considered to have “trespassed” against the TPP community members who wanted to move forward in the game. By replacing the “evil” in the line “But to deliver us from evil” with “Eevee”, the name of a Pokemon in the game, the TPP community identified Eevee as an unworldly antagonist. By imposing a well-known religious narrative onto chaotic gameplay, the TPP community was able to derive meaning from seemingly random actions. The (G)ame, then, provided a frame of reference through which the community could understand actions within the (g)ame.

Changes in (g)ame influence the meta-game

On the sixth day of the experiment, the system was modified to introduce a democracy system in response to a movement-based puzzle that had been impeding progress for almost 24 hours. This new system gathered votes for 5 seconds before executing the most voted for choice. In addition to voting for an action, the new system also made it possible to vote how many times that action was used. For example, a command of “a2” would simulate the pushing of the “a” button twice. While some players welcomed this change, the majority of the players did not and proceeded to submit commands of “start9” which effectively halted all progress in the game. The outrage was also expressed in chat with users messaging “RIOT” (see Figure 2). This community backlash led to amendment of the system so that, in addition to issuing a command, players could also vote for either democracy or anarchy. Despite having the ability to switch to a mode of democracy, the majority of the time playing TPP was spent in anarchy.



A screenshot of a chat log with a light gray background. The text is color-coded by player name. The messages are as follows:
that: down
nzoo: start
loped: \ / RIOT \ /
b14: dasdas
zucakes: b
star330: \ / RIOT \ /
efallox: Was that so bad?
glejoe: \ / RIOT \ /
mus_slot: \ / RIOT \ /
eic: \ / RIOT \ /
y : \ / RIOT \ /

Figure 2: Players posting RIOT in response to the democracy system

The backlash to the democracy system effectively divided the players by what they perceived to be the

purpose of TPP. One group of players wanted to experience the game in anarchy and believed the chaos was essential to this new experience. This group enjoyed the artificial obstacles imposed by players with different agendas and enjoyed the bizarre circumstances that followed. Another group wanted to finish the game and saw the coordination of thousands of people to beat *Pokemon Red* as the real victory. These players saw the chaos, and other players who worked to undermine progress, as a detrimental and frustrating part of play. Although both sides seemingly shared the goal of completing the (g)ame, users who supported democracy appeared to prioritize getting to the end-game, whereas users who supported anarchy appeared to value experiencing the chaos imposed on the (g)ame. While both sides wanted the same thing (to beat the game) one sided seemed the favor the experience, while the other was focused on the destination. These two ideologies emerged in the (G)ame narrative of TPP as warring religions, which in turn dictated how the players conducted themselves in-game.

Players were self-aware of the impact that their actions had on the TPP (G)ame and began to deconstruct the influence in order to provide an argument as to whether or not people should play in anarchy or democracy modes (Procrastinare 2014). The self-described followers of Helix (anarchists) believed that most of the fan art was created as a result of rationalizing mistakes made in game. They argued that the community was created because of this chaos, and would stop being vibrant if people made less mistakes (which was a by-product of playing in democracy mode). Anarchists also held that playing the game “correctly” removed players’ agency and was no different than a normal stream where players had no influence over the events. Followers of the Dome (democrats) believed that chaos was detrimental to beating the game and that things got boring if simple actions lasted for more than an hour. Democrats also believed that if the game was played in anarchy, it would never be beaten, resulting in wasted time and effort.

The metagame’s effect on gameplay

The mythology surrounding the Helix Fossil and the Dome within the TPP community is but one strand of narrative that emerged during the course of gameplay. According to Bruner (2010), narrative “not only shapes...our ways of experiencing the world, but it also gives form to what we imagine, to our sense of what is *possible*” (author’s emphasis). As the narrative of TPP emerged and saturated the TPP community, it changed which possibilities the hive mind considered when progressing through the game. In other words, the actions of the mind have become informed by their own game narrative, which originally arose to explain the game’s chaos.

A salient example of the TPP (G)ame influencing the way players interacted with the (g)ame can be found in the management of a specific mechanic of the game, the PC. An important part of the *Pokemon* series is managing the Pokemon that have been captured. *Pokemon Red* only allows the player to have six Pokemon on hand with which to battle. When this threshold is met (e.g., the player captures another Pokemon but already has six active Pokemon), the other Pokemon get sent and stored into what is known as “the PC”. By using the PC, players can switch their six active pokemon with others they have captured. It also allows players to delete Pokemon they may not want permanently from the game (this is known as “releasing a Pokemon” within the game’s fiction.) For a single player, management of this system is easy. For several players playing simultaneously, it is quite difficult.

Players attempting to use the PC during TPP ended up releasing several of the captured Pokemon, which was considered an unfavorable outcome. In order to explain this unforeseen event, players developed a narrative in which the PC was an evil god, and the released Pokemon were sacrificed as a result of player actions. This became known as “Bloody Sunday” (*know your meme*, 2014). Due to this line of narrative, players refrained from using the PC through most of the game. Abstaining from using the PC is an

example of how the (g)ame (accidentally releasing Pokmeon from the PC) influenced the (G)ame (the PC being an evil god which sacrificed Pokemon on “Bloody Sunday”), which in turn affected how players interacted with the (g)ame (refusing to use the evil god that is the PC.)

LEARNING AND MASTERY

After the completion of TPP, TPP community attempted to beat the next game in the Pokemon series: Pokemon Crystal. Having witnessed the success of the previous game’s narrative, players believed the new (g)ame lacked suspense and decided to permanently release a Pokemon in order to generate drama. This act created a divide in the TPP community, as members reported that it felt “forced”. This sentiment carried over to the subreddit where players, anxious to create lore around the new game, submitted content that was rejected by the community at large. This pushback against new lore points to the importance of those who may not have generated content, but are playing the (G)ame.

Learning and Peripheral Participation

Lurking represents a legitimate form of peripheral participation in TPP. As defined by Lave and Wegner, legitimate forms of peripheral participation are

“the particular mode of engagement of a learner who participates in the actual practice of an expert, but only to a limited degree and with limited responsibility for the ultimate product as a whole.” (Lave and Wegner 1991 p. 14)

Lurkers gave players inputting commands an audience for which to perform, helped the community grow through word of mouth, and provided feedback to content creators. For example, the TPP subreddit provided a voting system in which lurkers could upvote or downvote submissions, letting the creators know which ones they liked and wanted to see more of. This, in turn, shaped the (G)ame of TPP.

As the community evolved, the knowledge required to be considered an active member of the community grew. As a result, experienced members created diagrams and other artifacts to both record the community's history and help others understand it. One such example is a flowchart of the various religions associated with TPP⁴. The flowchart provided an explanation for the significant events that lead to the creation of Helix and Dome followers and subsequent splinter groups such as Flareon Apologists. By becoming associated with these artifacts, and interacting with the community, lurkers could slowly increase their level of participation in the community.

Mastery

Mastery of the (G)ame TPP meant different things to different players. One way to understand mastery in the (G)ame of TPP is to adopt Bartle’s player types as a lens. In his influential piece, *Hearts, Clubs, Dimonds, Spades: Players who suit MUDS*, Bartle specified four unique player types: Explorers, Achievers, Socializers and Killers, commonly known as “griefers” (Bartle 1996). Each group had its own unique style of play as well as motivations for playing the game. Although more modern definitions of common player types have emerged, Bartle’s four original stereotypes tend to encompass most interactions around games (Bartle 2004; Koster 2013). Using these player types, we can examine what was considered mastery in the (G)ame of TPP by the roles players assumed in the community.

In Bartel's definition, Explorers are players who play a game in order to experience its novelty. These players may find more enjoyment from interacting with the virtual world than they would from completing quests. For explorers who had played *Pokemon Red*, TPP presented to a way to replay the a game they loved from a different perspective (as a stumblecore game). Explorers who may not have played

Pokemon Red before were given the opportunity to explore the Pokemon universe for the first time. Most explorers were intrigued by the new mechanic and played in order to determine if beating the game was even possible. Because of the uniqueness of TPP, most explorers embraced the chaotic nature of TPP and identified with the Anarchy mode of play. Because “Praise Helix” was a result of this anarchy, explorers identified with Helix which was considered by the community to be a symbol of Anarchy. Mastery as an explorer meant reveling in the new experience of TPP.

Achievers, according to Bartle, find enjoyment from completing quests, challenges and achieving high scores. To this group, completing the game is the ultimate feat. Likewise, Achievers in TPP wanted to finish the game, and believed managing chaos was the main draw of TPP. These gamers generally did not like unexpected occurrences and developed strategy posts in order to achieve certain goals. Achievers enjoyed the addition of democracy mode because, although slower, it helped them avoid activities that were thought to be a waste of time (such as spending hours trying to solve a maze). In the (G)ame these players were seen as followers of the Dome because they rejected what many considered to be the spirit of the game, chaos, which was embodied by Helix. Mastery as an Achiever in TPP meant executing commands and strategies successfully.

Players who play a game mostly for the social components of the game are called socializers. These players find fulfillment watching others play, sharing strategies, and interacting with other players in-game. In TPP, socializers were active in chat room and provided commentary on events that ensued. The creation of the TPP subreddit is most likely the result of socializers who wished to have discourse in a location that was not constantly flooded with commands. The main goal of TPP socializers was to tell a coherent story, often providing fan art, and fanfiction. Socializers had no particular allegiance believing chaos provided opportunities for original content while democracy ensured progress. Some might have identified as Followers of Old Amber who saw benefits to both anarchy and democracy.

The last category, Killers, or Grievers, contains players actively try to undermine the goals of the game. These players attempt to find exploits, use the games for means other than their original intention, and, when playing with others, find more entertainment in angering other players. In TPP Killers actively tried to impede progress. If the mind hive wanted to go up (apparent by the commands in chat) they would enter “down”. The evolution of flareon is attributed to Grievers who actively worked against the wishes of the collective to create a fire pokemon rather than evolve it into a water pokemon. Success as a greifer meant undermining the rest of the TPP community by actively working against them.

In many instances, players identified as one or more of these archetypes. The attempted release of a pokemon to cause drama, for example, could be attributed to Socializers and Killers working in tandem towards different goals (Enraging players and generating more content). While there was often plenty of friction between these parties, TPP was a success because of all of them.

CONCLUSION

Given enough time, a thousand monkeys sitting at a thousand typewriters will produce the complete works of Shakespeare. Or so goes a permutation of the Infinite monkey theorem which states that given enough time, randomly generated sequences of characters will result in a reproduction of Shakespeare's seminal plays. Under a similar premise, the phenomena that is Twitch Plays Pokemon started as a social experiment to see if order can arise from chaos. However, TPP, with it's community and collective bias towards beating the game, cannot be seen as a purely random system and probably won't give us much insight into the infinite monkey theorem. Instead we are left with insight on how a community interacts

with a (g)ame producing rich narrative, complex social interactions, and the (G)ame of TPP.

ENDNOTES

1 The appeal of games that are frustrating due to difficult controls has led to its own subgenre, known as stumblecore, and may be one reason for TPP's success. Games such as QWOP (Foddy.net), Surgeon Simulator (Bossa Studios, 2013), and Octodad (Young Horses, 2014) use difficult controls to create new, and often comedic, gaming experiences. While adding difficulty might seem counter to fun, failure is actually directly related to enjoyment of a game (Juul, 2009). If a game is too easy, players feel cheated. This is especially true in stumblecore where part of the fun is overcoming the terrible controls to accomplish otherwise mundane tasks. TPP is similar to stumblecore in that the simultaneously executed commands introduce a new level of difficulty resulting in comedic situations. However, unlike other stumblecore games, this added complexity is a community-created constraint and was not intentionally designed.

2 Internet forum located at <http://www.reddit.com/r/twitchplayspokemon/>

3 <https://sites.google.com/site/twitchplayspokemonstatus/red-archive>

4 http://www.reddit.com/r/twitchplayspokemon/comments/1yyxi3/the_evolution_of_religion_in_tpp_ii/

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