Well Played

a journal on video games, value and meaning

Well Played v1n2

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Preface

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What makes a game good? or bad? or better?

The Well Played Journal is a forum for in-depth close readings of video games that parse out the various meanings to be found in the experience of playing a game. It is a reviewed journal open to submissions that will be released on a regular basis with high-quality essays.

Contributors are encouraged to analyze sequences in a game in detail in order to illustrate and interpret how the various components of a game can come together to create a fulfilling playing experience unique to this medium. Through contributors, the journal will provide a variety of perspectives on the value of games.

As with the three Well Played books, the term "well played" is being used in two senses. On the one hand, well played is to games as well read is to books. So, a person who reads books a lot is "well read" and a person who plays games a lot is "well played." On the other hand, well played as in well done. So, a hand of poker can be "well played" by a person, and a game can be "well played" by the development team.

Contributors are encouraged looking at video games through both senses of "well played." So, with well played as in well read, contributors are looking closely at the experience of playing a game. And with well played as in well done, contributors are looking at a game in terms of how well it is designed and developed.

The goal of the journal is to continue developing and defining a literacy of games as well as a sense of their value as an experience. Contributors are invited to also discuss games in general (ranging from tabletop, to big games and more) and how they are often designed for different fields (education, entertainment, etc) as we more fully develop a literacy around games and play. Contributors are encouraged to consider using screenshots and video of their gameplay in order to help illustrate their ideas. And we're open to suggestions on themed issues

around a specific game or a topic across games.

Video games are a complex medium that merits careful interpretation and insightful analysis. By inviting contributors to look closely at video games and the experience of playing them, we hope to expand the discussion, and show how games are well played in a variety of ways.

Well Played session tracks are also being held at academic and industry conferences. The Well Played Journal will be published regularly. We won't develop a set schedule until we have a good sense of the amount of quality submissions. Our goal is to publish as often as we have great essays. There won't be a subscription, although as with all ETC Press publications, all issues will be available for download for free, and we'll offer print versions for sale through Lulu.com.

BioShock and *Portal*:
A Discussion of Poetics

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Poetics, as outlined by Aristotle (350 BCE), serves as a framework for analyzing dramatic and literary works of art. In his treatise, Aristotle defines the basic elements of drama to be plot, character, theme, diction, music, and spectacle. More recently, Janet Murray (1997) posited *The New Poetics,* in her book *Hamlet on the Holodeck,* which updated this framework to include immersion, agency, and transformation. The combined use of these frameworks creates a powerful structure capable of elucidating the parallels and distinctions between literary works. This essay compares 2K's *BioShock* and Valve's *Portal* along the aforementioned dimensions to explore if such a structure is well suited to examine why both of these games achieved critical success.

BioShock is a first-person survival shooter set in an alternate 1960 and the player assumes the role of Jack, a plane crash survivor, who must explore the underwater city of Rapture. The game is one of the highest rated games, scoring 96 out of 100 on Metacritic, a website that collates critic reviews, and 8.0 out of 10 from users ("BioShock PC Review," n.d.). It was lauded for its immersive environment and its implementation of mortality. *Portal* is a first-person puzzle-platform game set in an alternate 2010 and the player assumes the role of Chell, a test subject, who must overcome challenges in the Aperture Laboratory. The game

is also one of the highest rated games, scoring 90 out of 100 on Metacritic and 9.5 out of 10 from users ("Portal PC Review," n.d.). It was praised for its original gameplay and darkly humorous story. Both games were released in 2007.

According to Aristotle (350 BCE), plot encompasses the mechanics of storytelling as well as the sequence of events through which the characters interact. The plot structure of these games develops along similar lines, despite the differences in genre, playtime, and difficulty. The player enters these worlds and undertakes the exploration of an abandoned space that was contrived by one man realizing his vision. Curiously, that man has already been, or is poised to be, succeeded by a character forged by the conditions of the respective societies.

BioShock's Andrew Ryan is an Objectivist businessman who envisioned Rapture, an underwater metropolis, as a safe haven for those artists and scientists oppressed by their governments or religions. Despite the founding principles, dystopia emerged and class divisions arose. Frank Fontaine began to undermine Ryan's authority through revolution in an attempt to seize control of the city (Tobey, Monacelli, & Levine, 2007).

Portal's Cave Johnson is an entrepreneur and founder of Aperture Science and he pursued scientific progress with fervor. His zeal lured Caroline, his personal assistant, into becoming the personality for a Genetic Lifeform and Disk Operating System affectionately named GLaDOS. GLaDOS is the computer artificial intelligence that tracks and monitors all testing progress within Aperture Laboratories after Cave Johnson dies (Marie, 2010).

The player must slowly adopt aspects of the world to adapt to new challenges presented by their respective environments. Jack starts splicing his DNA with a mystical, gene-altering substance that grants him superhuman abilities such as shooting lightning bolts or fireballs while Chell learns to use the portal gun to navigate the treacherous testing chambers. The audience sympathizes and identifies with the protagonists from their respective worlds because very little is known about the

protagonists other than they are in unfamiliar environments; this feeling of isolation and trying to find oneself is immediately recognizable and identifiable. The protagonist's, and by extension the player's, prime motivation upon starting the game is to first explore the area.

Speaking from a strictly plot perspective, both Chell and Jack have no choice in arriving at their respective environments. Jack survives a plane crash and enters Rapture due to the influence of his mental conditioning. Speaking from a game play perspective, the player is given the illusion of free will to approach the lighthouse entrance to Rapture; the environment is set up so that the player feels drawn further down into lighthouse by subtle lighting and directional cues. In *Portal*, the player is locked in a room with a small radio playing funky music. Then a disembodied, robotic voice welcomes the player but exhibits signs of malfunction which serve to spark curiosity. When a portal opens in front of the player and with no alternative paths to take, the curiosity becomes overwhelming and the player steps through the portal.

BioShock grants the space for the player to grow, develop, and realize their character through a subset of choices, both gameplay oriented and morality oriented. The player goes on a journey to define his or her identity in a world that was so desperate to create one separated from the world above. Jack encounters weapons he can use or plasmids that grant him special powers by changing, or splicing, his DNA (Murdoch, 2007). This symbolizes the manifestations of change that he goes through, just as all the citizens of Rapture did before him. The only aspect that affects the story is the morality choice given to the player which centers on harvesting or freeing the characters known as Little Sisters. Although the choice is binary, it creates a sense of choice.

Portal on the other hand, takes the player on a pre-determined journey through the world with no narrative choices to make. Chell starts in a specifically designed test chamber to highlight

the introduction of portals. GLaDOS informs Chell about the testing procedures to acclimate the player to the game space, and successive trials of heightening intensity are introduced to the player. In fact, there are a few puzzles that the player must complete without their own portal gun to demonstrate an understanding of portal mechanics (Valve, 2007). The only choice available to the player is strictly game play oriented: how to solve each challenge. This is a function of their respective genres since *BioShock* is a survival RPG whereas *Portal* is a first person puzzler.

Aristotle (350 BCE) posits that in the relationship between plot and character, there exists a "third necessary character" that is instrumental in bringing the climax. The "third necessary character" in *BioShock* is Andrew Ryan. He is the architect, visionary, and leader of Rapture and it is he who is established as the enemy from the onset of the game. Frank Fontaine, introducing himself to the player as Atlas, cajoles Jack into believing Andrew Ryan needs to be taken down for Rapture to flourish. Upon meeting Ryan, the player learns the true nature of what is occurring and understands that Atlas, who is now revealed as Fontaine, is the true enemy. During this confrontation, Andrew Ryan forces Jack to physically beat Ryan with a golf club to demonstrate to Jack that he has the ultimate power of choice. Without Ryan and his teaching-by-dying, the set up and reveal of the true villain would not have worked and it is that pivotal meeting which serves as the narrative climax for the story.

In *Portal*, the "third necessary character" is the weighted companion cube, a box with hearts drawn on each face depicted in Figure 1. Although this character never talks or moves or communicates in any way, it is essential to the story and teaches an important part of the game play mechanic for defeating GLaDOS in the end. In a short sequence during one of the levels, GLaDOS gives Chell the companion cube and warns her not to get attached to the cube, and reminds her that the cube cannot speak. The cube literally saves Chell's life as she holds it to block

incoming energy balls. At the end of the sequence, GLaDOS instructs Chell to incinerate the cube and mocks her throughout the process. The mechanic of taking objects and throwing them into incineration tubes is instrumental during the fight with GLaDOS; the player must take pieces of GLaDOS and throw them into tubes in the same fashion. Similar to Andrew Ryan, the companion cube must die in order to teach Chell how to destroy GLaDOS.
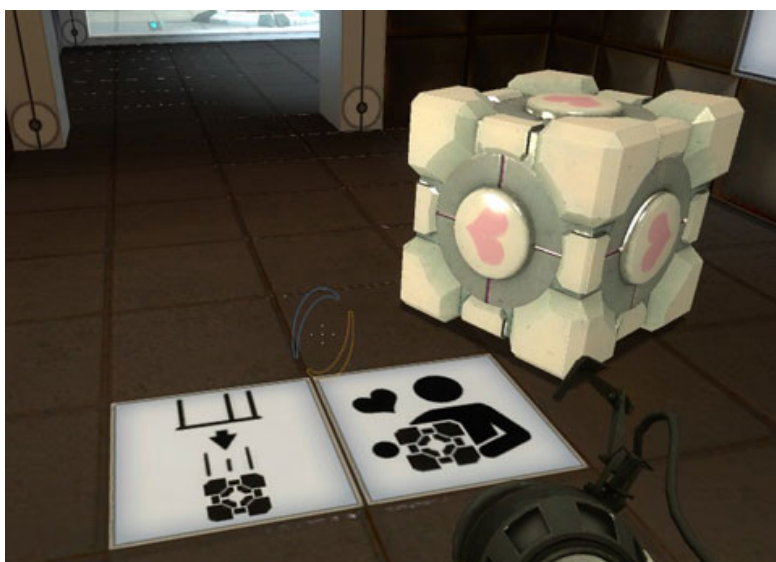
Figure 1. The weighted companion cube, Chell's one friend in *Portal*

Besides the overt conflict between Jack and Andrew Ryan, and then Fontaine, *BioShock* drips with conflict on almost every layer of its narrative. In fact, upon entering the lighthouse, the first thing that comes into view is a statement that clearly lays out a conflict with authority: "No gods or kings. Only Man." When Jack descends in the bathysphere, an elevator-like contraption, into Rapture, a short video narrated by Andrew Ryan explains the

premise behind Rapture. He defines conflict with politics, with god, and with human civilization, and how he explains his vision to create a sanctuary. This introduction posits a main theme that runs like a thread through everything: the philosophy of Objectivism.

Objectivism holds that reality exists independent of consciousness; people can directly perceive reality and obtain knowledge through that perception. Rand characterized Objectivism to be grounded in reality so that people can determine their own purpose and define their own nature (Rand, 1962). Similarly, Andrew Ryan designed Rapture to embody those principles and his character was directly influenced by Rand's work (Tobey et al, 2007).

There is a common theme that threads both games together by virtue of their environments and the individual who constructed said environments. They involve a sole architect realizing a vision to its logical extreme through the creation of a seemingly pristine but dystopian environment that ultimately drives itself after the original architect is removed. Although he only makes an appearance in *Portal 2*, Cave Johnson is the parallel character to Andrew Ryan. He consistently puts the progress of science above any individual's life and this pursuit is epitomized in his creation of GLaDOS.

Portal's primary conflict exists between Chell and GLaDOS. Indeed, this conflict ties in with the game's central theme of science, robotics, and ethical research. Chell's struggle in the testing chamber represents a logical extreme of unethical testing. The entire Enrichment Center flaunts societal standards of ethical testing and considers death an outcome that does not hinder the progress of the science they are pursuing. Although the game is wrapped in a heavy blanket of sarcasm courtesy of GLaDOS, she continues to serve this theme. Since she sees humans as simply a component of the testing procedure, she epitomizes some of the concerns posited by Isaac Asimov. GLaDOS's testing protocol and erratic behavior directly violates all of

Asimov's Three Laws of Robotics, which he describes from his stories in *I, Robot* (Asimov, 1950).

Aristotle (350 BCE) further identifies that dramatic works include diction, which is how the work speaks to its audience and is conveyed through tone, imagery, and dialog among other elements. The tone of Rapture and Aperture Science's Enrichment Center are poignantly dark and mysterious. This is demonstrated through visual cues such as dissonance between what is expected from the world and what actually is. The main voices in both games serve this tone by leading the player to expect one thing but then surprising them with the reality of the environment. Andrew Ryan speaks in a very lofty tone as if he is continually speaking down to the player. Atlas speaks in a pleading tone yet becomes derisive when he reveals himself as Fontaine, making the twist that much more severe. On the other hand, GLaDOS speaks in a very warm tone initially and transitions to sardonic and sinister tone as the game's message comes into focus. She even becomes frantic as Chell makes her way through the underbelly of the facility, emphasizing her loss of control and simultaneously heightening the player's own sense of mastery.

The imagery in *BioShock* all point to the notion of a better life, which is what Rapture is supposed to embody. This imagery is conveyed through elements such as the advertisements of products that are designed to make life easier, as seen in Figure 2. The imagery is continued through the now desolate house parties in almost every apartment and through the architecture of Rapture since it is a city fully separated from everything that stifles progress (Tobey et al, 2007). However, these are all painfully ironic since the exact products advertised led to the genetic demise of the citizens, the parties threw the inhabitants into a primitive fugue that disconnected them from their identities, and the abandoned buildings threaten the integrity of maintaining a city underwater.
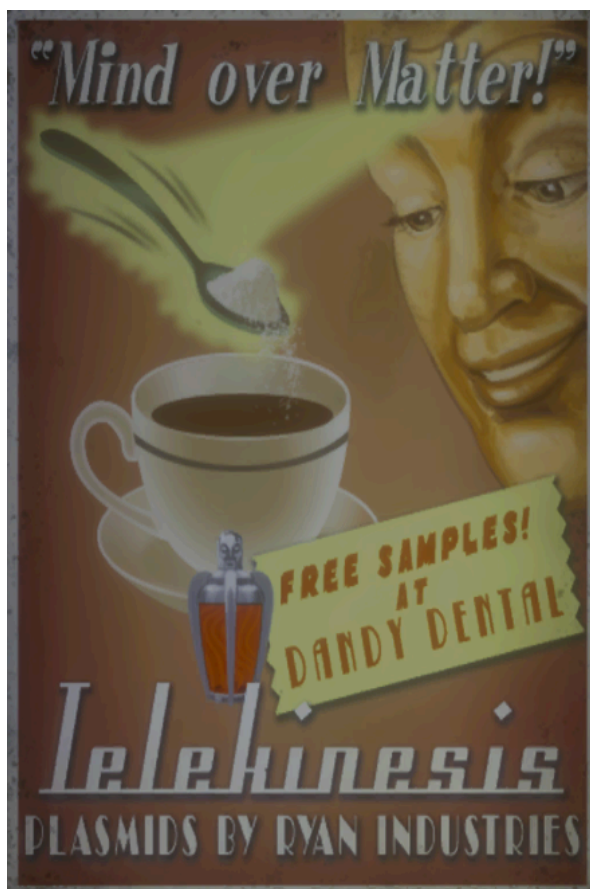
Figure 2. An advertisement for one of the powers available to the player

The imagery in *Portal* relies on the notion that scientific progression will enhance our lives, regardless of the cost. If one is a poor test subject, they simply perish in the test. If one is a good test subject, such as Chell, and completes all the challenge set forth then they are disposed of at the completion of the testing procedure because they have outlived their usefulness. Fortunately for Chell, there is a malfunction which grants her the opportunity to escape. The irony of the environment is divulged here as the player can start to explore the inner workings of the Enrichment Center.   It is here that the player begins to see the

larger workings of the laboratory and finds repetitive scrawling notes on the wall, indicating that someone else was here and they have clearly gone mad.

Music plays a fundamental role in both of these worlds to communicate their messages and establish the setting. In *BioShock*, phonograms pervade the world and play music from the 1940s and 1950s, which is consistent with a world that departed from reality in the 1960s. The songs are from a recognizable past and help to ground the world as not so distant from our own as well as concretely define the era (Tobey et al, 2007). The score excellently highlights the rhythm of Rapture as an underwater world set apart from the surface by contempt and hubris. The pacing of the predominantly violin and piano soundtrack subtly hints when the player is free to explore or when they should be on their toes. By using these two instruments in the forefront of the soundtrack, the music creates a classical feel that is flexible enough to portray the wide breadth of emotions necessary to deliver the crucial moments with the impact they need.

Portal relies on a non-lyrical ambient soundtrack which accommodates the eerie feeling of being constantly isolated in testing chambers as a mechanical voice taunts and berates the player. The ambient soundtrack also serves the double purpose of granting the player a contemplative space to perceive the challenge and creatively generate solutions to the problems. In addition to this soundtrack, the credits play the song "Still Alive," written by Jonathan Coulton for the game and sung by GLaDOS, voiced by Ellen McLain. The song became an fan sensation because of its humor and it also provided closure for the game. In an interview, Valve's Kim Swift said that it was their intention for players to leave the game "genuinely happy and with a smile on their face" (Kumar, 2008).

Both soundtracks also share one key element: they communicate the concept that something is not quite right in this world. There's something off about Atlas and his dynamic with the protagonist,

and there is something behind GLaDOS's incessant obsession with testing. Without the music, the beats of the story would carry far less or even no weight.

Spectacle (Aristotle, 350 BCE) embodies the visual and design aspects of the games that encompass the look and feel of the production. The spectacle of *BioShock* is not surprisingly in its detailed environment. Simply put, all aspects of its production contribute meaningfully to the spectacle of Rapture. The first sight of Rapture is seen from the bathysphere, and Rapture is an underwater metropolis complete with skyscrapers, despite their underwater disposition, and tubes that run among the towering structures. The costumes of the enemies are clearly identifiable and reflect the high life of Rapture, drawing the contrast between expectation and reality even deeper. Perhaps the most dramatic of all is the lighting. The game plays intimately with the sensation of light as a comforting presence which makes the absence of it that much more frightening. The use of lightning to lead the player is also prevalent, illustrated in the lighthouse introduction scene which playfully entices the player and leverages their curiosity. The areas just ahead are dark, and only after the player takes the first step into darkness do the lights illuminate where the player has actually entered. This is a motif that continues throughout the game.

Portal's spectacle lies within its primary gameplay mechanic. It bends physics and creates an environment in which those rules of physics make sense. Moreover, there is a childlike sense of curiosity and wonder when playing with portals for the first time and the portal gun is a genuine toy for the player. The portals render the world through them so they can be used as scouting devices to look around corners that are otherwise inaccessible, and objects can even interact with themselves in portals if they are positioned properly (Barnett, Swift, & Wolpaw, 2008). The level design points to potential portal locations and guides players' eyes in specific ways. The walls are colored differently to give depth to the visual space and also serve to let the player know on which surfaces he or she can place portals. Additionally,

the bright red buttons or colored cubes stand out against the austere background of whites and grays.

The greatest spectacle is that both games create a compelling and fully immersive environment. Narratively, these two environments were contrived by one person and intended to be futuristic and sleek, yet both break down in terrible ways. In fact, the inhabitants, or lack thereof, of both worlds are dead in some fashion. In *BioShock* they are metaphysically dead since they have altered their genetic structure beyond recognition and interact in primitive ways. In *Portal*, the humans are physically dead since GLaDOS flooded the Enrichment Center with a deadly neurotoxin.

Both of these games resonate so deeply with me because the worlds are vividly and viscerally real. The society within Rapture clearly sundered long before Jack arrived, yet remnants of what it was still exist through the charred architecture and the audio recordings, to name a few sources. *Portal* presents a machine-controlled environment that is starkly contrasted with the run-down areas behind the scenes. This is communicated visually through the pristine paneling and contrived walk spaces of the testing chambers contrasted with the chipped walls and broken, rusty catwalks behind the scenes. Additionally, the environment gives the player a window to previous inhabitants through the scribbling on the walls and the abandoned research posts that the player can explore. The worlds are strikingly different from each other yet each are grounded in some alternate reality with familiar elements to our existing reality.

As Ken Levine describes in his podcast interview (Tobey et al, 2007), *BioShock* is set in an alternate 1960s and heavily draws on Art Deco for inspiration in its art and architecture because this particular movement represents elegance, functionality, and modernity. Moreover, this familiar artistic and design style helps ground the world of Rapture with familiar shapes, patterns, and colors. The Art Deco designs speak to achieving greatness beyond human capacity and Rapture attempts to be the

quintessence of this unchained ambition and industrialization. Rapture's ruin and unsymmetrically destroyed buildings highlight the dissonance with its founding philosophy and emphasize its dystopian atmosphere.

Janet Murrary (1997) expanded on Aristotle's list of dramatic elements to include immersion, agency, and transformation. Immersion is achieved through the setting that surrounds the player through their experience, agency is the power to see results from meaningful choices and actions and transformation is the capacity for a player to not only witness a story, but to interact with it and take part of the story as their own, personal experience.

The creators of *BioShock* crafted an entire universe within Rapture. Although the people are fundamentally changed, the way of life still permeates the area. Wine bottles are strewn about and masquerade masks adorn the table showing the extravagant way of life. Levine (2007) further highlights the audio recordings of Rapture's citizens, which helps construct a human aspect to the world as the player can listen to the struggles of everyday life in Rapture and he or she can discover the citizens' individual stories. Moreover, there are posters and advertisements true to the style of the time that sell products with the gusto and panache expected of 1950s salesmen. Even the short informational videos that orient the player to newly learned plasmids serve the narrative with their overly enthusiastic presentation style.

Portal is set in the Enrichment Center for Aperture Laboratories, though it's commonly referred to as Aperture Science. The events of *Portal* take place somewhere in the year 2010 and although exact dates are not given, the events start about 12 years after the lab was abandoned (Keighley, 2011). The environment is clearly futuristic to represent a cutting edge research facility. The aesthetic seeks to portray a clean and efficient research atmosphere yet the underbelly is rusted and not maintained, depicting a clear dichotomy between what is presented and what is known internally. The machinery still seems functional despite

the lack of a human presence, which seems to grant GLaDOS an almost mystical quality.

Most of the game occurs within specifically designed test chambers. The elements within these chambers all serve this initial narrative from the clean, white tiled walls to the sleek video cameras following the player through each level. Any gameplay factor is explained through the narrative and each aspect continues to serve that narrative. For example, the designers do not want players to carry objects from one level into another so they incorporated a method to destroy any carried objects upon leaving an area (Valve, 2007). The narrative explains this phenomenon as an invention of Aperture Laboratories and names the device the Aperture Science Material Emancipation Grill.

Within these detailed environments, the player must learn to navigate the complex virtual worlds by making continuous choices. *BioShock* grants the player agency with the decision to either harvest or save the Little Sisters. This is the only truly meaningful decision in the game since all other actions are oriented around the gameplay whereas this choice is a clear break from gameplay, further indicated by its own user interface specific to that part of the game. Furthermore, this is the only choice that matters for determining the final ending to the game. Since there are three endings, i.e. save all the Little Sisters, harvest all the Little Sisters, harvest at least one Little Sister, there is a replayable aspect to this component of agency in the game.

Portal gives the player significantly less agency. In fact, the player never makes a choice that can influence the outcome of the experience. However, there are moments that give the illusion of player choice and thus create a small sense of agency. For example, after Chell completes the test, there is a scene which establishes that Chell will be discarded. When the contraption malfunctions, Chell is given the opportunity to escape through a side door. GLaDOS instructs her to remain where she

is and to not run away. Although there is no alternative path and the event is scripted, the player feels the illusion of rebelling against GLaDOS's command.

Additionally, both games heavily employ spatial navigation as their primary mode of player agency. Both environments contain landmarks to help orient the player though the secondary purpose of the landmarks differs between the games. *BioShock* gives the player space to admire the details of the intricate world and appreciate the juxtaposition of the grand Art Deco style of the world with the clear disheveled society that inhabits it. *Portal* uses landmarks such as tall platforms, bodies of water, and observation decks to help the player spatially map the test chamber because the player's sense of up and down constantly shifts.

Alongside agency, both game spaces grant the player freedom to experiment with their abilities. In *BioShock*, the player is encouraged to combine plasmid powers through experimentation with the environment. For example, if an enemy steps into a pool of water, the player can use an electricity bolt and zap the pool to deliver a shocking surprise. To add another layer the player can gently direct enemies to a refreshing pool of water by igniting the enemies' flesh. In *Portal*, the player quickly realizes they can use the portal gun in unintended ways that are eventually woven into puzzle solutions. For instance, the player can shoot one portal on the floor and another right above it on the ceiling. This creates a loop in which the player will fall into the floor portal and exit from the ceiling portal, directly above the floor portal. Eventually, the player achieves terminal velocity and the feeling of certain self-satisfaction from defying physics. If the player shoots another portal, they can launch out of it and maintain all of their momentum.

Figure 3. An infinite loop that allows the player to eventually reach terminal velocity

As a result of the autonomous choices the player can make, both the in-game characters and the player themselves experience a transformation. As Jack delves deeper into the world of Rapture, he changes both figuratively and literality. He learns more of the political subtleties of the world and changes in response to the characters impressing upon him. From a gameplay perspective, the plasmids he uses to modify his DNA literally change his appearance and DNA structure to reflect the sacrifice of losing his humanity to become part of Rapture. Part of Andrew Ryan's goal was to fundamentally change humans to change society. On a deeper level, the grand reveal of the mental conditioning is the crucial turning point for Jack. This awareness is accompanied by gameplay ramifications including a word, to which Jack had previously been conditioned, that Fontaine says in attempt to stop his heart.

This parallels the personal transformation that occurred within players during the game's climax. This is a social commentary about the mission system in games and the readiness for players to take up a cause because of the pretense set forth by the game. "Would you kindly" is a phrase seductively whispered to every

player every time they accept a new goal. This leads to the realization that in the game space it is normal for a non-playable character to simply lay out the rules of a world and instruct the player to achieve an objective. Atlas gives the player no time or space to consider why Jack entered Rapture, evaluate what truly happened, decide for myself what to do, and determine my own involvement in this unfamiliar world. Jack eventually learns he is simply a cog in a larger plot, as seen in Figure 4.

Figure 4. The realization that this phrase was actually a component of Jack's brainwashing

Contrastingly, *Portal* gives very little agency to the player since the experience is fixed from start to finish with no choices available to the player. This results in minimal transformation since the player isn't necessarily enacting their own story or carving their own path. In fact, this mirrors Chell's own lack of transformation. She begins as a test subject and even after defeating GLaDOS, she is pulled back into the laboratory to continue testing in *Portal 2.*

The only character that truly transforms over the course of the *Portal* mythos is GLaDOS. She is responsible for testing and maintenance of the facility but reveals that she has been corrupted and killed everyone with a deadly neurotoxin. In the

final fight, the player rips out her personality cores and she drastically changes each time. Continuing the mythos of GLaDOS into *Portal* 2, she changes even further as she begins to understand who she was prior to becoming GLaDOS. She fully actualizes after this moment and can finally let go of Chell since she can continue her testing with robots. Her character change is the single most significant transformation in the *Portal* mythos.

In conclusion, the combined use of Aristotle's and Janet Murray's work creates a framework that is well suited for analyzing any work of fiction, including games such as 2K's *BioShock* and Valve's *Portal*. Ostensibly, these games are different on the surface; *BioShock* is a dystopian survival-adventure game and *Portal* is a science fiction puzzle game, yet both games succeed in deeply engaging the player. As this analysis demonstrated, the design of both of these games aligns closely with the dimensions of this combined framework which deepens their experiential meaning. Beyond the gameplay, both games provide rich, immersive environments that are set in an alternate version of our familiar world. Moreover, both games have a layered plot and multifaceted characters, namely a principal architect with a clearly defined philosophy and a sinister antagonist that helps the player in an attempt for strict personal gain. Although there is no certainty in this, the successful interaction of these elements may have contributed to the positive reception of these games.

Aristotle's (350 BCE) basic elements of drama include plot, character, theme, diction, music, and spectacle, and Janet Murray (1997) added immersion, agency, and transformation as additional elements of drama. By jointly analyzing two games along these dimensions, one can explore trends between two seemingly different games from separate genres and understand how the games connect on levels that may not be immediately apparent.

References

Aristotle (350 BCE). *Poetics*. Retrieved from http://classics.mit.edu/Aristotle/poetics.mb.txt

Asimov, I. (1950, Dec 02). *I, Robot*. New York: Gnome Press.

Barnett, J., Swift, K., Wolpaw, E. (2008, Nov 04). Thinking With Portals: Creating Vavle's New IP.

Gamasutra: The Art & Business of Making Games. Retrieved from

http://www.gamasutra.com/view/feature/3839/thinking_with_portals_creating_.php

BioShock PC Review. (n.d.). In *Metacritic*. Retrieved from
http://www.metacritic.com/game/pc/bioshock

Keighley, G. (2011, Apr 21). *The Final Hours of Portal 2*. Available from
http://thefinalhoursofportal2.com

Kumar, M. (2008, Feb 27). Best of GDC: The Secrets of *Portal*'s Huge Success. *Gamasutra: The Art &*

Business of Making Games. Retrieved from

http://www.gamasutra.com/php-bin/news_index.php?story=17625

Marie, M. (2010, Mar 24). Aperture Science: A History. *Game Informer*. Retrieved from

http://www.gameinformer.com/b/features/archive/2010/03/24/aperture-science_3a00_-a
-history.aspx

Murdoch, J. (2007, Jun 04). BioShock. *Gamers with Jobs*. Retrieved from

http://www.gamerswithjobs.com/node/32465

Murray, J. H. (1997). *Hamlet on the Holodeck: The future of narrative in cyberspace*. New York:

Free Press.

Portal PC Review. (n.d.). In *Metacritic*. Retrieved from
http://www.metacritic.com/game/pc/portal

Tobey, E., Monacelli, E., & Levine, K. (2007, Feb 13). Episode Three: What is Rapture? *The Culture of*

Rapture Podcasts. Podcast retrieved from
http://www.2kgames.com/cultofrapture/podcasts-bioshock/page/1

Rand, A. (1962). Introducing Objectivism. *Ayn Rand Institute Website*. Retrieved from

http://www.aynrand.org/site/PageServer?pagename=objectivism_intro

Valve Corporation. (2007). In-game Developer Commentary. *Portal*. Bellevue, WA: Valve Corporation.

We should be heroes…
A case study of community building as a dominant strategy

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Introduction

Once upon a time in a not so distant galaxy a game researcher ventured into the world of persistent multiplayer games. He was not really there for the social stuff but loved strategy games – looking back two years later; he realized that he had been trapped. The cynical game researcher that had previously laughed at miserable people, cruel fates being caught up in online communities was no longer laughing at other online players' strong attachments to online communities.

During the years he experienced the destruction of his first clan, the hope for a better place in a new clan, which he was forced to turn his back on due to the outside world's pressure. Missing the game too much he descended once again into the game that would probably hardly qualify as a sub-quest in World of Warcraft in development hours: The graphics crude, the technical solutions hopeless, management a nightmare, and cheaters too often soup of the day. Sure, the game was free but that hardly made up for the problems. So, why did so many play it, and

continuously failed to leave it? Many of those who left swearing not to return came back - only to find the same ugly graphics, bugs, cheaters, and a long list of other problems.

My starting point is that the game pulled people back because community building and playing the game was closely intermingled. The game developed so community building became the most important criteria for winning. Achieving community building as a complex part of the gameplay made the simplicity of the core game less important – the building of a community was enough challenge.

This paper argues that slowly the simple gameplay led to the emergence of a number of structures that supported community building, and changed the gameplay. The link between gameplay and community is examined by looking at the most important gameplay mechanics, and how the successful engagement with these mechanics is dependent on a strong community. A strong community became the main strategy for winning the game although of course other skills were also needed. The importance of social interactions and community in MMORPGs is hardly unknown however I believe that I can bring something new to the table by showing an even closer relationship between community and gameplay than most MMORPGs like Everquest (Jakobsson and Taylor 2003)

The empirical data comes from 2½ years of playing Heroes regularly for 5-20 hours a week in three different clans. I have not revealed my research interest as I only recently decided to write this paper because I felt Heroes was an interesting example of a simple online game where gameplay emerged with close ties to community building.

It is always quite hard to use a computer game that few really know. To really get to my discussions I need to describe the game in some detail. Although a bit cumbersome, I feel that there may be an extra benefit to such a game description. It may move the light away from the huge mainstream multimillion dollars Massively Multiplayer Online Role-Playing Games that tend to

dominate game research, game market, and the game industry (Eladhari 2003). A tendency that has recently been challenged by game guru Raph Koster pointing to the example of RuneScape (Ruberg, 2007). RuneScape is also a quite simple massively multiplayer online game. A description, of an in many ways amateurish persistent turn-based multiplayer online game, may be one way to open our eyes to the real strengths of online games that is so easily lost in what seems an endless stream of clones within the MMORPG genre. An endless upgrading of graphics and more complexity but seldom changes in the underlying gameplay assumptions. You still level up by slaying monsters while exploring an online world. I believe that the number of less pricey online games that focuses more on gameplay than graphics may have a lot to offer. For example the Swedish soccer management Hattrick game is just about to reach 1.000.000 active players worldwide showcasing some interesting gameplay innovations.

Game description

The Danish text-based, turn-based online strategy game called Heroes is basically set in a Viking universe, although the direct references inside the game universe are very few both in gameplay, text and visuals – the theme plays a minor role. Still, The Viking universe plays a role for many Danes as the golden age of honour, loyalty, and valour. The Viking setting influences the construction of the game's tacit rules that are continuously discussed and negotiated. It also frames the social interactions. For example you have inns where players meet to drink mead like the Vikings did. The names of clans and tribes are also inspired by Viking mythology.

The gameplay of Heroes is inspired by Utopia, which is a US-based online game with 80.000+ players. Heroes currently has 3500 active Danish players (2009 numbers). An active player is one that has logged in within the last month. After one month a player is automatically deleted. The number of players may not seem very large but it is quite big considering the Danish population is only 5 millions. If we assume that World of Warcraft

has a market of 800 million potential users this would mean that Heroes on the same market would relatively speaking have 560.000 players.

The game has never been commercially marketed, and can be described as gaming subculture. It is in opposition to what most mainstream computer games stand for. It doesn't focus on graphics, sound, and development happens randomly with game mechanics slowly evolving. The evolution from predecessors like Utopia is still quite profound witnessed by the fact that playing Utopia is certainly not the same experience as playing Heroes. Over the years the two games have moved in different directions.

The players are made up of practically all layers of society from 11-year-old school kids to 50 year old family fathers playing with their entire family in the game. However, there is still an overabundance of young males. The game has 90% male players, and an average age of 22 years. Each player has a tribe that is part of a clan with a democratically selected chief and supporting management. The clan usually consists of 25 to 55 tribes that more or less work together. You can make official alliances with other clans. A game will last for app. 1½ months with all players starting from scratch except old players keep their tribe's id and may stay in the same clan with their tribe.

The game is quite simple on the surface, giving you one turn each ½ hour that you can use for building infrastructure, raiding opponents, sending reinforcements, building troops, or attacking other tribes. You can only save up to 150 turns equal to approximately being online every third day. An action is usually performed by writing a number, and clicking a link.

You can attack other tribes at any point in time as long as you have more than 200 warriors. However, usually your clan picks a time for a raid, where as many tribes as possible meet up and attack an enemy clan together. Usually you need to reach a certain level to make raids worthwhile including spending money raising an army compared to building your infrastructure. In terms of gameplay, the raids are the essence of the game experience,

where everybody is online at the same time. The activity levels at popular raid times bring up to 50% of all tribes in the entire game online making the servers lag severely. The lag is no small accomplishment considering the game is text-based and clicking a hyperlink performs your actions.

The importance of raiding

The best indication of how strong a clan is in Heroes is the raid performance. A raid is a set time for fighting another clan usually announced a couple of days in advance. The raid is the single most challenging aspect of the game, and it makes or breaks a clan. The raid can take a number of forms from one-hour raid with peace afterwards to daylong wars, or ultimately war for the rest of the game round. You can seldom win a raid if you are out-gunned by more than a few tribes. Still, a strong turnout can sway the battle your way, and is hence extremely important.

The importance of raid activity is witnessed by an evolution towards producing user-generated structures to get the highest turnout and coordinate attacks. A rooster list has been implemented for people to sign up for a raid on the forum, and tribes are expected to have a certain turn-out percentage for a game round (1½ month). All clans use an outside chat forum to communicate during a raid to insure collaboration and timing.

Raids have historically not always been a part of the game. Initially tribes just attacked other tribes more or less without coordination. There were no common enemy, no alliances, and no shared agenda. However, slowly it became clear that a coordinated effort was a clear advantage. So raids came into being, and are now the dominate way of fighting. This is a clear example of a quite complex emergence phenomenon, where new complex ways of playing emerged with matching user-generated game structures (Juul 2002; Johnson 2001). Because raids became so important a number of other structures emerged to support the raid activity, and raids became so important that they form the entire game's focus leading the game towards a focus on community building. To ensure the power of raid you really

had to maintain a strong community with turnout, collaboration, altruism and discipline, which will be explored in the following.

When looking at successful raids, they rely on the following four characteristics: activity level, game experience, sense of community, and group cohesion. The importance of the four characteristics is agreed on by most players in the game. It is hard to explain exactly why the four characteristics are the most important for raiding, and ultimately the game, to outsiders, but I will try to present a few arguments. First of all, raids are intense, confusing, and call for good nerves. You need to have game experience and group cohesion to deal with the changing tides during a raid, and know what to do. A raiding clan that doesn't coordinate, stay online when brought down by the enemy, wait patiently for counter-attacks, listen to the chief, help other tribes, or keep the morale high will not make it to the top. They can easily lose even if they have more tribes than an opponent.

Another important aspect is the activity level that decides how many really turn up for the raid. This is important because it initially gives your clan the upper-hand. To have a high turn out percentage over time, all tribes need to prioritize the clan highly. Other real life events that collide with raids must be cancelled, as the enemy clan is not about to wait for you to turn up fighting. There seems to be two possible explanations for tribes dedicating themselves to the stiff demands of raids. The first is, of course, the desire to win the game, which is the common goal that all tribes work towards, and this dynamic is well-known from most computer games (Zimmerman and Salen 2003; Bartle 1996; Juul 2003). However, this is, in my experience, not the convincing argument, when dinners are cut short, holidays cancelled, or parties left early. The chances of winning the game 1½ months later are too abstract and far away for most clans . Furthermore the desire to win is not really something that you can work to improve directly. A desire to win is personally motivating for a player but community building is a way to transform the winning instinct to a higher cause.   The most important tool for securing

high raid participation in Heroes constantly turns out to be community building.

A loyalty, sense of obligation to the clan, and social relations with other players will get tribes to flock to raids. The consequences of failure to show up are way beyond just winning or not. Other clan members will express disappointment and resentment towards other tribes for letting them down. It is like you have abandoned your obligations to the family. More often than not, failing to come to a raid will result in the player being kicked out of the clan. The secondary importance of winning is also evidenced by the behavior after raids. When you lose a raid with a good turn-out the tribes usually feel the clan represented itself well, and the tribes fought for each other. However, winning a raid with a bad turn-out will not result in a positive atmosphere but rather resignation among tribes.

The overall significance of the four parameters on the entire game's balance is supported by the top-clans being made up of a close-knitted number of experienced tribes with high activity. Many of these clans use real life parties to gather people in the clan from throughout Denmark. The most extreme tribes will stay online for days at a time – in a memorable round, one clan (Alfheim) fought off smaller clans ganging up on them by splitting their clan in two. The tribes then took turns so half the clan was always online for 48 hours straight.

The good clans can coordinate close to 100% turnout in the middle of the night with 2 days of warning. This shows a dedication and persistence beyond most activities I know of. The forum threads in most clans are also oriented towards securing the four characteristics. You have an inn where people can drink mead and hang out. You have different threads for showing activity level like jokes, word games, player real life info, honor warrior contest, and clan debate. These have little or no bearing on the game experience but bring players closer together, and check activity level.

It has turned out that to know the right strategy is easier that building a working clan community. A strong sense of community has become the characteristic that sets the top-clans apart from other clans. You need to create a strong community in a clan for players to turn up for raids, maintain high activity levels, keep tacit rules, and sacrifice personal winnings for the common good.

You can have the best of strategies for a clan but if the tribes fail on the soft parameters above you will never reach top-10. Therefore strategy is. if not replaced, then severely limited by a clan's ability to nurture game experience, group cohesion, sense of community, and activity level through the clan community. Ultimately the four success criteria are all tied to a strong community, which is further discussed below.

What is a community

Above I have claimed that the four characteristics of a strong clan are ultimately based on the clan's ability to work as a strong community. I will try to define a bit closer what makes up a community before giving more examples of the role community plays in the game.

Etienne Wenger (1999) defines a community as consisting of three central pillars: Mutual engagement, joint enterprise, and a shared repertoire. The mutual engagement refers to a shared commitment latent in relation toward a given activity. It is not enough merely to be physically located together or be interested in the same topic. The engagement has to be connected in a rich and meaningful way. You also have to share an understanding of how to go about a certain enterprise to which you share some relationship.

In this online game the obvious joint enterprise is to obtain the highest position on the clan list. The winner of the game is the clan with the highest total score for all of its tribes. The repertoire a tribe needs to really be an asset to a clan is varied and huge. On the surface , the game is quite simple but becomes extremely complex because most of the game is really negotiated between players and their tacit knowledge. The demands clans make on

new tribes are quite far away from the game rules, and are not immediately recognizable for the newbie. The game is impossible to learn if it is played without help from experienced players. The following example will help illustrate this claim. The alliances system in the game code only consists of 8 visible alliances. However this has turned out to be far from enough to handle the complexity of the game. Therefore players have designed elaborate non-aggression pact treaties with different notice warnings . The open alliances have also been supplemented with secret alliances that are only visible to the chief of a clan, and the concept of round peace is similarly used. Round peace means that you commit yourself to not attacking a clan for the rest of a play round (1½ month). For all of these diplomatic options, there are no official game options for enforcing a punishment, and the alliances are not described anywhere, including the official rules.

A clan can choose to break a treaty, and similarly a single tribe can choose to do so without immediate consequences. A displeased tribe or a newbie tribe can often result in the entire clan being at war without warning. Most treaties will have a 5:1 or 3:1 counter-attack as punishment to a breach of a treaty. However, this is not possible to enforce as such. It has to be on gentleman's basis, which as you might have guessed leads to constant problems: Bickering on who started a war, what the punishment should be, and whether one sold out an alliance. All these are regular occurrences.

Inherit in the implicit rules and tacit knowledge lies a slow building of a shared repertoire concerning how a clan does things. What is acceptable, and what is not. This repertoire is through mutual engagement used in the joint enterprise. The significance of a strong community where the clan works as a unit is illustrated by looking at the role of common good and equality in the game. It is important that the entire community recognize the importance of common good and equality.

Most online games have implemented common good and quality quite poorly. Most MMORPGs have little equality between

players because the persistent world easily leads to low-level players having little value for high-level players. The problem manifests itself in different ways with the broader problem of some people becoming useless in online worlds. However, there should be a place for the newbie, casual gamer, hardcore gamer, or any other major player type (Baron 2004). Heroes achieves this by making both newbie and expert players interested in the common good for the clan, and giving them tools to contribute equally well, although in different situations. In Heroes it is actually not rare for the best players (usually have higher scores) to have a peripheral role in a raid, and let the players with small tribes (usually worse players in the four characteristics mentioned earlier) do more of the fighting.

The common good

The dependency between low and high players is achieved through a number of game mechanics. One is sending troops to other tribes. This is a very strong weapon if you can trust other tribes not to attack you or use the warriors for wrong purposes. One tribe may use two turns to recruit 10.000 warriors because he has been winning in a raid, while another can only train 100 in two turns because the enemy has concentrated the attacks on him. It takes the big tribe one turn to send 20% of all of his warriors. The advantage is obvious although a few other matters need to be taken into consideration for it to work. The important point is that the players need to work together to achieve the best common good. This again requires a strong community, where you fight for the clan and trust other tribes to not misuse the warriors you sent. The misuse can be fatal, and have several times cost clans victories because a mole tribe turned on a clan during a crucial raid.

The dependency between low and high players is further supported by limits for attacks. A tribe can only attack other tribes that are either half their size or 2½ times larger than their size. This means that small tribes have an advantage because they can attack big tribes without the big tribes being able to attack back. The solution is that the small tribes in a given clan will hold

down an enemy clan's tribes from growing. The big tribes will send warriors to the small tribes because small tribes spend a considerably longer time training warriors. This requires a close collaboration to fight for the common good of the clan.

Also a small tribe could attack as big an opponent as possible but that is not in the clan's best interest because high tribes will be able to attack these. Therefore the small tribes leave these to the high tribes opening themselves even more to attacks from enemy tribes. However, drawing the fire from the big tribes is best for the common good. The large tribes can send warriors and sacrifice more gold to shared clan warriors (see below). Also when the big tribes attack an enemy tribe they can only get it down to a certain level where the enemy tribe can then attack back. Here you need to coordinate with some of the clan's smaller tribes to insure the complete downfall of an enemy tribe .

Another common good incentive and a strong facilitator for the sense of community is that each tribe can sacrifice gold to the entire clan, and thereby buy warriors that the entire clan shares. The warriors bought by the clan automatically fight for all tribes and can't die but are way more expensive than tribe warriors. A tribe's warrior only fights for himself and will die during raids. The gold you sacrifice as a tribe to the clan could have been used to buy your own warriors, getting you a better score. The clan warriors are a kind of safe deposit for the entire clan's future standing and raid strength. Even if you lose a raid you will have a minimum of clan warriors to help you back to the top. The clans that sacrifice will outlast other clans, but for tribes to sacrifice they need to be convinced of the advantages, which helps them feel a stronger relation to the clan than their own tribe. The sacrifices are very important and many clans give out the title "master of sacrifices" after each round to promote sacrificing.

Overall a clan needs to support a strong community for the tribes to stay active, collaborate, maintain group cohesion, and sense of community. This is of course especially hard when the game is going against a clan, when you lose a raid, several players quit

the clan, or activity level plummets. This is where a clan community shows its strength - strong clans can come untouched through an entire round with severe beatings because of a strong community - Untouched in the sense that they still have the same strong clan on the basic four characteristics. Strong clans like Last Klan Standing, Skrymers Vante, and Woodan Kulten have taken these bungee jump trips from between the top-5 clans to being the bottom-5 in next round. This can also happen during a round, where you take the trip on the clan list from high to low back to high. Clans that survive such a round will in the next round be even stronger, and more feared by other clans.

The vulnerability of even the strongest clans points to another important point, namely that a number of small clans (consisting of tribes with low scores) will be a severe threat to any clan. A top-clan's worse nightmare is to get into raids where a top clan gangs up on them with some smaller clans that continue to keep them down during the rest of the round. Such a favor is of course returned in future rounds, both on the giving and receiving end.

Equality rules
I mentioned that equality is quite important in Heroes, and this also supports the importance of community building. The newbie and low score tribe is potentially of as great a value as an experienced player due to the factors explained above. After each 1½ month round, the newbie will start with the same game stats. There is no difference whatsoever. The difference lies in id number, game experience, and activity level. Of course, the newbie needs to learn how to play: build up tribe, whom to attack during raid, micro strategies to supplement clan strategies, keep a cool head during raid, and a number of other specifics. In general the expert players are characterized by an ability to recognize the important from the not so important. This fits nicely with Lave & Wenger's (1991) definition of old-timers in a community.

More importantly, equality implies that all tribes have an interest in teaching new tribes to play and to assist tribes with low scores

– their clan's success will depend on it, and ultimately also their own security. The importance of introducing new players is evidenced by the evolution of a minister in all clans responsible for welcoming and helping new tribes.

The importance of both newbies and low score tribes makes for a very close-knit and homogenous game universe quite different from MMORPGs. As the game progresses, quite big differences between tribes and clans will occur but importantly they both have weak and strong sides as explained above. The equality facilitates a strong community building, where everybody is welcome although somewhat distrusted. Also, the amount of tacit rules in the game calls for a strong community. Rules and knowledge of the game are shared and distributed to new tribes that are deemed worthy. Usually worthiness comes from showing signs of activity, commitment to the clan, and interest in learning more. You will always get the first pointers as a newbie but will not be let into the most sacred until you are seen as part of the clan community.

All tribes are equal but those that have experience, are active, and have been in the clan for a long time have a higher standing in the community. They present the social expectations to new tribes. These are formulated in a set of rules that guide a clan, and failure to live up to them will lead to exile from the clan. The rules usually include an obligation to be active by participating in forums and raids. You also need to live up to the clans obligations towards other clans like non-aggression pacts and alliances.

Here the sense of community is also crucial to impart rules early on to newbies as you need to ensure that the rules are held and expectations met. A clan does not really have a lot of options for punishing a tribe in the game. You can ultimately expel him from the clan but that will mean that you loose a tribe, which is really as much a punishment for the clan as the tribe.

Overall there is a tremendous interest from expert players to train newbies and to attach them to a clan. The newbies must become skilled and part of the clan community. It however also leads to

quite strong demands on activity level towards players, which is one of the biggest problems in the game. You need to be online at specific times and not miss raids, which in the long run excludes a lot of people. However, this somewhat depends on the ambition level of the clan you are in. In the top clans each tribe dedicates their life to the game, and the chief and management of a clan is a fulltime job. However, smaller clans have other ambitions and expectations that make room for more casual players. In that way there is still different options for playing.

The strong sense of community is also evidenced by some players going to extremes, getting banned for death threats or trying to beat up other players in real-life. This is of course not the most common of actions, but on the extreme end. However, it is obvious that the in-game conflicts have a very high intensity not explained by simply winning the game. Clans will forge alliances over the years and will break some, leading to bitter fights, flaming, backstabbing, and nagging on the public forum.

Conclusion

Like most online games, the community structures are not really a part of the computer game's code but are user-generated by using different external tools (Steinkuehler 2004). It is likewise in Heroes where the community is represented in a variety of ways. It is a living, breathing creature present everywhere in the game. The structures are mainly communicated through chat, instant messaging, mails, and forums with the ultimate goal of increasing the chance of winning the game through a strong community. The heroes in the game are those that sacrifice everything for the clan.

I have presented some examples of how different game mechanisms have led to the emergence of community building as the most important skill in the game. Although strategy still plays a role in many gameplay decisions, the success of these rests on a foundation made up of the degree to which the clan community works. A strategy cannot be implemented without a decent

activity level, sense of community, group cohesion, and game experience. All of these depend on the community, and can't be achieved by a player by himself.

On a last note, the implications of a game like Heroes points to a potentially benign socialization of players that learn to think in terms of equality, common good, and the community. This is also in stark contrast to popular media representations of online games but potentially also other MMORPGs. In Everquest collaborations and community may help you, but ultimately the game rests on players growing godly powers.

References

Baron, J.. 2004. Glory and Shame: Powerful psychology in Multiplayer Online Games. In Developing Online Games: An Insider's Guide, edited by J. Mulligan and B. Patrovsky. Boston: New Riders Media.

Bartle, R. 2003. Hearts, clubs, diamonds, spades: Players who suit MUDs [Website], 1996 1996 [cited November 27th 2003 2003]. Available from http://www.mud.co.uk/richard/hcds.htm.

Eladhari, M. 2004. Trends in MMOG development [Website]. Game-research.com, 2nd of May 2003 [cited 14th of January 2004]. Available from http://www.game-research.com/art_trends_in_mmog.asp.

Jakobsson, M , and T.L. Taylor. 2003. The Sopranos Meets EverQuest: Social Networking in Massively Multiplayer Online Games. FineArt Forum 17 (8).

Johnson, S. 2001. Emergence: The Connected Lives of Ants, Brains, Cities and Software. London: Allen Lane.

Juul, J. 2002. The Open and the Closed: Games of Emergence and Games of Progression. Paper read at Computer Games and Digital Cultures Conference, at Tampere.

Juul, J 2003. Half-Real - Video games between real rules and fictional worlds. PhD dissertation, Department of Digital Aesthetics and Communication, IT University of Copenhagen, Copenhagen.

Lave, J., and Wenger, E. 1991. Situated learning: Legitimate peripheral participation. Cambridge: Cambridge University Press.

Steinkuehler, C. 2004. MMOG Guild Leaders as a Com/Dev Resource. In Paper presented at the ComWork Conference. Copenhagen.

Wenger, E. 1999. Communities of Practice: Learning, Meaning, and Identity. Cambridge: Cambridge University Press.

Zimmerman, E., and Katie Salen. 2003. Rules of Play: Game Design Fundamentals. Cambridge: MIT Press.

Acknowledgments

Cracking the Code: Untangling Game Structure, Properties and Player Experience

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Introduction

I am in search of the perfect game. That game, which has not yet been made, that will incorporate my love of material culture and artful activities. It will avoid the endless battles and dungeon crawls that appear to be the foundation of so many RPGs as well as the manic task-based spamming of Facebook games. Yes, I am female and most games are not written with me in mind as evidenced by my recent experience with *The Witcher* (CDProjekt, n.d.). Now, don't get me wrong, I loved *The Witcher* but how odd for me to play through the eyes of a noble-hearted mutant who, basically, slept with every girl he met and then collected sex-memento cards. "Wow! So that's what it's like to be a Don Juan," I thought to myself. It eventually dawned on me, however, that the male players were probably thinking the same thing. I felt both curious and creepily voyeuristic, peeking into a male fantasy like that.

But I digress. Let's return to my main point which is that, having given up the idea that any game company will ever make my perfect game, I decided to work towards the development of said product myself. The first steps of this process involve getting down into the nitty gritty of how games work to better control the design process. I teach in a museum studies program and, with the help and support of the *School* of Interactive Games & Media at RIT, have begun to dabble in game making. Ultimately, I want

to make games for museums to use within the context of informal adult education and that I can use in my classes. With this goal firmly in hand, I set out this summer to try to understand the intersection between player experiences, learning and game structure. Bravely, I picked up Bogost's *Unit Operations* and tried to come to grips with it. I'm not sure that I succeeded in fully understanding his approach. However, I was inspired by such statements as, "We should attempt to evaluate all texts as configurative systems built out of expressive units" (Bogost, 2008, p. 70). The shift in perspective is subtle but profound and allowed me to build a model of this space that illustrates how the actions of units, through emphasis or negation, are used by designers to change the player experience.

The Method

How do we know if a game is successful? This appears to be a no-brainer; looking at the sales rankings, awards and reviews will give an answer within a couple of mouse clicks. However, while it is true that these yardsticks do measure game success they are also based on player-centric parameters. For the purposes of my work, I want to consider the entire system. So, while rankings let me know which games are doing well with the players, they don't provide any information about how well the game met the goals of the designers. For those of us involved in educational games, this point is critical for our games must be both popular and deliver specific content to fulfill educational goals and outcomes. Therefore, it was also necessary to include the intentions of the designers into my analytical model. That is, how well does the game fulfill the designer's intentions? Chris Melissinos (2011), curator of the Art of Video Games exhibition at the Luce Center, stated that:

> All video games include classic components of art-striking visuals, a powerful narrative, a strong point of view. What's new is the role of the player. Video games are a unique form of artistic expression through, what I call, the "three voices": the voice of the designer or artist, the

voice of the game and its mechanics, and the voice of the player.

This is the classic interpretation of the relationship between the artist, the medium and the audience adapted to the video game. Traditionally, the audiences for the visual, dramatic and literary arts have been seen as static and passive, which is why Melissinos emphasizes the role of the player as something new, but this is not entirely true. All art uses its medium as a method of creating a dialogue between the artist and the audience, all art is about expression and audiences always interpret art, they are not entirely passive. These three voices are always present to greater or lesser degree. Indeed, this trinity can be understood as existing within a continuum of interactivity where the amount of audience participation required to make sense of the art depends a lot on the aims of the artist, as well as the limitations of the medium. For example, realistic paintings are much easier to understand and require much less initial viewer input than abstract works. Realism delivers the story to the viewer through an artist-dominated experience. Abstraction, however, requires that the viewer complete the story and take on a more active role in the creation of meaning. Scott McCloud (1994) nicely explains how this effect is used within comics to allow readers to put themselves into the characters with more abstracted features or to complete parts of the stories that aren't spelled out through their prior knowledge of genre and narrative conventions.

By comparison, however, games are universally agreed to be more interactive. In fact, the interactivity is not just participation in making meaning but in determining the final outcome. The game and the player interact to create something unique: "The game plays the user just as the user plays the game.." (Aarseth, 1997). We say that players have agency, that they can make choices that make an impact. However, the dialog between artist and audience still takes place through the media, be it a book or a video game. The media is the bridge that facilitates the conversation between the designer and the audience or player. It is more a matter of degree, how much can the player or audience

participate? As some art requires more participation than others, so do video games allow different levels of player choice. So yes, games demand greater audience involvement and participation but they do so to varying degrees.

Video games express content and require player input within an interactivity continuum. To explore this concept, I imagine a space that contains our three starting elements: player, designer and game. Content, both conscious and unconscious, is developed by the designer who is separated from the player by both space and time but connected through the medium of the game. The shape of this space is often depicted as a linear corridor with a progression from creation to product to experience as shown below (Hunicke, LeBlanc, & Zubek, 2004):

Designer   Game   Player   →   ↔

Player activity is shown as a constant unit of input and response as depicted by the double headed arrow. This model, while useful for an initial understanding, does not begin to illustrate the complexity of the real experience. A game is not a black box from which gameplay magically appears but complex media that can be understood as being made up of two basic elements: the formal and the dramatic. The game expresses the content, developed by the design team, simultaneously through the interaction of the formal and dramatic categories of game elements along with the actions of the player. Formal game elements include goals and objectives, procedures, rules, resources, conflict, boundaries and outcome. Dramatic elements emotionally engage the player and are typically understood to be all the elements that create the story world and relay narrative content: challenge, premise, character and story, art and sound. The simple linear expression then becomes a mirrored ternary diagram as shown in Figure 1.
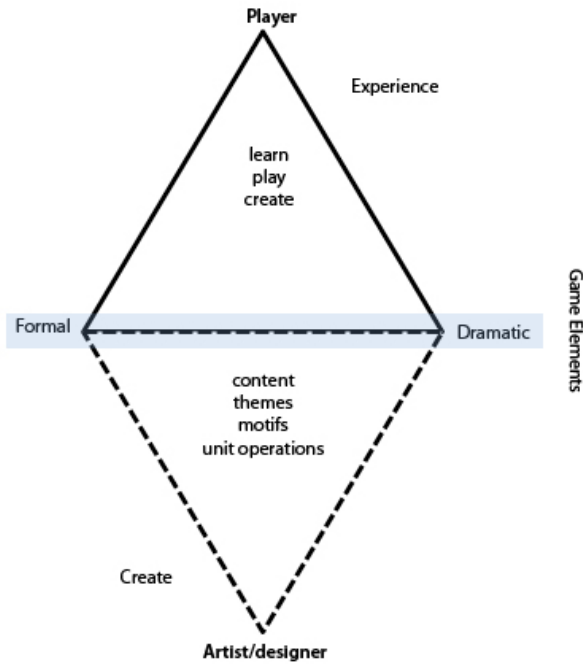
Figure 1

The upper triangle, which represents the game experience, is the primary area of interest for assessing game play. When presented as a ternary diagram, it is suddenly clear that the amount or degree of player interactivity, that is, how much the player really contributes to game outcome is not constant. The player will have more agency in some games than others. The lower, inverted triangle, serves to show the underlying relationship of the designer to the finished game. Outlined by dashes, this area represents elements involved in creating or designing the game and would be the area of interest for analyses that focus on interpretation of underlying game themes. In this area, elements like themes and motifs are incorporated into the game by emphasizing and de-emphasizing the basic units of the game. For example, let's say that the designers decide that they want to emphasize a particular narrative with very little control given to the player as to how the story ends. In order to do that, dramatic elements would need to be emphasized and, accordingly, there would be less focus on formal elements such as game mechanics or the input of the player. On the other

hand, if a sandbox type game was desired in which emergent narratives could happen, the designers would opt for a design that focused on player choice and input and less on the formal and dramatic elements. This is a matter of degree, however. Formal and dramatic elements still remain within the game; they are just de-emphasized to allow more emphasis on player input. Examples of how real games might be mapped within this space are shown in Figure 2.

Figure 2

According to Bogost (2008) these small blocks, the unit operations, that make up the whole should be understood in terms of their interaction, not as isolated components as from the top down view of a generalized system. What this means in practice, to me, is that the game is the final expression of these discreet units and in order to understand the experience, I need to understand how much, and in what way, each is contributing. Comparing the discrete unit structure of games or other media is somewhat analogous to the study of genetics (Bogost, 2008). Genes are universal to all living things and it is the combination of genes within the DNA structure that determine form and function.

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Small changes can have a dramatic effect on the resulting organism. So, on the one hand, we can look at the units and understand them to be the simplest form of expression of 'mammal.' However, the type of mammal will be the result of the combination of the entire sequence. The fundamental unit that is expressed by that particular configuration is what might be called a motif. It is important to note that there are a number of abstract motifs that might be identified. If we consider the genetic example again we could have motifs of: living organism, mammal, human, female, blond, etc. Likewise, we can think of the fundamental units, exposed by the game elements, as also being open to a number of different interpretations based on perspective. For example, a fundamental unit of the Sims (EA Games, n.d.) might be considered to be 'consumption' which is expressed by player engagement with game play units as they simulate our consumer driven society. However, we could also discuss fundamental units as suburban America or even that of time management.

There is then a distinction between concrete and abstract unit operations and Bogost argues that sound content analysis, involving the abstract motifs, should be tied to the unit operations of the concrete elements such as game mechanics, procedures and story elements. If we refer again to the first diagram in Figure 1we can see that there are two layers of basic units. The first level, or most basic, are those abstract units of content, motifs and themes. The second level is that which expresses the abstract concepts, the formal and dramatic units that turn an idea into an experience: the procedures, outcomes, character and story. Of course, a game isn't a game until it is played and incorporating player interaction with formal and dramatic units is fundamental to describing gameplay. Ultimately, any analysis must consider all four elements in order to fully contextualize the final experience. To start with, however, it can be helpful to understand just where a particular game falls within this spectrum of player and game elements.

Analysis of Match 3 Games

I thought it befitting that my first analysis start out with one of the simplest of game organisms, the match 3. The match 3 game mechanic basically consists of matching three things by manipulating the objects with a secondary activity like shooting or swapping. Typically found within the Casual games sector, the match 3 games are often considered to occupy the "lowest rung on the cultural ladder….of video game enthusiasts." (Juul, 2009) This, however, has not diminished their popularity and countless variants, of which *Bejeweled* is one of the most recognizable. In fact, the 2010 Gamers' Edition of the Guinness Book of World Records ("Bejeweled – Most Popular Puzzle Game of the Century," 2010) lists *Bejeweled* as the most popular puzzle game of the century. Developed relentlessly by commercial companies, casual games must strike a balance between constant innovation to sell more games and familiarity so that players can learn to play quickly (Juul, 2009). The interesting thing about analyzing these games is that the primary game mechanics stay fairly consistent with the designers changing secondary mechanics and tweaking elements of the primary matching mechanic. The player input remains about the same and it is often the dramatic elements which are responsible for the largest design changes. A number of match 3 games in the casual game space have begun to incorporate a lot more story into the games. *Jewel Quest* frames the game in an overarching story arc to create a puzzle adventure game. *Puzzle Quest*, on the other hand, brings in fantasy elements from RPGs and turn based game play. The development of narrative elements and integration of mechanics is fascinating but beyond the scope of this paper. Instead, I'd like to focus my attention to a comparison of two match 3 games that are true to the simplest form of the game yet deliver very different experiences: *Bejeweled* and *Layoff*. Each of these games resides in a slightly different area of the continuum in Figure 2.

Focus on the Formal Elements: *Bejeweled*

Bejeweled is a classic casual game that focuses primarily on formal game components. Developed by PopCap Games in 2001, the objective of *Bejeweled* is to obtain as high a score as possible by matching three or more gems of identical color in vertical or horizontal rows. The *Bejeweled* craze spawned the creation of many clones and also variation from PopCap: *Bejeweled 2* (Figure 3) and *3*, *Bejeweled Twist* and the Facebook game *Bejeweled Blitz*. The basic Pop Cap game has evolved over time, but never strays too far from the original concept. An example is *Bejeweled 3* which is made up of different modes including Classic, Zen, Lightning and Quest, ostensibly to compete with some of the RPG or adventure match 3 puzzle games. However, the Quest mode still resides firmly in the formal section of our triangle as the quests are highly simplistic.

Residing in the left corner of our triangle in Figure 2, narrative components are virtually non-existent. Originally called *Diamond Mines*, the title *Bejeweled* references an abundance of precious gemstones and is the only link to meaning of any kind. The linkage to a precious material, supported by the artwork, allows the player to contextualize the game as the swapping, collecting and sorting of jewels. However, this is incidental and the player experience is primarily derived from scoring through the completion of matches which can be varied to include timed game play and even quests in *Bejeweled 3*. Learning within this game is restricted to the improvement of play and no external content is introduced. Players are able to achieve higher and higher scores by learning the best scoring strategies. In order to progress in the game, players do acquire skill and become more adept at identifying high scoring patterns.

The art primarily helps to support player connection to the game by using a bright, highly saturated palette and simple geometric shapes for the jewels. In essence, dramatic elements have been compressed and reside entirely within the art work. The design of the game pieces and environment are responsible for creating the entire story world concept. Sound arguably plays a more

important role than the art in giving player feedback during the fast paced game play. And it is the juiciness of the deep voiced male announcer and the riotous cacophony of cascades that undoubtedly keep the player coming back for more. However, the art, minimal as it is, does also reference and link to the external world. In an interview, Jason Kapalka (2011) of Pop Cap said:

> We've always gone for a pretty bright and colorful palette, as opposed to the "space dungeon made of cinder blocks" look that a lot of hardcore games have. But we take a lot of care with each game to make sure it has its own internally consistent style. We were worried *Peggle* might come off as a game for toddlers made by crazy people, but the surreal aesthetic seemed to come through for most players. For *Bejeweled 2*, we created a lot of fractally generated alien worlds that were intended to be reminiscent of sci-fi book covers from the 70's and 80's. For *Bejeweled 3*, we went for a more fantasy-based look, and so did more hand-painted backgrounds rather than computer-generated.

Figure 3: Bejeweled 2 ("Bejeweled® 2 | PopCap Games – Download Games," n.d.)

Personally, I favor the untimed versions of the game and tend to shy away from the more socially competitive versions like *Bejeweled Blitz*, although I know of many, particularly male,

players that are exactly the opposite (Juul & Keldorff, 2010). I'd like to point out, however, that I have a love-hate relationship with this type of casual game. To be sure, I have spent many, many hours playing *Bejeweled* but there comes a point when I realize that I have long since stopped enjoying the game and am manically coming back for more like the proverbial Pavlovian dog. Thinking about my experience, the initial stages of learning the strategies and becoming familiar with the different levels are the most satisfying. After a time, however, I begin playing compulsively. It is at the point when I am really not learning or rising to any new challenge. Instead I am playing for that elusive sweet spot where I am totally on my game and where the gems fall in an optimum arrangement that will allow me to eke out a little higher score. I am engaged, surely, but this is not satisfying. This is the equivalent of the desperate denizens of the casino slots, waiting for that lucky break. It is at this point, that I am forced to limit my time on the game or walk away from it completely for a while. Because, that's the kicker, this game never ends; there is never any resolution or conclusion to give me that ultimate satisfaction so I can move on with my life.

More Power to the Player

Layoff (Figure 4) is a serious game, it has a point to make and it makes it by using familiar gameplay to highlight the underlying ruthlessness within the business world's use of the bottom line. Developed by Tiltfactor Lab and RIT in 2009 ("tiltfactor >> LAYOFF," n.d.), the game uses the basic match three mechanics familiar to most players through *Bejeweled*. The game mechanics of these two games are identical but the resulting game play is at opposite ends of the spectrum, while *Bejeweled* is manic and addictive, *Layoff* is contemplative and sad. If we consider the games within the ternary diagram (Figure 2), we can begin to analyze the underlying design features which bring this about. *Layoff* still tends to emphasize the formal elements of the game but requires more input from the player in order to interpret and conceptualize the experience. There is some drift towards the dramatic as well due to greater emphasis on content as expressed through in-game snippets of text and the tutorial.
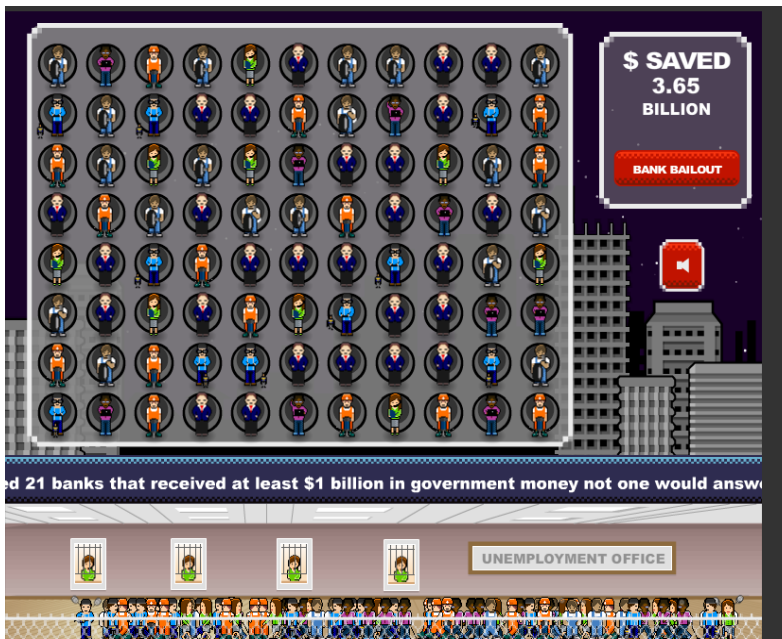
In order to play *Layoff,* players match groups of three or more workers which are removed to the bottom of the screen where they wait in the limbo of the unemployment office. The player wins by laying off as many workers as possible which increases their score in units of millions of dollars saved. Players can take advantage of a bank bailout if there are no more moves which randomizes the screen again - at no penalty to the player. Making matches becomes increasingly difficult as the game goes on because the tiles become over populated with business men who can't be fired and thus eventually bring the game to a halt. The narrative content is expressed through small bits of text attached to game elements: a ticker tape of the financial crisis news items scrolls across the bottom of the screen, each game piece has a personal biography that is visible when the player moves over it and there is a tutorial which clearly frames the game perspective by depicting the business men as all powerful, disconnected bullies who cannot be touched by the crisis. The artwork for *Layoff*, in contrast to *Bejeweled*, is somewhat understated with a de-saturated color scheme and generic game pieces that represent workers with all the individualization of a set of nesting

dolls. The sound is not the high intensity feedback of *Bejeweled* but a repetitive and hypnotic background soundtrack.

At first, the player notices the color of the workers (orange, blue, etc.) and thinks of them simply as objects or tiles to be matched to increase the score (money saved). However, the game has a very slow pace. Matched game pieces leave slowly, without any fanfare they slide off the board and into the unemployment office. These elements coupled with the lack of juicy visual and audio feedback gives the player a lot of time to look around; eventually, reading the touching biographies, written in third person, that accompany the workers. The game board is slowly filled with businessmen with whom the player can do nothing. The text that accompanies each businessman piece is usually written in first person and portrays their character as unfeeling and untouched by what is happening.

The player begins by quickly eliminating workers at first, in order to learn the optimum strategy for high scores (that to many is very familiar through *Bejeweled*). However, the narrative theme quickly becomes apparent as the player learns that the workers aren't pieces but real people. The player is playing out the story of the all-powerful business magnate, distanced from the workers, making decisions disconnected from any human link to the "units" that make up the workforce. The relentless, inevitable results, driven by a game mechanic that becomes the embodiment of ruthlessness, trap the player into the role of the heartless CEO. As summed up by Flanagan, "It is cute and fun to play, but when you realize how frightening the situation is, the game in fact functions as a very dark portent." (Flanagan, 2009)

The narrative here is expressed through the scrolling news facts and the characterization of the game pieces thus allowing the player to reference and bring in information exterior to the game from their own knowledge of the news, the economy and contemporary business practices. Gradually, the player becomes aware of the tension between achieving the game goal and the high cost that will be paid on a personal and societal level. This

game references current events that must be well known to the player in order for the game to make sense. The end result (educational content) is achieved through the tensions derived by pitting the empathy players ultimately feel for the worker pawns against the game mechanics and scoring associated with current corporate practices. The match three mechanic is, after all, fairly mindless. The mindless eradication of a person's livelihood seems a high price to pay for winning a game and after a while, the player realizes there is no winning within this game structure. *Layoff* works by thoroughly integrating educational and narrative thematic components with the game play so that the themes are expressed, not through cut scenes or dialogue, but by the interaction of the player with the dramatic and formal elements.

Conclusion

Which of these is the better game? Well, to my mind, this is comparing apples to oranges. The intentions of the designers for each are very different so they chose to emphasize different areas to achieve the end goal. *Bejeweled* may be useful for stress reduction but it is also an addictive time suck, as I know firsthand. By focusing purely on the formal elements that tap into player compulsiveness to play again and again, *Bejeweled* is hugely successful. However, the desired experience envisioned by the *Layoff* team was not to addict players but to make them think and to express a perspective on a current social topic in order to raise awareness and to help change behavior. This required a couple of things from the design. The first was that the emphasis had to shift to include more narrative content, which means things have to slow down in the game to give players time to think and understand. The other, I think hugely important thing that happened was that the player was given a bigger role. In *Bejeweled*, players have very limited choice. They can use a simplistic move to make combinations over and over again to achieve one of two end states: either they beat their previous score or they don't. *Layoff* also restricts the players choices as in *Bejeweled* but instead of an exhilaration the player feels trapped by the limitations of the mechanic exposed through its interaction with the narrative elements. This narrative is not an imposed

linear progression but rather bits and pieces of a narrative that the player must assemble into coherence, informed by the characterization of the pieces. Similar to the reading of an abstract art work, the player must work to make sense of what is going on in *Layoff*. This leads to a curious dilemma: in order to keep the emphasis on the formal elements, the narrative component of the dramatic elements has been compressed down into its simplest form. This puts the act of meaning making onto the player which means they must have the background to "read" this game. Players without external knowledge of the banking industry and Wall Street might find this game difficult to interpret. In order to make this game more easily understandable to anyone, more narrative content would have to be included. However, this would have resulted in a lessoning of the role of the player. They would go from participating in meaning making to passively receiving meaning.

Now, is *Layoff* a game most people would play over and over again? No: It has an ending, a conclusion. You leave that game wondering about all the faceless people who have lost their jobs, how do they cope, what has happened to them all, will the inequities of the system ever change? *Bejeweled*, on the other hand, leaves you thinking about nothing, perhaps seeing rows of colored gems when you close your eyes, but otherwise, nothing – which is perhaps why it's a good stress reliever. It's fun and it never ends. *Layoff* ends: the suits bring down the system and you can't really win in this scenario. It's a pretty depressing end but one that fulfills the designers aims of making people think.

This brings me full circle, back to my original point of finding the perfect game. By working through the analyses of these games through the interaction of their basic components, I understand the relationship between designer, game and player differently. I am now in search of perfect games, plural, depending on some basic conditions: As a player or designer, do I want dessert or a salad? Do I want a game I can play over and over while I wait in the airport? Or do I want a game that will make me think or involve me emotionally? Finding the perfect game will depend on

how I answer these questions. Making that perfect game will require me to emphasize the appropriate elements that express what I have in mind.

References

Aarseth, E. J. (1997). *Cybertext: Perspectives on Ergodic Literature*. The Johns Hopkins University Press.

Bejeweled – Most Popular Puzzle Game of the Century. (2010, April 21).*NXT Gamer*. Retrieved August 29, 2011, from http://www.nxtgamer.com/xbox360/bejeweled-most-popular-puzzle-game-of-the-century/

Bejeweled® 2 | PopCap Games – Download Games. (n.d.). Retrieved August 16, 2011, from http://www.popcap.com/games/bejeweled2/pc?s_kwcid=TC|3875|bejeweled||S||6605176728&gclid=CP_BxILs1KoCFU3IKgodyBSX1Q

Bogost, I. (2008). *Unit Operations: An Approach to Videogame Criticism*. The MIT Press.

CDProjekt. (n.d.). Home - thewitcher.com. Retrieved September 6, 2011, from http://www.thewitcher.com/

EA Games. (n.d.). The Sims. Retrieved September 6, 2011, from http://thesims.ea.com/

Flanagan, M. (2009, March 12). Press Release: New Casual Game Layoff Released. Retrieved from http://www.tiltfactor.org/layoff/layoff_pressrelease.pdf

Hunicke, R., LeBlanc, M., & Zubek, R. (2004). MDA: A Formal Approach to Game Design and Game Research. *Proceedings of the Challenges in Game AI Workshop*. Presented at the Nineteenth National Conference on Artificial Intelligence.

Juul, J. (2009). *A Casual Revolution: Reinventing Video Games and Their Players*. The MIT Press.

Juul, J., & Keldorff, R. (2010). Depth in one Minute: A Conversation about Bejeweled Blitz. In D. Davidson (Ed.), *Well Played 2.0: Video Games, Value and Meaning*. Pittsburg, PA: ETC Press.

Kapalka, J. (2011, February 22). All Games Network - Bejeweled 3 After the Credits. Retrieved from http://www.allgames.com/news/23273/

Mccloud, S. (1994). *Understanding Comics: The Invisible Art*. Harper Paperbacks.

Melissinos, C. (2011, August 18). The Art of Video Games: Five Questions for Chris Melissinos. Retrieved from http://eyelevel.si.edu/2011/08/the-art-of-video-games-five-questions-with-chris-melissinos.html

tiltfactor >> LAYOFF. (n.d.). Retrieved August 29, 2011, from http://www.tiltfactor.org/layoff/

A Life in Baseball, Digital and Otherwise

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Roger and Me

To a kid growing up in the armpit of Massachusetts during the late 80's, a perennial little-leaguer two-stepping every 4th of July through clouds of second hand smoke, a child with shiny dreams of baseball glory not yet sullied by the dinge of athletic mediocrity, to him Roger Clemens was god. I wanted to be him. I didn't know what a steroid was, nobody did, and at that point he was simply the greatest pitcher I had, in my yet young existence, ever seen. My father would mention names as we played catch in the street – Seaver, Palmer, Gibson, Carlton, Koufax, but to a 9 year old they were merely fiction. They were stories of greatness imagined, but unknown. But Clemens, he I had seen. Clemens, he was *real*.

My imagination was free then. I remember toeing the slick rubbery plastic atop the pitchers mound, thinking about how Clemens would move, thinking about how he would stare in at the batter, attempting to win the battle before any pitch was even thrown. I remember wanting to duplicate the smooth windup, and the explosive, violent delivery. A scrawny, lean, and lanky boy, I wanted to defy my body and blow every single batter away with heat. I wanted to strike out the entire opposing team. I worked ceaselessly, pitch after pitch, waiting patiently for the teledramatic breakout moment, the moment when a salty, small town coach, watching a young phenom throw, takes off his hat and shakes his head, not believing the talent to which he just bore witness. I waited for that moment, wishing and wanting for a future I did not

know was outside my reach. I waited for the moment that would signal a future in baseball; a future that, until recently, I thought had passed me by.

A Future in Baseball

Last night I threw a six-inning gem. There I was, that is to say 18 year-old me, standing on the mound for the Birmingham Barons. I'm a minor leaguer, drafted by the Chicago White Sox, and sent to the Deep South to sink or swim. It is a familiar narrative in baseball, the story of so many ballplayers – Clemens, and Seaver, the story of *Bull Durham*'s Ebby Calvin "Nuke" Laloosh. Each had found their way pitching in the minor leagues, honing their skills, only to emerge from the obscurity of local baseball to reach the pinnacle of the sport. At that point, for a young, fresh out of high-school boy, earning a few thousand dollars to play a kid's game, my promise far exceeded my record. But with that moment, that first opportunity at a minor league start, the "Road to The Show" offered by *MLB 11: The Show* began its winding course with an ascent, the crest remaining out of sight.[1]

A few hours earlier, in an expression of shameful vanity, I labored over my character creation. I spent ten minutes on the squint and rotation of my eyes, another five on my nose, and an unfortunate five minutes on my receding hairline. I danced on the line of reality, making a pitcher resembling a mash of myself at 18 and an idealized vision of myself as an elite baseball player. I was tall, and lean, and intimidating. I had recognizable bags under my eyes and crows feet. Kindly, I gave myself less of a double chin. Imagine my surprise when I discovered that the designers had taken the time to record a PA announcer saying both my first and last name, allowing my created player to be announced as if he were real. I tweaked everything with painstaking care, from the color of my glove, to the length of my undershirt. I was, after-all, not making just any player, I was recreating a me I had once known daydreaming of a future in baseball. Satisfied with my monster, I threw the switch and entered him in the MLB draft to be selected by whatever team might see fit to give me a chance to be great.

I had spent the first few weeks of the AA season as a middle reliever, amassing some impressive stats after a disappointing first appearance in which I coughed up three runs in less than an inning. That first game was a nightmare. I came into the game in the 6th inning, eager to prove myself, having never thrown a single pitch of professional baseball to that point. I struck out the first batter with my powerful fastball, recording my first out. I was confident and ready. I felt, in that moment, like my childhood idol Clemens, towering over the opposition, staring them down with a mixture of arrogance and pride, swagger and confidence. I puffed my chest, and smirked at the screen.

Then the wheels fell off. I walked the next batter on a pitch that should have been called a strike by the game's umpire. In *MLB 11:The Show* the umpire is designed to be flawed, just like a real umpire, and since I was pitching in the minor leagues, not yet at the top, this very umpire was *especially* flawed. The marker left on the strike zone indicating where the pitch had landed vindicated me to a powerless juror on the couch. The deliberate, designed "error" is in fact a procedural strength, breathing life into a system that would otherwise be static, obvious, and sterile. *MLB 11: The Show* is a game inside of a game, and the relationship between the rules of both invigorates the language of the whole system. The rules of baseball as such are understood via the rules of baseball as played, as simulated by the rules of baseball as video game. The obvious strike was *called* a ball.

I was mad, and *I* was mad. The "me: on the couch swore at the screen. The "me" on the screen lost points on a confidence attribute, and subsequently lost some of the efficacy of his pitches. What a brilliant system, modeling the state of mind of an athlete, and creating opportunity for that state to align with the feelings of the player! We were, I was, rattled. A few base hits and a few runs later and the manager walked to the mound to pull me from the game. I was sent to the shower of a loading menu, my team had lost, and I gained no experience from the game with which to improve myself. How quickly a bright future seems to fade at the first hint of adversity.

Every hit the opposing team got that inning felt like my fault. Because of the interface for controlling pitching, when I failed on the couch I knew the batter had a good chance to capitalize on my pitching mistake. To throw a pitch in *MLB 11: The Show* one must first select the location and type of pitch to be thrown, in the instance of my player, either a fastball, a curveball or a changeup. Once the pitch is selected, the player rocks the right thumbstick back to initiate the windup. Slowly a meter fills, and at the precise instant the right thumbstick must be thrown forward to an exact location. To miss the location or the timing is to err, and depending on the attribute scores of the pitcher, and the skill of the batter, such mistakes can have dramatic consequences.

The mimetic pitching interface is a combination of precision and power, of rhythm and timing. Not unlike real pitching, one must remain poised while executing a precision-oriented skill quickly. In addition to the physical skill of manipulating the right thumbstick, the strategic element of pitch selection mirrors the same strategy a real pitcher would need to consider. When I was a boy, I threw pitches with my arm. Today, I throw them with my thumb, and while there are obvious differences, the challenge of trying to master a quick and precise physical skill is comparable. That is to say, when I pitch with my thumbs I am reminded of when I used to pitch with my arm in a way I have not experienced with other baseball video games.

I did not pitch again for a few days. Three games and half a week passed in five minutes on the couch, and doubt began to creep into my head. I was eager to prove myself, eager to find redemption in the long season of professional baseball, but where was my opportunity? I had grown accustomed to opportunity in games, conditioned by a life of video game playing to simply press start and try again after repeated failure. We are spoiled in many video games by a glut of opportunity, and many have argued that this is a strength of the medium. I was somewhat surprised by the scarcity of opportunity so early in my career in *MLB 11: The Show*. Now I was wondering when my next chance would come. Was I being punished by my digital

coach for previous failure? Had he lost confidence in me, as I was beginning to do myself? That the game was designed to limit opportunity based on performance accurately models how baseball is experienced for many young men trying to succeed in the sport. The accurately modeled system allowed me as a player to impose my own questions and doubts based on a baseball context I had brought into my game play. I was building a story around the game, and it felt real. Seeking solace, I chose the menu item to "interact" with my coach, to see what options were available to me.

At that moment the only options available were to retire from the game of baseball at the ripe old age of 18 or ask the manager for the opportunity to start a game instead of being a relief pitcher. Thinking that retirement might be premature after only one outing, I contemplated asking for a start. The doubt from earlier began to seep back into my head. What right did I have to ask for another, more significant opportunity? I had not yet proven myself to this faceless, voiceless coach. It would be brash to ask for more responsibility. No, I should wait, and wait I did.

In my next appearance, as the first batter stepped into the box to face me, I was nervous. I was eager to prove myself after an abysmal first outing, and I sat forward on the couch, renewing my focus. The controller thumped in my sweaty palms. Was that my heartbeat, or my character's? I had been brought in with two outs, a runner on first and second base, and a one run lead. A hit in this situation would give up the lead and likely cement my reputation as a pitcher who could not handle any pressure. Taking a deep breath, I delivered my first pitch. Strike, fastball outside corner.

Two more strikes and I was out of the inning. Getting out that one batter began a streak of consecutive scoreless innings that brought my earned run average (average number of runs allowed per 9 inning game) down to a spectacular, sub 2.00 level. I had regained some focus, and was now pitching like the phenom that, two decades ago, standing on the little league field, I had hoped

to be. I again checked my "interactions" menu to talk to my manager. Blinking back at me was the option to ask for the chance to start a game, a significant upgrade in status for a relief pitcher of my track record. I was ready. One push of the button and I may get the chance to prove myself that I had been hoping for.

And there I stood, 18 year-old me, on the mound for Birmingham, ready to start my first game. I was ready to begin my climb to greatness, confident in my abilities, and hoping for the resolve to see it through. I was, we were, both there: the reflection of a childhood dream on my television, and the thirty-something reality on the couch – the fusion of unrealized goals and realized life. I pulled back on the controls and stepped back to begin my windup, ready to deliver.

A Game About A Game

MLB 11: The Show, and specifically the "Road to the Show" career mode, is a game about a game. At the core of the software is a simulation of baseball. The rules of the sport are written into the system, and baseball as a game is digitally simulated and played, in part or in full. Elegantly wrapped around this core of the game are meaningful interactions that reflect the experiences of baseball as a culturally situated activity, as a livelihood, and as a childhood dream realized.

For those who love it, baseball is more than just the formal properties that structure its play. Baseball fans, more than with any other American sport culture, look back at history to understand the present. The game has been played almost unchanged since the turn of the 20th century. Great players transcend their accomplishments on the field, acquiring saint-like status in a practice that to many resembles folk religion more than sport. Children are told legends about "The Shot Heard 'Round the World" and are shown enduring images like Yogi Berra leaping into Don Larsen's arms, and Hank Aaron shoving a fan as he rounds the bases. Traditions and narratives are passed through generations. No American sport is more in touch with its

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history than baseball. Perhaps owing to the codification of copious statistics, fans regularly compare players and teams in a vain attempt to measure quality empirically, and historically.

MLB 11: The Show invites players to mediate such speculation through the game, as players are invited to pore over accurate historical statistics as they steer their player throughout his career. There is even a "Hall of Fame" meter that abstracts the player's performance into a measurable likelihood of being voted into the digital version of Major League Baseball's museum of excellence. Player's can be voted to all-star teams, and awards are presented at the end of seasons to deserving players. The designers of *MLB 11: The Show* recognized that baseball in America is understood by fans through the lens of historical context, and they made sure to include content and features that awakened old debates, and allowed players who play the career mode to impose their digital athletes into the discourse surrounding the game.

I often remark that sports games are some of the greatest role-playing games I have ever played. Career modes in sports games share many of the statistics-based mechanics that other role-playing games have adopted over the years. However, by applying them to a world constrained by the conventions and culture of sport, the game invokes new and different storytelling. The "Road to the Show" career mode in *MLB 11: The Show* has some engaging mechanics that reinforce the notion of a career in baseball. More specifically, the career mode allows for the construction of familiar baseball narratives, including the experience of young men struggling for accomplishment in the minor leagues.

Most professional baseball players do not make it to the sports highest level, the Major League, or as it is called by many, "The Show". Mired in obscurity in places like Durham, Toledo, Ogden and Hickory, they play out a decade of professional baseball making a livable wage and traveling by bus across the country. Many barely speak English, and live in homes with families who

try to help them acclimate to their new surroundings. Opportunity, to a minor leaguer hoping to prove himself, is the difference between success and failure.

Most role-playing games I have played inundate the player with opportunity to succeed. Failure either returns a player to a saved point in the games narrative, or results in some economic loss that can be easily recuperated. Opportunity in *MLB 11: The Show*, like in the lives of real minor league baseball players, can be scarce. Imagine the pressure of not knowing when you might receive another chance at success. What if winning a game were only available should the computer decide if you were worthy of the opportunity? I have not felt pressure in a video game like I have in *MLB 11: The Show*'s "Road to the Show" mode. Sure, the stakes were not, in fact, my livelihood. Even as I gave up hit after hit, my refrigerator remained well stocked. However, I felt, at times, victimized by my own failure. I felt an approximation of the sickness in the gut of doubting whether I was good enough, and wondering if each blown opportunity would be my last. Imagine how great I felt when I managed to succeed!

It would be fair to say that as a child playing little league baseball I did not dream of being a career minor league baseball player. I wanted to be Roger Clemens. I wanted to be the best. Few entrenched in the world of adolescent sports strive for a level of mediocrity, for a future playing a game at a non-spectacular level. The hope for excellence, the passion for success drives many to work hard for the goal and many more to suffer the pains of inadequacy. *MLB 11: The Show* balances player skill and character skill in a remarkable way. Characters have a myriad of numeric attributes, ranging from the efficacy of certain pitches, to composure in the face of adversity, and the effect of upgrading those statistics is real and perceptible. However skilled I make my character though, my focus as a player, and my strategic choices will always effect the outcome of any given play session. Sure the goal of "The Road to the Show" is to become a star in the Major Leagues, just as I dreamed of it as a child. That is evident in the very naming of the feature.

However, it is clear from the design of the game that such success is not a forgone conclusion. Created characters may spend an entire career in the minor leagues. They may end up traveling back and forth between levels, always hoping to pounce on an opportunity, and yet never really reaching the pinnacle. Success and failure are not diametrically opposed in *MLB 11: The Show*, and just as childhood dreams may find degrees of fulfillment, so to do aspirations for characters in the game. *MLB 11: The Show* has allowed me to play out a childhood fantasy of baseball success. More importantly though, it has allowed me to model the experience of a possible future, filled with successes and failures and uncertainty, and to be reminded that childhood dreams are pure when held against the nuance and murkiness of reality.

Safe at Home

My relationship to baseball is, in a word, complicated. Sadly, I chose at one point to ignore the sport, forsaking the game of generations preceding me for a more violent, faster, newer sport. I regret sacrificing the youthful years I could have been playing baseball to instead play other games. And yet, the memories of my baseball playing youth are visceral like none other. I remember the smell of the tanned, oiled leather of my glove. I remember the feeling of the brown clay that had snuck off the diamond and into my shoes. I remember the sting of sunscreen in my eyes on a balmy July in New England, chewing an unwieldy wad of gum while chanting at teammates as they determinedly eyed the pitcher. Even as I reflect on those experiences, I recognize that memory's senses pale in comparison to their precursors.

No video game will return those senses, those experiences to me. Despite the claims of "immersion" or "photorealistic graphics" no video game I play will allow me to smell and feel the game I love like I had. This is the unfortunate limitation of memory, always offering a glimpse of the past while keeping the reality tauntingly out of reach.

What *MLB 11: The Show* has allowed, however, is an opportunity to experience, and interrogate the emotions associated with a future I had once imagined for myself so many years ago. On one hand, the game reinforces the fantasy of my childhood, allowing me to excel at baseball in a way I never really could. Better though, the game invites me to imagine myself as a baseball player, complete with the frustrations, the doubts, the uncertainty, and the discomfort of a life dedicated to playing a game well. It allowed me glimpses of a real life, reconfiguring a fantasy that was so prominent as I was growing up. Playing the game allowed me to hold up my childhood dream closer to the reality of my life, that I might compare the two and understand better that the dreams of a child may be best kept a fantasy. I will always love baseball, but playing *MLB 11: The Show* as a version of myself allowed me to understand the sport more fully. Anecdotal stories of triumph and failure, of determination and doubt are now, somehow, lived.   I have played the game.

I no longer want to be Roger Clemens, now that I have been me.

End Notes

(1) "Road to the Show" is *MLB 11: The Show*'s exhaustively detailed career mode. Players are invited to create a character that will start in the professional minor leagues of baseball, possibly working his way to the highest level of baseball in America, the Major Leagues. Minor leagues are divided into three categories ranging from Single-A to Triple-A, with the AAA teams being one level below the Majors. In "Road to the Show" players start on either an A or AA team, depending on how the character is drafted.

References

MLB 11: The Show, Sony Computer Entertainment America Inc., SCE Studios San Diego, Mar. 2011.