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A USER EXPERIENCE STUDY IN STORYTELLING



BACHELOR'S THESIS | ABSTRACT

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The goal of the thesis is to discuss the importance of storytelling and investigate the importance of storytelling in video game(s) both through theory and a user survey and discusses some common issues with video game storytelling.

The purpose of this thesis was to observe how video game players experience video game story and how much value they put in to it over other aspects. A week long survey was held which was put on common video gaming forums and garnered over 200 submissions of varying opinion.

The survey revealed that the survey takers were greatly in favor of storytelling over gameplay. However, many points were raised over the importance of both.

KEYWORDS:

Video games, Storytelling, User experience

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1 INTRODUCTION

Video games are a new way of telling story alongside books and movies. This thesis will attempt to show how storytelling in video games affects user experience. The subject itself has been widely researched and the concept of storytelling is a constant topic in video gaming. The scope of the thesis is to show the basics of what storytelling consists of and its history as well as to show some examples of good or bad storytelling in video gaming. The practical part consists of a survey whose results are analyzed to illustrate a general idea of how storytelling affects the player experience.

At the of writing this thesis video gaming storytelling as a format has settled down and most of it is conducted in the same way. However some companies have moved outside the box and provide games that do not follow the usual format of storytelling while still providing a good story. The understanding of what makes a good story or a storytelling method is vital for the development of gaming as well as other entertainment platforms. A story is affected by numerous factors which are not related to the writing itself.

The thesis will continue with the theoretical part which introduces the history of storytelling and video game storytelling, the importance of storytelling and the forms of videogame storytelling as well as some examples of good and bad storytelling. The theoretical part will also present ludonarrative dissonance which is a term that describes an issue between storytelling and gameplay. Finally, the thesis will then move onto the case study where present and discuss a small survey concerning video game storytelling and the user experience relating to it.

2 THEORY

The theory section discusses non practical side of storytelling such as the history behind it, why it is important, the problem of ludonarrative dissonance and analyses examples of good and bad storytelling.

2.1 History of Storytelling

Storytelling has been engraved into humanity ever since the cavemen learned to draw. From describing how an animal looks by finger painting to describing a dynasty of Egyptian pharaohs through hieroglyphs. Stories can give meaning to life, express values, teach the young and convey culture (Miller 2011, 2). This is why humanity inclined to leave visual representation to the coming generations.

Storytelling by word of mouth has also had its place in the lore of old in the form of songs, chants, myths and poetry that were handed through generations and eventually written and published. Yet storytelling in this form always had the problem of being skewed or embellished by the person telling it which led to its credibility being questioned and the art form eventually fading into the background. Storytelling by word of mouth nowadays rarely happens outside a group of people coming together to socialize.

At the age of technology at around the year 1800. Through the invention of cameras we could now record and show what had been seen to complement a story no matter if it was through spoken word or written text. Some years after motion pictures had been invented, we could tell a whole story through pictures which eventually gained colour and became movies which moved on to eventually have sound.

Then came the age of computers in the year 2000 where technological improvements hit each fold of the entertainment industry. Digital age brought higher quality to pictures, movies and sound. Yet the more important effect of the digital age was the improvement of computers which made the quality of editing skyrocket in each field on top of that. The amount of data a machine could process at its limit rose and opened up new possibilities across the board. In the wake of improved hardware, video gaming prospered alongside it as the game engines gained room to improve and graphics began to resemble that of movies on the big screen. With hardware it became possible to imitate fantasy and reality

in a much better way which added to the story that was being told. Yet new technology can also restrain as told by design editor of Ceros Simon Martin in the following quote.

“Virtual reality is going to be an interesting place to play from a storytelling perspective. Ultimately I think VR has stories that will best be experienced within that immersive space. However VR is also extremely constrained, because everything is always first person and we can not ever take control of the camera away from the user. This really cuts us off from a lot of important visual storytelling tools” (Martin 2017, 1).

Now with these newer technologies creeping in one has to wonder how storytelling will develop in the upcoming years. Will new forms of conveying a story be found or will the old ones simply be polished and brought to new heights?

2.2 Why is storytelling important?

In short, storytelling is the fault of evolution. We understand events by cause and effect. Our ancestors have been conveying meaning and action through stories since the dawn of humanity. It is a central characteristic of being human. Politicians,, generals and teachers convey their message through the form of a story.

Events happen to us and around us, these are the elements of a story but we humans have unique perspectives which shape how a story is relayed. A story can have many effects on us from educating to inciting the masses;- it is meant to invoke emotions in the reader.

If a person were to listen through a PowerPoint presentation with bullet points a certain part of the brain would get activated. Scientists call this Broca's area or Wernicke's area. Overall it is part in our brain which processes language where we decode the meaning of a word. Compared to a PowerPoint presentation when listening to a story you would not only light up the same areas but they would also activate any area which are related to the experiences in the events of the story. As an example, hearing words like”cinnamon” and ”soap” or ”lavender” would elicit a response from both the language center as well as the areas devoted to dealing with smells (Paul 2012, 1).

We want to use our imaginations and prefer to passively have a story told to us. Many of us enjoy being moved by a story, either emotionally, or viscerally, like in a good action film.

As said by the founding director of the center of Neuroeconomic studies Paul J. Zak,- if the story is able to create that tension then it is likely that attentive viewers/listeners will come to share the emotions of the characters in it, and after it ends, likely to continue mimicking the feelings and behaviors of those characters (Zak 2014, 1).

A good story wraps the person inside of it, you see the world in a different way and empathize with its contents or its characters even if they do not reflect reality.

Stories stimulate, train and play with the mind. So the better the story is, the better our own growth and enjoyment are. Telling a story to a child not only stimulates their imagination but cognitive engagement, critical thinking and story sequencing as well(Agosto 2016, 3). Stories are ultimately good for our health be it fact or fiction.

2.3 Storytelling in video games

2.3.1 Storytelling forms

There are numerous ways of telling a story but the categories generally trickle down to four types. These types are usually mixed and matched in a game but also work on their own at the base level.

Text Block

The text block is a large block of text at the start of a mission or event (picture 1) - conveying what has happened or what needed to be done. It serves its purpose of telling the story or goal but does not involve the players themselves in any way while also leaving a big gap between the story and the actual game.



Picture 1. Text block in a Shadowgate event.

The form of storytelling was commonly seen in early stages of games such as the first Wolfenstein game. The text block faded into obscurity at around 2000 when technology allowed for better ways of conveying the story that engaged the player rather than just a large blocks of text which bored the player and were mostly skipped. Although games, such as Papers Please has given a nudge of life to the text block narrative at an occasion, showing that the text block still has its uses.

Dialogue

The dialogue represents interaction between two or more characters or even items as seen in (Picture 2). Dialogue opened up many doors during its creation. The illusion of choice and the possibility of telling a story by interacting with different characters enabled the player to learn more about the story or stick to the bare minimum required.



Picture 2. Dialogue options in Mass effect.

More importantly dialogue also gave characters the ability to show their personality. This gives a way to bring life to the characters and the world.

Environmental Storytelling

Environmental storytelling refers to items, terrain and buildings around the environment. Storytelling through environmental means has mostly been an addition to storytelling in the early years but in recent years it has become one of the strongest ways of conveying events.



Picture 3. Screenshot of Environmental prop in Fallout 4.

A scene as the one presented in (Picture 3) above might be an amusing sight to find through a normal playthrough especially when it stands out but if tied with past concept or future development it may explain a collection of why/who and when in a story when all the pieces click together. Rather than a direct message, it forces the player to think and recall events which might have lead them to this point and scene.

Cutscenes

The cutscene is the method of Choice for the most modern and high budget game developers. Cutscenes offer a perfect scenario for the developer as they can plan out a scene from start till the end which is much harder when the player is in control. It is easy to spoil a dramatic moment when a player is jumping around or looking at the scenery though still very possible but much harder than it needs to be.

However it is not without its downsides. Ultimately cutscenes remove the interaction part of video gaming as the player loses control over their character in favor of a theatrical

demonstration. There needs to be a fair balance between story cutscenes and action in a game or the player will feel excluded to the point where they would rather be experiencing what is happening in the cutscene rather than watching it which takes enjoyment away from the game.



Picture 4. Cutscene from Final Fantasy 13.

Another downside to cutscenes is that making them can be difficult, especially if they are pre-rendered rather than from within the existing game engine or framework which can be a deal breaker for most developers.

2.3.2 How storytelling has changed through the years of video gaming

When video games began their rise storytelling was considered mostly a filler. Relayed to the player via the game manual or text block at the start of the game. As an example the original Double Dragon managed to tell a simple story of a teenager fighting his way through a town to rescue their love interest. The game started with a small scene of the girlfriend being abducted and then simply showed the heroes journey through gameplay and the screen moving from right to left with no real level transitions: the second level kicked off right where the first one ended and so on. This served as enough of a storyline at the time for a video game as people were not as invested in deep stories with loads

of background story or character progression since the technology was new and simply playing a game was amazing enough on its own.

The narrative quality stayed quite low even for the new generation of consoles which were introduced, though not without their own small improvements. Around this time game developers began to have enough resources to develop the actual characters rather than having a static two dimensional character progressing through a story. They were nowhere near the detail we have all become accustomed to yet the fact that the player could distinguish them from one another revolutionized video game storytelling at the time. Some games such as Final Fantasy 6 began to produce gameplay where several characters have their own story arcs throughout which they grow and develop. This was unheard of and would only show up in the occasional PC game due to lack of resources.

The next generation of consoles in the early 90's brought forth a new change to video game storytelling. With improved hardware, it was possible to add more dimensions to a video game providing us with characters that vaguely resembled humans through their angular boxlike features. While at the time game's still were mostly lacking a plot, some game's, such as Metal Gear Solid, began to introduce ways of how new technology could blend gameplay and storytelling through scripted cinematics which were revolutionary for their time. The game itself at this point has over 30 years and 23 sequels under its belt which makes it one of the oldest stories told in video gaming.

It was not until the 2000s when storytelling began to experience its growth spurt. Consoles and computers began to have the power which was required to show a unique world and characters, leaving only a story to be told. In a few years' time games such as The Elder's Scroll: Oblivion began to appear. The game's story was complex and the game also provided the player with countless hours of sidequests which turned into their own story arcs.

The game also took advantage of the hardware to the point where it was possible for items to not be static in the environment but something the player could lift and move around instead of just putting it in your inventory. Millions of objects in a small room that all had physics tied to them was not something that was possible a decade before unless they were trying to break their machine by overheating it. This was a massive quality leap for environmental storytelling in a game with such a large amount of story to tell. Elders Scroll Oblivion was released in 2006, roughly 10 years ago. In those 10 years,

game engines and graphics have improved drastically giving inspiring developers ways of implementing the heavier storytelling methods such as cutscenes or environmental objects in a cheaper and easier manner.

Over the last few years videogame developers have been increasingly receptive to the importance of storytelling for players' involvement, leading to a revival of the narrative-focused genre par excellence, adventure games. This trend has resulted in a number of videogames where the intrinsic interest and emotional power of the narrative make up for the limited interactivity and unchallenging gameplay (Caracciolo 2015, 234) .

As strange as it might seem storytelling was and still is largely bottlenecked by technology, almost as much as the gameplay itself. Cutscenes, animations, engines, character and object art and many more factors influence a story. As better hardware becomes the standard, it opens up new ways for a story to be told, but that does not mean storytelling relies on good gameplay/graphics.

2.3.3 Problem of Ludonarrative dissonance

The term "Ludonarrative dissonance" was coined by Clint Hocking, a former Lucasarts creative director who later on moved to Ubisoft to hold the same title. The term refers to a point where gameplay, and narrative elements intersect in opposing ways (Hocking 2007, 1). For example Clint coined the term in response to the game Bioshock and how its gameplay encouraged the player to be selfish while the story and narrative were promoting a theme of selflessness, this in turn creates a "violation of aesthetic distance" which often reminds the player that they are in fact playing a game and pulls them out of the story.

This raises a huge issue concerning any discussion about combat. If the story is meant to make the player feel for the protagonist, how many people does that person need to kill before you have an emotional disconnect towards them?

Let us consider for instance the Tomb Raider series Rise of the Tomb raider game. The reboot of the series centers around Lara Croft's early days when she was still new to her profession, coping from her father's suicide and struggling to trust other people as well as being a fragile character. The problem with the game becomes clear when the player notices that the Lara Croft they are playing and the one in the story are not the same. There is a huge emotional scene where she has to defend herself and in turn take a life

in the middle of a jungle for the first time. However, from that point onward in the game she has no issues shooting people in the head or slicing their throats with expert skill that manifests out of nowhere. The gameplay turns from do no harm to do nothing but harm while the upcoming story scenes keeps Lara as the typical wimp who is filled with remorse.

Now as much as there are people speaking for the term "Ludonarrative dissonance" and its meaning there are also many people who are against it and argue that the term is misleading on many fronts. The major argument is where we can draw the distinction between a ludic element (gameplay element) versus a narrative one. Take for instance a game's sound cues, would those be considered ludic or a narrative element? Depending on the context, sound cues can fall into either of the categories or even both at the same time. This raises the question of what do we consider them as in that case.

So it is said that when determining what could be "ludonarratively dissonant" the analyst really has to explore the context and situation further rather than simply say "That is not right because x would not do that."

To help distinguish this problem, a suggestion has been made that we instead use the term "Thematic Inconsistency" to indicate more generally what we often mean when reaching for the term "Ludonarrative Dissonance" as it is not just that the player behavior is at odds with the narrative but that it is at odds with the thematic elements of the game. As an example, we can have a look at the previously mentioned Tomb Raider example. The game attempts to tell the story of Lara's journey from being a scared victim to becoming a character filled with confidence and ready for action.

The problem is once again that narratively Lara is still feeling vulnerable and unconfident but in the gameplay she has no problem attacking or mowing down numerous enemies creating a "Thematic inconsistency" which does not make sense regarding the story. The two examples are somewhat similar but the distinction that should be noted is that "Ludonarrative dissonance" would in this case signify specific encounters while "Thematic inconsistency" would refer to more general view of theme versus gameplay.

Now the real question which has been argued over for many years is whether "Ludonarrative dissonance" itself is bad. To some it might be obvious that it is a problem but many argue that it can hold value as a tool in creating a video game. Video game's can force players into uncomfortable situations and ludonarrative dissonance can help foster that uncomfortableness. However to make a method like that to work it would rely

heavily on the player which in turn makes it unreliable as players are unpredictable in nature.

It should also be made clear that these are video game mechanics were talking about. Sometimes natural laws or logical elements have to be ignored in favor of player convenience. An imminent threat is rarely imminent and the players characters inventory is rarely as small as they are portrayed on the character yet limiting something like that due to realism would not work in favor of the player's experience.

With all this said, it is safe to say that Ludonarrative Dissonance holds a place in game development and when making a game with heavy gameplay and story interaction, it should be considered and evaluated carefully. Terms such as "Ludonarrative Dissonance" or "Thematic Inconsistency" are not there to criticize the game but to bring the issue on the table so that it may be improved on. As stated by Josh Bycer of Gamasutra.com.

"You can have a world where everyone flies around on magic ostriches fighting mutant donkeys and as long as you explain why that it is going on in the context of the world then the game is stronger because of it" (Bycer 2013, 1).

2.3.4 Examples of good/bad storytelling in video gaming

The section will focus more on how the story is told rather than what the story itself is. The games were chosen after researching numerous discussions regarding storytelling and the aim was to choose a few noteworthy examples with different styles to them as well as a game which held a issues with its storytelling.

It was hoped that the games would fall under similar age as comparing old gaming standards to those of new ones would hold too many variables. In the end the chosen games ended up in a rather modern era with the oldest one released in 2012 and the newest in late 2016.

Gone Home

Gone Home is a game that presents a story about a family. The player takes hold of Kaitlin Greenbriar who is returning from overseas to her family in Oregon only to find the

house empty with a note on the door from her sister which implores her not to investigate what happened while she was gone. That is the premise, there is no goal to the game. However, the game encourages the player to explore and discover clues to what happened to her family by roaming around the house. The game itself offers a narration throughout the game which gives a very bland or speculative view of what might have happened through the eyes of Kaitlin as she discovers the clues around the house.

The game starts the player off by giving them expectations. They go around the house finding pieces of the puzzle in form of written messages or props which coupled with the dark and lonely house paint a dark picture. Eventually they might be convinced that their family has dabbled into the occult and they can expect to find corpses in the attic but then they finally find the last pieces of the puzzle which connect all of the other ones together in a new way to reveal a family which is simply going through rough times on all fronts. The whole idea of the game is to subvert player expectations throughout the ambiance and vague clues that end up building the story as a whole.

This is called a "Walking simulator" type of a game. *Gone Home* demonstrates environmental storytelling in a superb way. Combining a relatively common story with ambiance and environmental storytelling to make a story which you get invested into emotionally as it starts off as a mystery, turning into horror and finally ending in a slice of life manner. The story leads the player in a rollercoaster of emotions that ends with a conclusion that could happen to anyone.

Dark Souls

A good example of questionable storytelling is how *Dark Souls* franchise handles their narrative. *Dark Souls* itself focuses highly on the combat with numerous unique monsters having different attack patterns to learn and avoid so the player can ultimately defeat them. Yet story-wise you can complete the game without ever understanding what the game was about or what has happened throughout the journey because of how the story is told. The storytelling in *Dark Souls* is a split between obscure hints in the environment and from non player characters as well as item descriptions which all coalesce into a great story that explains the world around you, who your avatar is and what you are doing. Although you would never encounter most of it unless you wanted to go out of your way to learn it. When entering a fascinating area your only option to understand

what the place is or what history behind it is to find the items which are either at relevant locations or carried by a noteworthy enemy which has links to its origin.

The game makes you look for the story and is highly criticised for doing so. The story itself is great, just the way you have to experience it is unfriendly for a casual player. The game's storytelling focuses deeply in environmental storytelling while abandoning meaningful cutscenes or dialogue but still manages to provide an interesting story. As long as you can find and interpret it.

Final Fantasy 15

Then we come to a game which had been in development for 10 years, Final Fantasy 15. The game also has two movies based on it which have affected the game itself in major ways. The gameplay centers around Prince Noctis and his four bodyguards/friends fighting for their country and ultimately for the world as demonic beings threaten their existence.

Now 10 years is a long time to develop a game so it would be expected that the game is refined to the core and in some cases it is. The Art, combat and gameplay are arguably amongst the best on the market. However, during those 10 years the development team changed their writing team four times. It is unclear how much this affected the story by itself but it is safe to say it probably had a large play in it as the game's storytelling is arguably amongst the worst in recent years by a high class company such as Square Enix.

So what went wrong? The game has some clear problems which can be put into a few categories.

Starting off with the most obvious one, the movie. The movie Kingsglaive essentially promotes the game and tells the story up until the start of the game which includes most of the ingame lore and plot. Normally this would not be a problem as you would simply have any important plot or history represented inside of the game itself in one way or another through environmental storytelling or dialogue reminders so that new players would not get confused. Sadly, that is not the case as the game assumes you have watched the movie and most of the important plot or past lore is omitted. A removal of plot and story at this magnitude can not and will not work for a long lasting story such as

the Final Fantasy series where several events and subplots happen in a single playthrough.

The second issue the game most notably handled wrong was side characters. The Final Fantasy series in general has a rich world with numerous unique characters, but series 15 appears to have had a confusion on how to handle them. During the game you encounter numerous bad guys. They explain what they are doing and what they want but in most cases fail to present why they are doing it or what their motivations are which makes them feel as if they are simply there for the sake of being there to stop the player. The villains simply appear out of thin air after small build up before disappearing for the rest of the game.

In other cases such as the friendly side characters, you are introduced to a large number of them throughout the game who you interact with and find to hold value or interest for the moment. The characters show up and build themselves for that one set of dialogue or scene and then disappear to never be seen again. What happened to them? What are they doing during the story events? There is no follow up to them, or well there is but it became a category on its own.

In the later parts of the game you come across a single character who seems to know everything that has happened, from the fate of side characters to the outcome of battles and events happening around you which you could not witness. They are essentially what game critics call a "loredump" character having little purpose other than to run you back up to speed on what has happened in the story. The idea of having a character such as this violates one of the most cherished rules of story writing, "Don't tell, show.". In relation to this character much of the game's story happens around the player off screen instead of with them which adds to the list of events the loredump character has to know and what the player themselves would rather experience themselves.

Continuing on, while the next issue mainly only affects one event in the game it is still a major failure in storytelling. At a certain point in the game the player has to invade the main enemies area to learn what they are and why they are doing whatever they are doing. You fight numerous great enemies and the plot is conveyed to you by pieces of paper which you have to find. You go around collecting pieces of paper which by themselves are out of place as the location of the pieces do not correspond to a location where you could imagine information such as that is held. There were many ways to handle such an event like a cutscene or dialogue with an enemy or simply hearing it in the background

but instead a decision was made to implement an item which appears hugely out of place.

In conclusion, it is easy to see why the game's story could be frustrating to understand and follow. Investing most of the plot into an outside source like a movie definitely did not do good for the game outside of promoting it. The decision to invest so much time on making side characters but no development to them makes them an oddity in the story rather than interesting and the decision to have major plot devices happen off screen definitely is extremely questionable. It is quite clear that Final Fantasy 15 is a victim of either a deadline or simply bad decisions which caused the team to focus more on gameplay while patching up the story as best as they could which resulted in a fragmented story that leaves most new people questioning what actually happened when they finished the game.

Journey

As a last example of good storytelling we have a game with only a few hours of gameplay. The game is called Journey. Journey's story is told wordlessly through gameplay and using cutscenes. The player start off as the traveler in a seemingly endless desert. In the distance they can see a large shadowy mountain with a glowing crevice which the player is drawn to. The player makes their way through ruins of a once sprawling city at the base of the mountain until they eventually reach the mountain peak. If connected to the internet the player might also find another nameless traveler who is another player trying to reach the mountain. You can not converse with the other player in any way but the simple addition of another player in a vacant world creates a small attachment which encourages the players to stick together till the end of the game as they keep each other safe through the desert nights.

A simple story but stories are not about the conclusion but rather about the journey. The game provides no narrative but it is made so that the player can piece one up by themselves as they observe the collapsed architecture and experience the ambience. With the architecture and ambience combined, they steer and create a premise for the player to interpret through emotional cues provided through the gameplay.

Journey is one of the few games which induces emotions to create a story rather than the other way around. The game has received numerous awards including "Game of the

year” in 2012. Although mostly in art, music and animation, there is no question that the unique way that Journey handles storytelling is praiseworthy in its own right.

3 CASE STUDY

The case study section goes through the case study survey question by question explaining the thought process that went to forming the question as well as how the question can be answered. The section then moves to analyse the answers as well as give rationale for the outcomes.

3.1 The survey

Why

A survey was made to let a selection of communities show how much they value the story inside of a video game and to let them point out any quirks and oddities they have noticed in the logical built or the journey of the story. The reason for this was to see how much a normal user actually pays attention to the story and how much it affects their enjoyment.

How/when/Who

The survey itself was made using a free edition of Google Forms available for anyone who has a Google account. The survey itself was connected to a Google Excel document to collect the information into an environment where it could be edited for viewing. Since the survey content was about gaming, the survey was published in a small circle of websites which were deemed to house a large number of gamers from different genres.

Mmo-champion (www.mmo-champion.com) is a video gaming forum dedicated to game's from the gaming company Blizzard who have made a selection of games from different genres but it also holds a more general sub forum which discusses video games in general.

Gamefaqs (www.gamefaqs.com) is a video gaming forum however for a much bigger audience. The forum itself is amongst the oldest video gaming forum on the internet and holds numerous boards dedicated for specific game's. The site holds some strict restrictions for its users so new users are not able to access all of it without continuous

use. This posed a problem as only a fresh account was available for use and access to the boards was extremely limited. Luckily enough after a short talk with a third party they agreed to post the survey to the forum.

Lastly reddit (www.reddit.com) is a message board much like any other but it is differentiated by the content which is curated through a voting system. Users may "upvote" or "downvote" discussions and comments to bring them to attention of the rest and therefore, create more discussion within the thread. The survey was posted into a subforum section called "samplesize" which is a forum dedicated for surveys and data collection where anyone can enter their surveys as long as it meets the minimum requirements. The survey was initially intended to be submitted to another sub forum simply called "gaming", however after reading the rules it was discovered they do not allow surveys in the mentioned forum so the survey location was changed to "samplesize".

The survey takers were expected to currently be players of video games with possibly a long career of gaming behind them. They were also expected to have at least vague memory of their gaming exploits throughout those years to fill out the surveys open questions.

The survey itself was opened and put online on Wednesday 3.5.2017 and run until the next Wednesday 10.5.2017, closed late in the evening filling out a full week. The survey received 211 submissions which vastly exceeded the expected amount of a 50 submissions.

3.2 Content of the survey

Age and gender

The survey was designed so that it would have the minimal personal information required as answers so the personal questions were limited to age and gender. The age section in the survey was an open question in which the respondent could write their own age while gender section had three choices: Male, Female and "prefer not to say".

How long have you played video game's?

The question of how long one has played video games was actually rather interesting to think about when you put thought into it considering video games have been around for only 50 years. The survey form for the question was made as a slider with 8 options, ranging from half a year to "more than 21 years" with smaller increments in between.

What type of game's do you play mostly?

The question was formed with the option "checkboxes" which allowed for a row list of selections which the test taker could mark a selection of as their answers. The list for this survey consisted of 10 possible gaming genres (Shooter, Action, Horror, Sport Game's, Role-playing, Adventure, Fighting, Racing, Strategy, Casual.) with an extra option called "Other" that the test taker could fill out themselves if they found that the previously mentioned genres did not fit their criteria.

The genres were selected through a small amount of research and deemed to be the most general genres, but it did not rule out the option of adding an extra option for the survey taker to fill out themselves.

How much do you value the story in a game?

Much like the previous question, this one gave a selection of genres. However for this question the survey form "grid" was selected which enabled a column section to the question. In the row section we have the genres while on the column section a set of evaluative sentences were added. The idea of this question was to make the survey taker measure how much they value the story inside of said genres.

The values chosen started from the most negative going to the most positive, "Not at all", "A slight amount", "It holds importance", "It's a dealbreaker" the idea being to affirm to terms which the survey taker could relate to.

It should be noted that this portion had the option to evaluate "other" genres as well but no way to specify what that other is which in turn made the option hold next to no value data-wise when combining all of the category.

Ludonarrative Dissonance

This particular section was not a question in itself but was a needed information block for the upcoming questions.

The section was solely made to inform and demonstrate the term "Ludonarrative dissonance". The section was made to be informative as well as understandable as possible. The information would carry on to the next three questions.

Were you familiar with the term "Ludonarrative Dissonance" beforehand?

A simple yes or no question which was made to supplement the next two questions.

Have you encountered such an issue during your gameplay?

Another yes or no question, but this one held importance as a yes answer would hold a lot of data considering the question which it foreshadowed.

If so, can you elaborate on that encounter?

Apart from the age question this was the first open question of the survey but due to the nature of the question being a follow up to the previous question (Have you encountered...) it had to be left out as an optional answer considering the survey taker had nothing useful to write into it if they answered the previous answer "no".

Google Forms is a handy tool for surveys but in its free form it lacks options for intricate permissions/rule sets for more elaborate survey forms.

Have you ever encountered anything else which seemed odd/abnormal or disruptive in a game's story?

Although not directly related to the questions regarding Ludonarrative dissonance the question was made mostly for those survey takers who were unsure if their answer qualified for the previous questions regarding it.

If so, can you elaborate on that encounter?

Not to be confused with the same question earlier on, it is paired up with the previous question instead. The survey question is the second question to not be mandatory due to mechanical restrictions by Google Forms.

As mentioned, this question was mostly asked so that survey takers who were unsure if their experience qualified as a "Ludonarrative dissonance" answer could write their comments.

Have you ever been disappointed by a game's story after completing the game?

This was a simple closed question. The option to add an open form after it asking for details was considered but it was decided that it was not necessary.

Have you ever stopped or continued playing a game solely due to its story?

This question was a simple choice between five options.

"I've stopped playing because I disliked the story."

"I've continued playing simply because I liked the story."

"I often stop playing because I dislike the story."

"I often continue playing simple because I like the story." and lastly "No."

It was not until multiple survey entries into the survey that a problem with this question was brought forth. What if the survey taker had stopped playing because they disliked the story for one game and continued playing because they liked the story of another game? The question only allowed for one answer.

It would have been easy to change the question to allow multiple answers, however the survey had run for multiple days and there were over a hundred answers already so a decision was made to keep it unchanged and simply note the mistake in the analysis part of the thesis.

What game has had the best/most memorable story in a video game for you?

This was the last question and third of the open questions but unlike the previous two, this one was made mandatory. The question itself was made so that it would show what makes a story memorable for the survey taker.

Results

The survey ended on 10 th of May and managed to gather 211 survey submissions with near 80 answers in both non mandatory open questions. Far surpassing the predictions of 50 or so answers that were expected. The results were imported from Google Forms to an Excel sheet and two copies were made. One known as the master copy which would not be touched and one for editing editing purposes.

4 ANALYSIS

4.1 Age, Gaming careers and Preference

Out of 211 survey responses 182 were male, 24 female and 5 preferred to not mention their gender. It is common misconception that women do not play video games but it is well represented in the Figure 1 (page 27) that there's a clear gender imbalance in the survey. An explanation as to why this might have happened is that maybe female players simply do not frequent these type of forums as much as male players do.

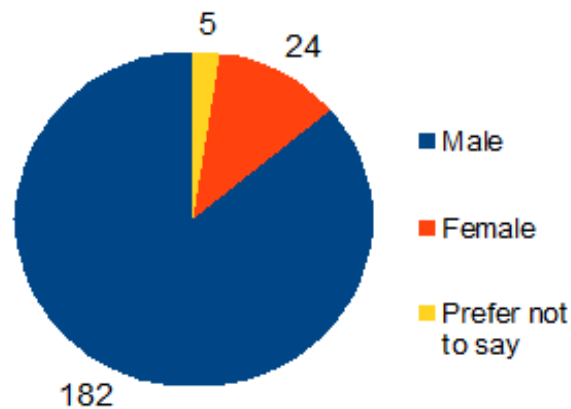


Figure 1. Survey answers for gender question.

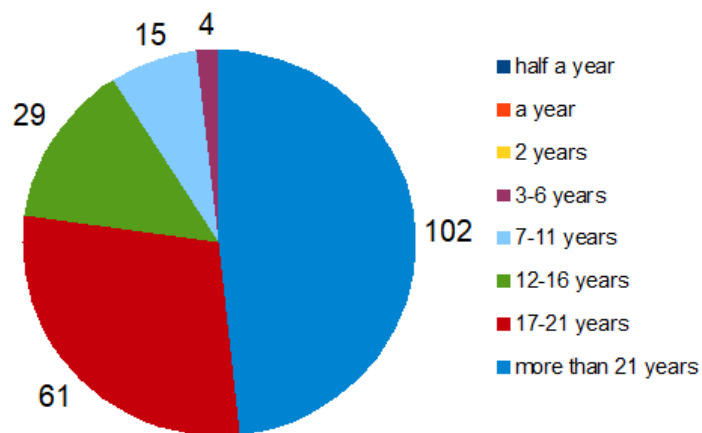


Figure 2. Length of experience in video gaming.

Regarding their gaming experience it was surprising to see the answers to be at the far end of the spectrum as presented on the Figure 2. The large majority answered that they had been playing video games for more than 21 years at 102 answers with the next largest portion having played 17-21 years at 61 and 12-16 years at 29 and 7- 11 with 15

and lastly 3-6 years with only 4 answers Leaving the options 2 years and, a year and half a year completely empty.

As we can see from the Figure 3 the survey takers ages ranged somewhat linearly with majority of survey takers ages ranging between age 20 to 31 which considering the previous gaming experience statistics would suggest that a large majority of the survey takers have played video games for most of their lives.

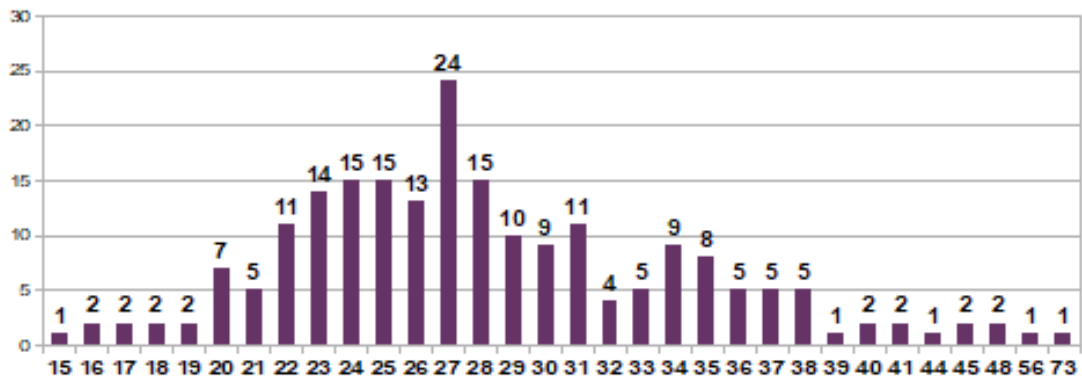


Figure 3. Survey taker age distribution.

The responses on the type of genres that the respondents play were greatly in favor of role-play as seen in Figure 4. This could be due to many reasons such as how the survey was presented as survey about storytelling or the fact that the survey was presented at a forum which is dedicated to a company that focuses on their storytelling in their video games. But even with the outlier, the other genres had a good representation with the emphasis going towards adventure, action, shooter and strategy.

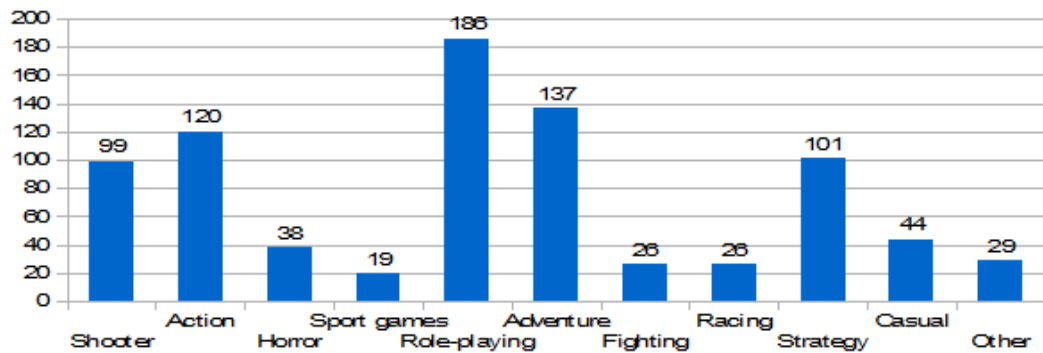


Figure 4. Distribution of video gaming genre preferences

4.2 Value of story

The outliers (Sports Game's, Racing and Role-play)

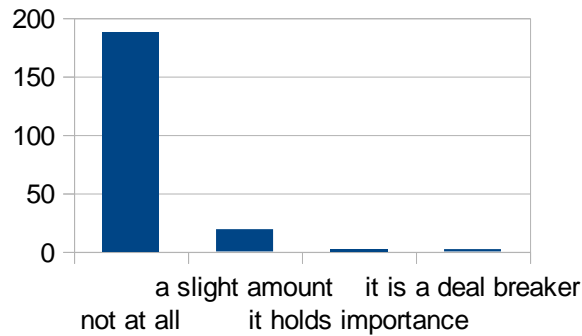


Figure 5. Values for the importance of story in Sport games.

Regarding the question of how much a person values the story in a genre it is quite interesting to see that most genres holds quite a significant difference to one another. The survey takers' evaluation of some genres were somewhat predictable such as Sport games and racing having a large portion of their answers leaning towards "Not at all" (85% for sport games and 76% for racing) as presented in the above Figure 5 and Figure 6 below. This means that story in these genres does not hold much value to the player.

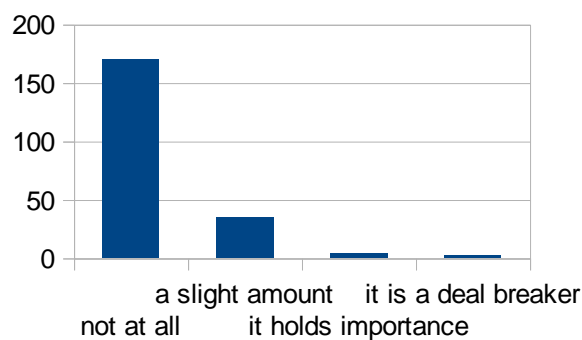


Figure 6. Values for the importance of story in Racing games.

In the other end of the spectrum shown by Figure 7 role-playing holds the highest value for positive "it's a deal breaker" (71%) clearly indicating the the story is massively important for the genre. The rest of the genres are more well rounded in their answers.

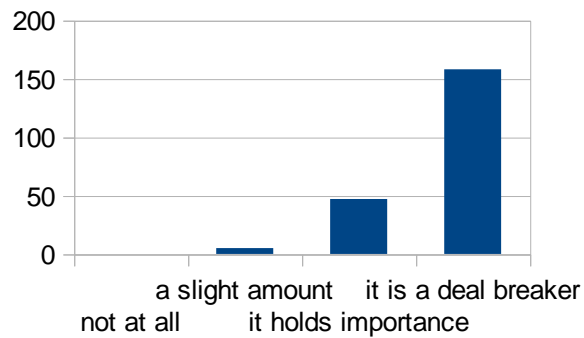


Figure 7. Values for the importance of story in Role-playing games.

Shooters

In the case of shooter genre we can see in the Figure 8 below, the answers lean towards the story holding some value while not being the most important factor. The shooter genre can be considered to be reliant on its gameplay to be entertaining but the values in the survey show that a story still has some place in the shooter genre, most likely to give a meaning to the action.

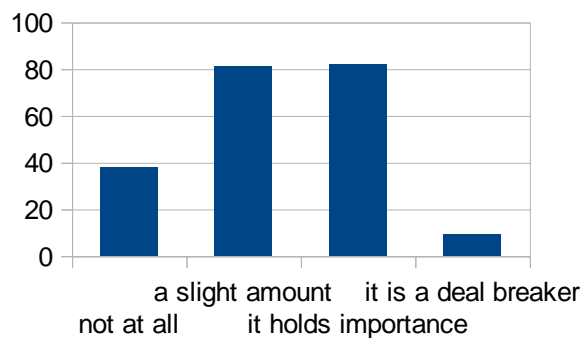


Figure 8. Values for the importance of story in Shooter games.

Action

Speaking of action, the very genre itself is considered rather vague. A genre that emphasizes physical challenges including hand-eye coordination and reaction times could be related to any game realistically but its roots are still holding towards game's which involve much fighting in one form or another. With the genre being somewhat vague, the results of the survey should probably be considered differently.

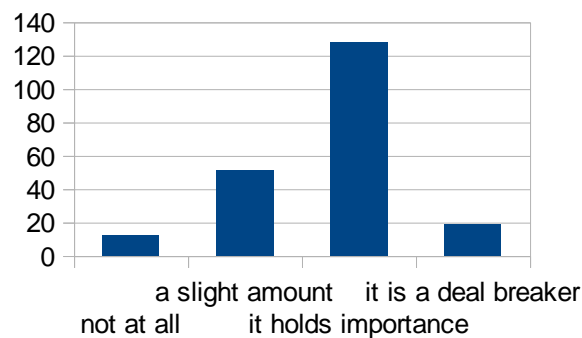


Figure 9. Values for the importance of story in Action games.

For the action genre we can see that most people answered "It holds importance" in the Figure 9 meaning that story is important but not the main point of the game. So if we consider the term "action" to refer to a game such as Dark Souls where the player controls an avatar and fights enemies which require them to have hand-eye coordination and good reflexes to react to the combat. Even a genre which focuses on skill still heavily becomes assisted by a story which grants all the action a meaning/theme and a goal.

Horror

The horror genre is generally rich with story as that sets the theme and setting so it is not strange to see that the majority of survey answers are situated on the positive side of the scale with more than 80% of the answers split between "It holds importance" and "It's a dealbreaker" as presented in the Figure 10 below.

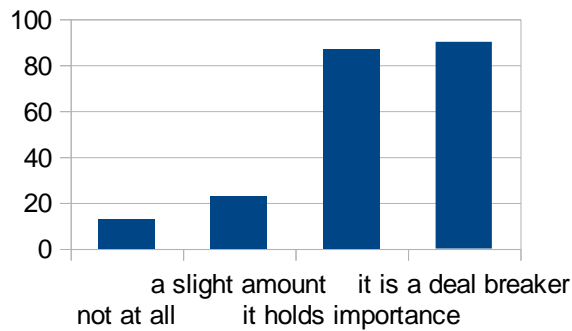


Figure 10. Values for the importance of story in Horror games.

Adventure

The roleplaying genre has majority of its answers located on the far positive side of the spectrum much like horror but much more so at 90% split between the two options shown in Figure 11. Adventure games are about the journey and exploration but without a reason for the hero to journey out, they would never leave the safety of their home or journey towards the ends of the unknown.

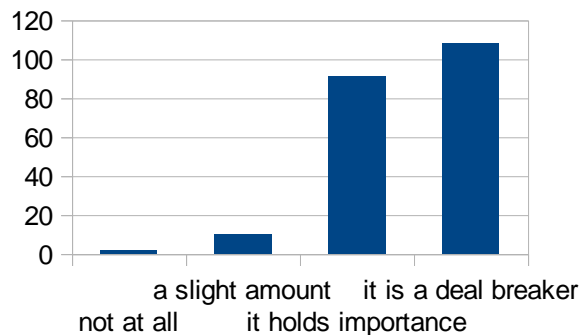


Figure 11. Values for the importance of story in Adventure games.

Fighting

Contrary to horror or adventure, the fighting genre seems to lay on the other side of the spectrum as seen on Figure 12. With 83% split between "Not at all" and "A slight amount", which is not unexpected. Fighting games generally only occupy one space with a background which might change simply to keep the environment fresh on which two avatars fight each other until one side is the victor.

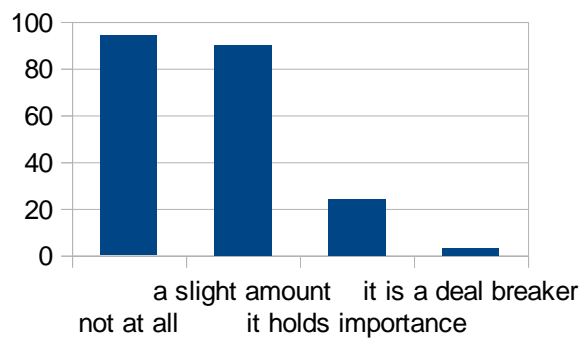


Figure 12. Values for the importance of story in Fighting games.

Fighting games usually hold short amounts of story that explain some of the avatar's story and conflict with one another but story such as that is generally sidelined during play in favor of the gameplay. It might be interesting to know that fighter x killed fighter y's family and that is why fighter x has trained years to avenge them but it provides very little in such one dimensional gameplay that focuses on skill and knowledge of moves as well as reflexes.

Strategy

The strategy genre holds the middleground with most answers splitting between "A slight amount (31%)" and "It holds importance (43%)" shown in Figure 13. The story is valued but not to the point where it makes or breaks the game.

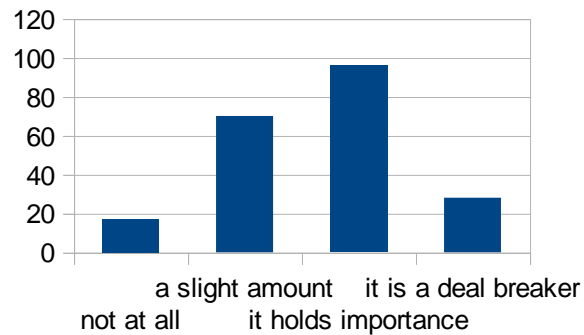


Figure 13. Values for the importance of story in Strategy games.

The genre focuses heavily on strategy in the form of proper placement of minions and structures so the split between gameplay and story heavily favors gameplay with the story influencing terrain and how the controllable minions look. Depending on the type of the game, the hook may lie more in the intellectual challenge than the story which is portrayed.

Casual

From the answers shown in Figure 14 we can see that the value for story in a casual game seems to be heavily slanted towards it not being important with 38% of the people answering "Not at all" 31% answering "A slight amount" 19% answering "it holds importance" and lastly 6% answering "It's a dealbreaker". The majority appears to feel that a casual game does not need a story to be entertaining but a small lump of the answers still feel it does.

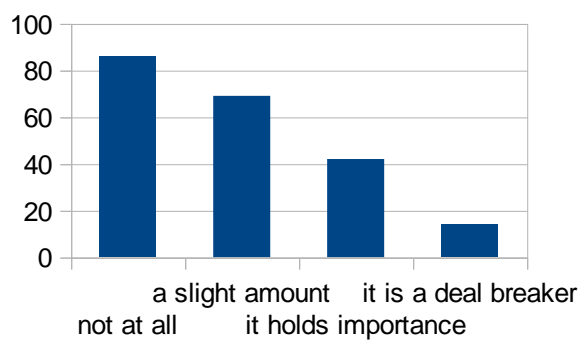


Figure 14. Values for the importance of story in Casual games

It is likely that the large majority consider casual games to be games a person might play on the bus simply to pass the time. A game such as that does not really require much story to it but a compelling gameplay that you can forget yourself in to pass the time.

4.3 Ludonarrative dissonance

The question of "Were you familiar with the term "Ludonarrative Dissonance" beforehand?" came up with predictable results as 81% of the 221 responses answered no as depicted in Figure 15. It was expected as the term is not something that gets thrown around in common gaming discussions but rather in more analytic discussions and in the process of game development.

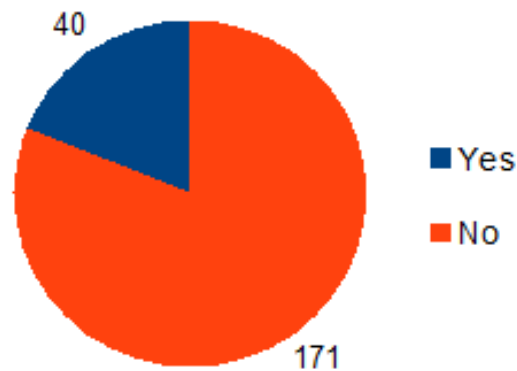


Figure 15. The yes and no answers to the question of "Were you familiar with the term "Ludonarrative dissonance" beforehand?"

Now with so many answering "no" to this question, it was interesting to see that the question of "have you ever encountered such an issue during gameplay" came up with such a neutral response that can be seen in the Figure 16 below with a slight preference to "no". The effects of Ludonarrative Dissonance as discussed earlier in the thesis are very situational but when severe enough, the player will unmistakably notice it.

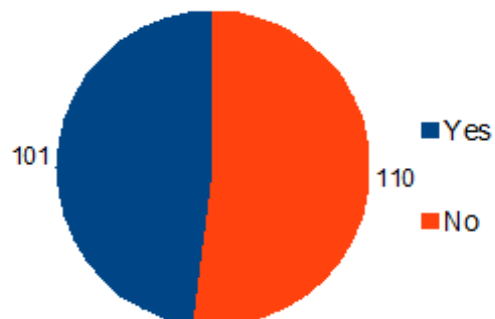


Figure 16. The yes and no answers to the question of "Have you ever encountered such an issue during gameplay?"

With majority of the people answering their preferred genre to be role-playing it is rather interesting to see that the disparity is next to nothing. Although based on the open question which prompts the survey taker to elaborate on a game or scene in which they have encountered such an event, it is highly likely that many of the survey takers did not fully understand the terms meaning.

All together only 80 out of the 101 survey takers who answered yes to "have you encountered such an issue during your gameplay" chose to fill the open question. Surprisingly exactly half of the answers either did not give enough information or were outright not related to the subject of Ludonarrative Dissonance although most of the answers did show that they had had some thought put into the subject but neglected some of the necessary parts which determine it. Many confused the term with sudden new developments(plot twists) which they did not find enjoyable or simply relating the term to choices such as "doing good" or "doing bad" having different results gameplay power-wise which is certainly related to the term but in no way its primary concern which is disconnect between story and gameplay.

The remaining 40 answers, on the other hand showed extremely similar results amongst each other. For example the survey takers gave examples of game's where the protagonist is portrayed as someone who would have problems taking a life but would ultimately gameplay-wise go on to kill massive quantities of enemies such as previously mentioned Tomb Raider reboot or a different game such as Grand Theft Auto and some even brought up the previously mentioned concept of false urgency.

Many role-playing games instil a sense of urgency in the story by insisting early on that time is of the essence, but gameplay-wise the players are in no hurry as you delve into the world and do side quests which are completely unrelated to the main plot. This is directly related to game's pacing and could be avoided or alleviated. It must be mentioned that the lack of real urgency is there for player convenience rather than as a flaw aided by some suspension of suspended reality. However, it could still be said to be a point of interest as instilling that emotion of urgency does immerse the player into the game and story as well.

Many of the answers also discuss Ludonarrative Dissonance and how it should not be considered too deeply. Arguing that gameplay usually takes over storytelling and the storytelling itself follows gameplay instead of the opposite which is generally true.

Especially so in the case of realism versus character power or simply for player convenience.

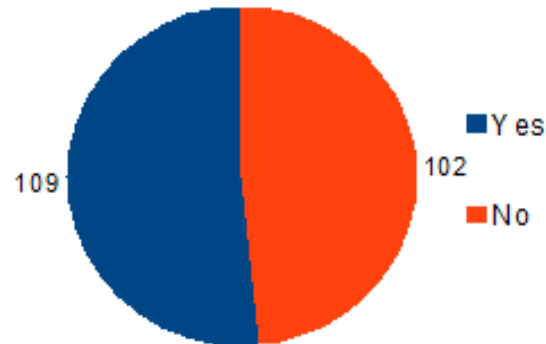


Figure 17. The yes and no answers to the question of "Have you ever encountered anything else which seemed odd/abnormal or disruptive in a game's story?"

In regards to the question "Have you ever encountered anything else which seemed odd/abnormal or disruptive in a game's story?" we can see in Figure 17 most survey respondents answered "yes" though only by a small margin. The corresponding open question "If so can you elaborate on that encounter" received 76 responses out of 109 and caught a handful of responses which were a good fit for the Ludonarrative Dissonance open question which was its purpose.

Although mostly referring to the same problem where a frail protagonist is afraid of killing but then goes on to kill masses of enemies so it brought nothing new to the table. It did, however, further the idea that some of the survey takers did not completely understand the explanation for Ludonarrative Dissonance since answers like this would have been good in the previous open question.

4.4 Experiences regarding storytelling

Regarding the actual question whether they have found something odd/abnormal or disrupting in a game's story only a handful of the answers seem to actually relate to story. Story mechanics such as dialogue that appears out of place completely or old game's having two non player characters with the same voice talking to each other or simply

conversation choices which do not seem to follow the game characters character, making it feel like they are responding to two similar situations in different ways.

One answer mentions the Final Fantasy 15 problem that was discussed earlier in the thesis where they have noticed that many story elements are not explained and after defeating the game they were left clueless as to why many of the events happened or went as they did. Another survey taker pointed out that a lot of the game's have a strange relationship with the villain's power in the story versus the power inside of the game. Earlier on in a game, you might witness a villain do something like destroy half a town with ease, but then in the final fight when you face him, he only seems to throw pot shots at you by comparison. Situations such as this are fairly common and usually storywise the explanation is that the villain has been weakened by external effects such as the hero or some accident but there are glaring cases where no reasonable explanation is given story-wise for the villain to suddenly be holding back.

A large number of the answers referred to story or gameplay where they encountered an invisible wall which are designed to keep the player out of a specific areas or other game limiting mechanics such as the length bullets can fly or loading screens. There are many mentions of events having bugs associated with them causing the event to malfunction in some form or another breaking immersion. Although such issues might be related to specific scenes, they are not really directly related to the story or how it is conveyed. Nevertheless mostly the the survey takers appear to consider story elements that are odd/abnormal or disruptive in the story to be something someone else would considered a plot twist or character development

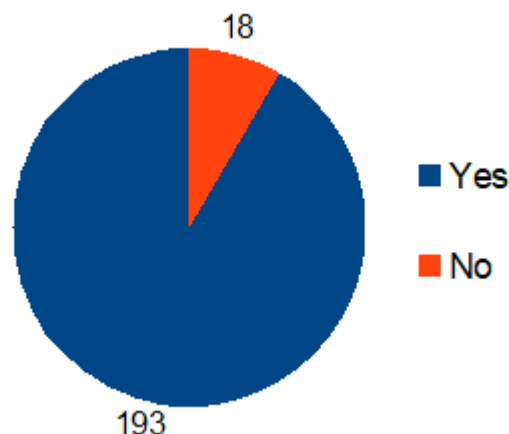


Figure 18. The yes and no answers to the question of "Have you ever been disappointed by a game's story after completing the game?"

The next question simply asked "have you ever been disappointed by a game's story after completing the game?" which all 211 survey takers responded to and the responses were nearly unanimous with 193 (91.5%) answering yes and 18 (8.5%) answering no as shown in Figure 18. A large majority voting yes to a question like this is easily explained with the help of one of the earlier statistics regarding how long they have played video games. Nearly every survey taker has played video game's for over a decade which means they have more than likely played numerous video games. It is quite safe to assume considering people have different tastes that in those numerous video games one or more held a story which would leave survey takers disappointed.

"Have you ever stopped or continued playing a game solely due to its story?" now this question had the problem of not being a multiple answer question when it really needed to be which was already mentioned in the run through of the survey questions. However, even with the question being faulty to a point, there is still some information we can take from it. Unlike most of the other survey questions, this one shows a healthy distribution that can be seen in Figure 19.

Combining the 32.% and 20% together 52% of the survey takers have encountered a situation where they have been ready to stop their play through for good but have persisted in favor of seeing the rest of the story with one fifth of the survey takers encountering this regularly

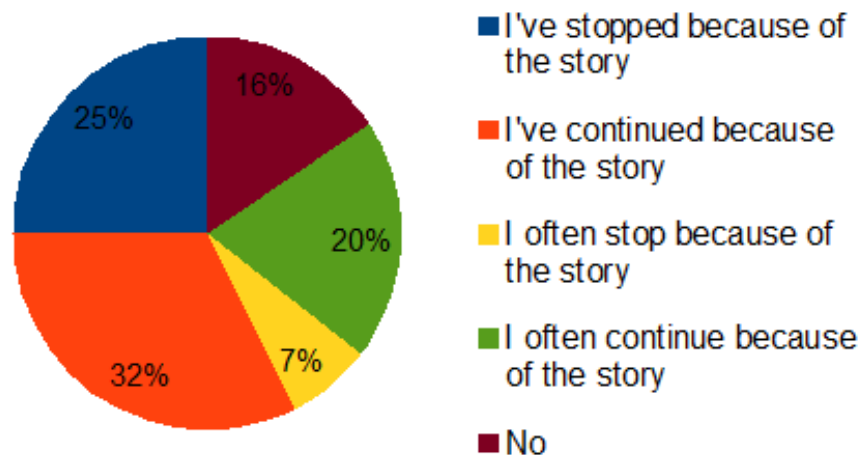


Figure 19. The answers to the question of "Have you ever stopped or continued playing a game solely due to its story?"

On the other side of the coin, if we combine the 25% and 7% we have 32% of survey takers who have dropped their game play solely because the story did not appeal to them regardless of how good the gameplay was with a small percentage finding that they do so on regular occasion.

Considering the survey taker most likely chose the option which they felt more strongly with, it is surprising to see that the survey takers inclined to continue their playthrough because of their interest towards the story more than continue their playthrough because of interest towards gameplay despite the story. Even if gameplay is generally valued higher than the story aspect of a game, it is interesting to see that the cases in favor of storytelling seem happen more often than the cases in favor of gameplay. Perhaps good gameplay is taken more for granted while a good story is more appreciated when it comes along?

The very last question asked the survey taker what game had the best or most memorable story in a videogame for them. Not to be confused with "what is the best game" as that would need consideration in more than the story. All 211 survey takers responded to the question with nearly half of the responses being about old franchises with long established story and multiple game's to hold the best or most memorable story to them, especially game's such as the Final Fantasy series with many game's under it or The witcher series which originates from a collection of short stories and novels that

established a vast world with rich lore behind it before being adapted as a gaming series

Many of the survey responses refer to games such as these as their gateway to well established storylines so there is a hint of nostalgia in the answers. The vast majority who refer to these games which hold stories that span through many releases appear to enjoy the established world and the long lasting stories and have grown attached and invested to the story itself rather than the gameplay which is considered as a cherry on top of it.

Much like one might read a series of books and wait till the release of the new book, these survey respondents consider the story in a videogame as such. Unlike a book where one can only immerse themselves in the story, these people wish to be a part of it but also to see where it leads them.

The rest of the survey answers and vast majority refer to one off games that have not established large series behind them with most of them referring to what these days are considered old games from before the turn of the century such as Tales of Symphonia or Chrono Trigger. Games such as these generally hold vast amounts of play time even when not considering any potential side quests. Considering the age group of the survey hangs largely around the age 24 as shown in Figure 3, it is very likely that during their younger years the survey takers could have spent a week or two completing such a game and when the game would inevitably end it would certainly stick as memorable simply because of the length of the journey.

Many of the responses explain their game as holding incredible character design or immersive story but notably nearly all of them also mention that the ending or the story in general made them feel things such as astonishment or sadness in the highs and lows as well as made them question things. Is the reason good/bad guy in this game has really a good justification in what they did? Would they instead side with the evil if given the chance? Or it simply made them question concepts of the real world.

5 CONCLUSION

In conclusion, we can see that storytelling has been and will continue to be a large part of our enjoyment as well as a central part to our growth as humans. With video gaming giving us a relatively new medium to convey a story in which we can interact with and be a part of, it is important that we continue developing how the story is conveyed to the person. With bright minds discussing subjects such as “Ludonarrative dissonance”, the game developers must also keep a clear eye out for disconnect between the story and the gameplay to not let the aspects of the story make the gameplay itself distasteful.

Regarding the survey most survey takers were currently in their 20's to 30's with the large majority of them being male and having been involved with video gaming for most of their life. The survey takers gaming preferences seemed to also lean towards games which are heavy or rich in storytelling and they valued storytelling in these games averagely to heavily on the positive side of the scale.

Regarding the question of Ludonarrative Dissonance the survey takers had not been familiar with the term before hand and when questioned if they had encountered such an issue during their game play, the survey answers seemed to hover in the grounds of neutrality between yes and no. However, after reading the open questions which prompted the survey takers to elaborate on the encounters, it became clear that a large portion did not completely understand the concept. Many confused it with story concepts they did not agree with such as plot twists or simply the results of the choice between “doing bad” or “doing good” being different reward-wise. This idea was enforced through the next question where survey takers were asked if they had encountered anything else odd or abnormal in the games story and some proceeded to describe situations which fit the Ludonarrative Dissonance issue instead. With the rest of the answers referring to glitches, game mechanics such as invisible walls or plot developments which they did not agree with.

Nine out of ten people had experienced disappointment after completing a game which is reasonable considering the medium of how long the survey takers had been part of the gaming community being so high as they more than likely had completed numerous games and not everyone can be satisfied with every story.

With the question of "Have you ever stopped or continued playing a game solely due to its story?" not being a multiple answer question by accident, the concept of "How do you feel you act more often?" was considered to be the aim of the question. Most of the survey takers by a few percentage points felt that they had continued playing simply because they enjoyed the story with 1 out of 5 out of all answers feeling they did so on regular basis compared to the opposite of continuing despite of bad storytelling.

Finally the survey asked "which game has had the best/most memorable story for you?" which a large majority nearing half of the responses answered to be a game which had a long series behind it, often starting from the very first game and sometimes even commenting the whole series. Many referred to game's such as these as their start to video gaming and established story worlds.

With technology improving at a rapid pace giving our computers more to process with. The quality of video gaming and storytelling will improve and how we can portray a story may be revolutionized in ways we simply can not make happen right now with our home computers. This is a million dollar business simply waiting to be found by some developer with enough imagination.

Hopefully game developers take note of just how important storytelling can be and are encouraged to look outside of their cubicles to find new ways to illustrate a story and improve storytelling as a whole.

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