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The Official Rulebook for Choice in Video Games:
An Examination of Choice in Modern Narrative Games

by

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Submitted in partial fulfillment of the requirements of
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Words followed by an asterisk (*) have a short definition in the glossary at the end of the thesis.

Introduction

Storytelling has always been evolving. It has taken on many different forms: film, drama, novels—each able to convey a story in a specialized way. Written stories can allow us a view into a character’s thoughts, or can focus on descriptions of characters or the worlds they inhabit; film does well at representing the story visually, using images to convey emotions that can’t be explicitly said; drama often uses movement or exaggeration to shift the attention of the audience. Each form of storytelling is special in that it can tell a story in a way the others cannot. This thesis builds on the idea that video games are the newest form of storytelling. Just like any of the mediums before them, games are specialized and have something that each of the others do not. For games, this specialization is choice.

With choice, players can make decisions that influence the outcome of the story: the player becomes the author. This unique quality of video games has become more apparent over the years. Due to technological setbacks, several early video games were unable to use choice to its full potential. Games from the “early eighties such as *Pac-Man*, *Donkey Kong*, [or] *Frogger*” gave the player “almost no choice” and “nor could they significantly alter the world” in the video game (Garrelts 7). As they “have become more technologically advanced, the possibilities for interaction... have exponentially increased” allowing players to “shape their own game experience” (Garrelts 11).

While the use of choice has risen in popularity, it is not something that all narrative games do. Many films forget to communicate through imagery, many novels forgo description. Just the same, many narrative games overlook choice with the result being a linear story without meaningful decisions. These linear games have outcomes that are still determined entirely by the author, making these narrative games no different from reading a book or watching a movie.

Games such as this have resulted in “an increasing similarity and overlap between video games and cinema.” In *Gargantuan*, Julia Stallabrass describes these narrative games without choice as “dominated” or “subservient to the conventions of cinema” “losing any sense of itself” (Garrelts 16). Without choice, video games lose their unique means of storytelling. Stallabrass isn’t alone in this opinion. Ben S. Bunting from Washington State claims that “insisting that stories can only be told through a linear, largely non-interactive narrative discounts by default the central quality of games that give them such potential to tell new kinds of stories” (Bunting 146). But what exactly do game narratives lose when they don’t use choice? What does choice add when it is integrated into the story of a game?

Games that integrate choices have the potential to be much different from any other medium. By placing meaningful decisions in the story that have lasting impacts on the plot and outcome, games can create personalized interactive stories that are made by the player instead of the author. These games can create a robust plot that shifts and adapts depending on how the player plays the game. The story can be different every time and for everyone. This is something that no other medium can say. “Of course, to be effective, this interactivity must be acknowledged by the gamemaker and incorporated into the game’s storytelling process” (Bunting 146). If this is done, and choice is used, the game’s narrative can be an experience that is wholly unique from other means of storytelling.

This potential to do things that other mediums cannot seems important but is this the only reason that choice should be used in games? To be unique from other genres of storytelling? It is likely that gamemakers use choice for more than that. Perhaps one may use choice to accomplish what game designers Laura and Frans Mäyrä define as absorption: “becoming physically or virtually part of the experience itself” (Bunting 147). Perhaps another game might

use it to appeal to players with different personalities, each having a choice they deem correct even though the other players might disagree. This idea is concisely stated by Peter Molyneux, designer of *Fable* and *Black and White* who asks “Who am I to tell you what type of character you should be?” (Totilo).

In the modern age of the interactive story, it has become increasingly common to incorporate choice into a video game. ‘Choice’ has even become a common term for marketing a game—advertising the number of endings a game has, how a player is free to play as they want, or how a game is open-world*. Many modern classics are praised for their use of choice: the *Dragon Age* or *Mass Effect* series, Telltale’s interactive narratives: *The Walking Dead* and *The Wolf Among Us*, *The Stanley Parable*, *Black and White*, *Fable*, or *Undertale* “The Friendly RPG Where Nobody Has to Die” (Cormier) are all examples. There has been a significant amount of scholarly research into the use of choice in these games, with varying goals. In Bizzocchi and Tanenbaum’s ‘close reading’ of *Mass Effect 2*, the two authors explore the implementation of choice and how it is used to create what they call “bounded agency” (Bizzocchi). From this, they make assumptions at how this particular use of choice may increase the pleasure the player receives from the game’s narrative. In another example, Cameron Moore examines the use of choice in multiple games, detailing what uses of choice work and which do not. He defends his claims of choice done right or wrong by asserting what benefit or detriment a particular game’s use of choice adds or takes away from the narrative. This latter example most closely resembles the intentions of this thesis: to determine how choice is being used in modern games by looking at popular examples; to determine the consequences and benefits of using choice in narrative games; and to use this research to determine how to use choice to benefit a game’s narrative.

Choice can be used in several aspects of a game. For example, a game could allow choices in character customization, dialogue, player actions, gameplay, level/path design, etc. For any of these given aspects of a game, a developer has many options in how they could use choice. The investigation of modern narrative games that this thesis includes attempts to determine the most common uses of choice in the example games. Not only this, but the failures and successes of these design decisions will also be investigated to try to define what is ‘good choice’ i.e. what characteristics will choice have when it is incorporated well—a lasting impact on the story (persistence) and a branching narrative with multiple outcomes come to mind.

With this analysis of the most highly acclaimed choice-driven games, an understanding can be gained about why and how developers include choice in their games. We will be able to see how choice is integrated differently depending on a game’s genre, what genres it is most prevalent in, and hopefully what should be done and what should be avoided when creating a decision based game. I expect there to be a ‘philosophy on choice’ that differs between developers, especially regarding who should have the most control over the narrative: the player or the author.

Since choice can create stories that give the player some aspect of control, one would expect the its most profound effects to be on the narrative elements of a video game. If we find that choice can in fact improve the narrative of a game, its inclusion would be well worth the effort—much of the pleasure a player gets out of a game is from the story (Schneider 6). This begs the question, in what ways does choice improve these games? How does it better or worsen the narrative that the game is telling? With this knowledge, game developers will be better educated on whether to include choice when designing the narrative in their games. While narrative is not something for all games, before deciding to include or omit a narrative, a

developer should know the benefits of video game narrative when it is used to its full potential (i.e. includes choice).

Another important question to ask is what other aspects of a game can be improved by choice? We must not forget, many modern games do not have story elements (Schneider viii). If it is found that choice can be used to improve non-narrative aspects of a game, then these games without a story can benefit from this research as well.

The investigation of choice in video games is nothing new. Several other scholarly texts already exist that analyze how a game includes choice. In fact, I will be referencing several of these in my own investigation. Studies thus far have mainly served to describe how games use choice but not draw any conclusions from this analysis: Bizzocchi, Garrelts, etc. Instead of just answering how, this thesis will try to take the argument further and ask why developers are using choice in the way that they are. By studying a selection of games with choice-driven narratives, this thesis hopes to establish guidelines for using choice in games. What works and what does not? How is choice most commonly used in games and to what purpose? What kind of stories often succeed with choice and which do not? For a game developer, this information would be the most valuable when they are deciding whether to use choice in their games. I do not plan to convince all game developers to use choice in their games. In fact, I don't want that. All I want is to show developers the benefits that choice can have when it is used to its full potential. If they decide that these benefits are worth including it, hopefully this thesis can give some guidance about how to use it too.

Chapter 1: Analysis of Modern Choice-Driven Narrative Games

Section 1: Analyzing Examples

It seems appropriate to begin the examination of choice in games by first looking at the genre that seems to use it the most: role-playing games*. Many of these games place the player in an environment where they are free to adventure as they want, design and play the character that they want, and to interact with the game characters and story as they see fit. There are several popular titles that match this description and that aim for this goal. In fact, four of the most known RPG* series in the mainstream are developed by one of two studios: Bioware or Bethesda Game Studios. For this investigation of choice, this is where we will begin: looking at some of the highest grossing and most successful role-playing games produced by these AAA* studios. It is no coincidence that some of the games most praised for their use of choice are role-playing games. It would be difficult to expect a player to inhabit a character without being able to influence the character's decisions in some way.

According to Cameron Moore at Baylor University, fantastical role-playing games “are closest in structure and content to traditional literary fantasy” (Moore 69). Two well-known series of this type are Bioware's *Dragon Age* and Bethesda's *Elder Scrolls*. More specifically we will be looking at the first installment of the *Dragon Age* series, *Dragon Age: Origins*, and the fifth installment of the *Elder Scrolls* series, *Skyrim*. While these games share the same genre, they were produced by different studios with different goals in mind. One would expect these differences to appear in how they use choice throughout the game.

AAA Fantasy I: *Dragon Age: Origins*

First looking at *Dragon Age: Origins*, the player takes on the role of a Grey Warden: a guardian that is tasked with uniting a kingdom engulfed in civil war against an impending invasion of evil creatures known as the darkspawn. The game largely consists of recruiting allied factions to aid against the darkspawn invasion. However, these factions are tangled in civil war so they are unwilling to help until the player has aided them with their own problems first. This often, but not always, takes on the role of eliminating the faction that they are currently at war with. The recruiting of one group leads to the alienation of another. At the end of the game, these factions aid the player in a final battle against the darkspawn threat. The allies that you have for this fight are the ones that you chose yourself.

Despite having chosen your own allies, one of the most disappointing aspects of the endgame of *Origins* is how little mention these allies receive. The only impact that the player's decisions on whom to ally with are brief mentions in blocks of text before the credits stating what happened to them after the battle. Some of the most difficult choices in the game were choosing who to have support you. This ending mocks these choices and makes them seem inconsequential and unresolved.

Instead the ending cut scenes of the game place most of their focus on the outcome of the player's final decision: give their own life to defeat the final enemy, let one of their companions give their life, or perform a ritual that allows the player to defeat the final enemy without having to give their life. As expected, this decision holds great impact on the game's ending. Should the player sacrifice themselves, their body is shown on a funeral pyre while their companions tie up loose ends within the plot. Should the player live, there are some final sequences of dialogue and alternate cut scenes. Note that the ultimate outcome of the game is unchanged. None of

these decisions results in the player 'losing' the game. Some are more appealing than others but none result in the darkspawn overthrowing the player's allies.

The majority of the other choices in the game are handled the same way. There are often two choices presented to the player with a third option that is often more appealing but more difficult to unlock. After making a choice and following a questline to the end, a cut scene* plays. This shows the player the results of their actions, and signals the end of a chapter in the game and the resolution of a conflict. By using choice this way, the game designers seem to be emphasizing the impact of the player's decisions since the player determines the ultimate outcome of a conflict and since the results have a permanent effect. While many of the choices in the game follow this model, some of them are more notable than others.

At one point in the game, the player is confronted with a decision of siding with a group of elves or a pack of werewolves. Joining one group leads to the extermination of the other which could make either decision unappealing to a player looking to resolve the conflict peacefully. By investigating NPC* dialogue further, the player can discover a peaceful resolution that cures the werewolves and allows both to ally with the Grey Warden. I would argue this choice is more significant than others since at first both options are unappealing. The player will be forced into the tough decision of choosing a side unless they take the time and effort to resolve the conflict peacefully.

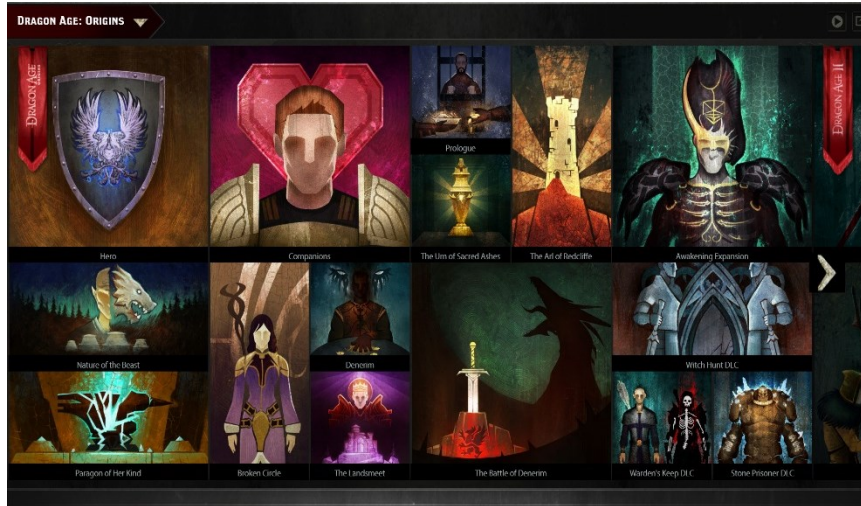
Another interesting aspect of the choice in *Origins* is that sometimes previous choices determine the options a player has in future choices. This gives previous decisions more impact and haunting effects down the road if they were handled poorly. In *Origins* the player is faced with the options of killing a demon-possessed boy or to undergo a lengthy quest to free him of possession by entering a spirit world. Even if the longer more moral choice is taken, the conflict

still ends with the death of the boy's mother. However, a hidden resolution to this conflict exists. If the player has sided with the mage faction previously, then they can use their magic to free the boy. However, if the player has not yet completed that storyline or sided with a different faction then this option is left unknown. When previous choices come to affect future choices such as this it "makes the whole world seem very [inter]connected" (Wilson).

In the first example with the elves and werewolves, this choice is memorable because it is difficult at first. The hardest choice to make is one where both options seem the same. For the second example, we can see how choices are given lasting impacts on the player's options later in the game. These impacts remind the character of their previous choices and show that they don't come without consequences. In all of these choices we can see that *Origins* includes options that are superior to the others. However, these options are either hidden, unavailable depending on prior choices, or the most difficult to complete.

There are however situations where these superior choices are not hidden and that is where *Dragon Age* begins to have its failures. For some choices, the options are like day and night. One is clearly and unapologetically bad and the other is the good option. Choices like this are the most forgettable since the player needs to spend no time deciding what to do or searching for an alternative to two tough options. It is fine to have choices that are more appealing than others but they should be difficult enough to find that the player has spent significant time trying to decide between two difficult options first. Stumbling upon a better solution should be their reward for thinking outside the box or being frustrated and unwilling to accept two bad options. If they are not allowed to experience this frustration first, then a superior choice provides no

relief for their frustration and no satisfaction for finding it.



Bioware provides a summary of the major decisions a player has made in each game in the *Dragon Age* series. Players can edit their decisions from previous games they have played to affect the world state in the newest game in the series: *Dragon Age: Inquisition*.

AAA Fantasy II: *The Elder Scrolls: Skyrim*

In *Skyrim* the player takes on the role of a prisoner that was captured by the governing Imperial Legion under suspicions of being a Stormcloak rebel: a faction that opposes the control of the Imperials. This role is quickly set aside however as the player is revealed to be Dragonborn (a chosen one) who alone has the power to stop the now returning dragons from destroying mankind. While this is the main quest of the game, there are several other long storylines in the game that are similar to it. Often the quests in *Skyrim* only have one ending with the only choice on the player's part being the option to complete it or not. For many other quests, the only choice the player is given is whether to spare or kill an NPC at the end of a quest. The only impact of these decisions is what reward the player receives at the end: a helmet or a hammer, a ring or a cuirass. However, there are some noteworthy outliers worth mentioning.

One of the longest questlines (almost comparable to the main quest's length) is the Dark Brotherhood series of quests in which the player has the option to join the Dark Brotherhood, a secretive band of assassins. Should they follow and complete the Dark Brotherhood questline, it will lead up to the assassination of the emperor—an event that has surprisingly little impact on the rest of the game beyond some changes in character dialogue. While this outcome is inconsequential, the choice whether to join or destroy the Dark Brotherhood is not. If the player chooses to destroy the Brotherhood rather than joining, this huge amount of game content is inaccessible unless the player reloads their save or begins a new game. The consequences are permanent should the player decide the removal of many NPCs and quests are worth a quick bag of gold.

Another interesting example of choice is the player's decision whether to kill or spare Paarthurnax a dragon that was formerly evil turned good through seclusion and meditation. The choice itself is nothing special in the game since its 'kill or spare' options pop up on several occasions. This choice does however present several interesting ethical questions to the player. Can those that used to be evil truly become good or will they eventually default back to their evil ways? If they can become good, is it worth sacrificing them to save others? To quote Paarthurnax on this question: "What is better – to be born good, or to overcome your evil nature through great effort?" This interesting moral question is presented in the form of a choice. The player may act out their answer to this question by whether they choose to slay or spare Paarthurnax. But still, this is all that the player is allowed to do. There is no option to further discuss this philosophy with Paarthurnax. There is no option to convince those that want Paarthurnax killed that he is not a threat. The player can feel dissatisfied by this since not all of the most obvious responses are available. The decision is left black and white with no

alternatives. It is worth noting that unlike many others, this choice does have some effect on the end game. Should Paarthunax be killed, he is not present to give a speech at the end of the game and some NPCs that were friends with him will be unwilling to speak to the player.

Since we see such little impact on the outcome of the narrative through choice, where does choice come into place in this game? Instead of being part of the narrative, most of Skyrim's choice comes in the form of a massive amount of quests and content. The developers let the player decide what they do, where they go, and what order they do it (if at all). Salen and Zimmerman call the game world a "space of possibilities." *Skyrim* delivers the player a game world with a huge amount of narrative content that they are free to choose and complete as it appeals to them. If a questline is unappealing, it can often be ignored entirely. While the player cannot influence the outcomes of the narratives, they can guarantee that the quests they choose are those that are interesting to them. This choice in content extends beyond quests and narratives. In a sandbox* game of this sort, the player is given no set paths to follow and can explore any area of the map straight from the beginning. Everything is unlocked, the player need only walk there.

This is the appeal of this game. Since the player is in control of everything they do, the experience is tailored to them and their interests, making the game more enjoyable. This design choice can have repercussions as well. The main quest which warns of an impending dragon invasion loses all urgency when the player can indefinitely put off doing it. When the player comes back to a quest such as this, all momentum is lost since they've spent their previous hours in the game doing other, more appealing things. If choice about what to do next is given to the player, it should not excuse them from the consequences of what they don't do. For example, if the player spent several days in-game exploring underground dwarven ruins only to emerge and

find out that the dragon enslavement of mankind has already passed, this would show the player that their choices are meaningful and time-sensitive. A storyline such as this that warns of impending doom should be able to result in failure. A narrative that begs the player be urgent is made all the more immersive and interesting if it is actually urgent.

From this examination we can see that most of *Skyrim*'s choice is in what content the player completes and where they go. The choice in *Skyrim* is mostly non-narrative. Even when it is presented in a storyline, the options are often uninfluential and without impact beyond what reward the player is promised for each. There are some special cases where interesting philosophies are presented through choice or where choice does have a lasting impact on the game, but these are rare.

AAA Science Fiction: *Mass Effect*

In the scholarly community, *Mass Effect 2* is considered to be “an excellent example of contemporary game narrative” (Bizzocchi 4). We will be looking to discover the reason behind this claim and whether choice plays a part in the reverence of the narrative of this series. This investigation will look at how choice is implemented in *Mass Effect 2* and whether this same use of choice continues in *Mass Effect 3* released years later.

The games are set in the distant future where humans are the newest of “spacefaring civilizations” (Bizzocchi 5). In all *Mass Effect* games excluding *Mass Effect: Andromeda*, the player controls Commander Shepard, who is tasked with defending human colonies from ancient starships known as Reapers. Similar to *Dragon Age*, the *Mass Effect* series allows to players to import their save files into the sequels. By doing this, several events and dialogue interactions in

the new game are altered based on the player's decisions in the previous game. *Mass Effect: Andromeda* however doesn't support this feature since its narrative acts as a separate storyline from that of Shepard's.

In Jim Bizzocchi and Joshua Tanenbaum's "close reading" of the narrative of *Mass Effect 2*, they set out to discover how the game balances "tension between player-expression, and narrative inevitability" to demonstrate "narrative poetics including tragedy and sacrifice" (1). Their findings were that the player in *Mass Effect 2* experienced a "bounded agency" where they were allowed to interact with Shepard "at the level of attitude rather than identity" (5). This is seen in the game's dialogue system where the attitude and personality of Shepard is mutable by the player but Shepard's goals and values are not; despite what the player does, Shepard will continue to work to defeat the reapers. Regardless of the dialogue choices made by the player, the player is lead down a clear narrative progression that the game designers intended. This idea of an intended path is supported even more when the game's sequel, *Mass Effect 3*, doesn't allow the player to import a save from *Mass Effect 2* where Commander Shepard died, effectively saying: "this is not a canonical outcome" to the story we are telling (10).

Despite the limited effect that the player has on the outcome of *Mass Effect 2*'s story, Bizzocchi and Tanenbaum claim that the player and the game's narrative still stands to gain from the "bounded agency" given to the player. "*Mass Effect 2* is like a river" where the current will eventually carry the player to a predetermined destination. However, the player is allowed to determine the speed of the current. As an example, the game is divided into several smaller story arcs with the player given the option of how long to spend on each arc. This gives the player an option to explore the content of the narrative that they find particularly interesting while skipping optional content in arcs that they find of little concern. Bizzocchi also claims that the limited

agency of the player helps them to better enjoy the narrative by “submitting to the story” and listening to what the author wants to tell. If this is true, then there is a limit to the extent that choice should be used in a game. At a point, it can “interfere with the pleasure of a story” as the author’s intent is overwritten by the players (2).

Looking at *Mass Effect 3*, the sequel does not seem to place as extreme of restrictions on the player’s influence on the story. While the player is seemingly being carried down a river of authorial intent, the river in *Mass Effect 3* is much wider than Bizzocchi described in *Mass Effect 2*. Player’s actions in *Mass Effect 3* have a similar outcome as actions in *Dragon Age: Origins*: the player is assembling a team to combat an imminent threat and they can decide who they want to support them. The player’s decisions in *Mass Effect 3* seem to go beyond merely choosing the attitude of Shepard but actually hold significant impact on the narrative itself with entire factions potentially being wiped out or major characters in the game being killed. Even the ending of the game has several possibilities on how the conflict with the reapers is resolved, with options that include: ending the war peacefully for both sides, the extermination of the reapers, or not choosing and allowing the reapers to wipe out organic life in the galaxy. For deeper emotional impact, these endings also vary in whether Shepard survives, whether Earth survives, or the state of the companions that followed Shepard. This is in a large part due to fact that the third game does not lead into a sequel with the same main character. In fact, *Andromeda* does not import the save file, it is clean slate taking place between the events of *Mass Effect 2* and *3*, effectively free from addressing the outcomes of *Mass Effect 3* and leaving their possibilities open.

As observed by Bizzocchi, *Mass Effect 2* offers a “bounded agency” where the player has control over the attitude of Shepard during the narrative and the level to which they dive into the

narrative content in each story arc. *Mass Effect 3*'s choice obeys a similar structure but the outcome of the choices seem to have a more profound impact: a design philosophy that seems appropriate to end a series: no holds barred. With *Mass Effect 2*'s narrative leading to the climactic ending of *Mass Effect 3*, such a large impact



(Above) An example of a dialogue choice in *Mass Effect*. As stated by Bizzocchi, the dialogue noticeably varies in tone.

of choices was likely not possible in the prequel. Most importantly, the restrictions that Bioware places on player choices shows that more impactful choice is not always a good thing in a game. For example, if the player was given the option to abandon the fight against the reapers, it would undermine the story that the authors were trying to tell. From this we see that there is a balance of player choice and authorial intent that varies game to game. When a chronological narrative is at its end the author can afford to be more lenient in what they allow the player to do. Such is the case in *Mass Effect 3*, where player choice has greater repercussions than in *Mass Effect 2* in which the game's narrative must logically lead into the plot of the sequel. This however, doesn't mean that choice should be omitted in games focusing on the author's narrative. *Mass Effect 2* realizes this by allowing the player options that enrich the narrative, and their enjoyment of it, without undermining it. Such choices include the player's option to explore each of the game's story arcs to the level that the player was interested. This design makes the game's narrative more enjoyable to the player since unenjoyable parts can be cut out of their experience. This design was likely for practical purposes as well: dividing the game into separate chapters allows the developers to better contain the branching possibilities from the player's actions. This use of chapters appears in other narratives games as well, as we will see with Telltale's games.

Telltale's Interactive Narrative: *The Wolf Among Us* and *The Walking Dead*

Telltale's *The Walking Dead* and *The Wolf Among Us* allow the player to make choices in a fashion similar to the RPGs we've seen so far. While the dialogue options were one of the main ways choice was presented in the role-playing games we've looked at, in Telltale's games it is used to a greater extent. In both of Telltale's series, almost all of the choices are made by selecting one of four dialogue options. This often is the only way the player can interact with the story. Despite this, both games are riddled with game changing decisions that are difficult to decide. In *The Wolf Among Us*, you take on the role of detective Bigby Wolf (the Big Bad Wolf) who is investigating the murders of several Fables (characters from folk stories who exist undercover in a modern-day city). At one crucial moment, your two biggest leads on your case take off in different directions, you only have time to pursue one. *The Walking Dead* presents similar drastic decisions. The game follows the same world of the popular television series and comic where humanity has been wiped-out by a zombie apocalypse. At one point in the game, you must decide if you will sever your arm that has been bitten by one of the infected walkers or accept your fate of infection and keep your limb.



(Above) An example of a dialogue choice in *The Walking Dead*. Typically four summarized replies or actions are presented with a shrinking white bar that indicates the time left to choose a response.

These decisions are designed to pressure the player since they appear to have such a momentous impact on the ultimate fate of the character the player is controlling. As such, these impactful decisions are often the only decisions taken out of the typical four choice dialogue format used in Telltale's games. In *The Wolf Among Us* for example, the decision where your two leads both try to escape is emphasized in a cinematic view of the scene in slow motion. The fact that the figures are both slowly slipping away as you make up your mind on who to go after only adds to the intensity of the decision. The intelligent use of time to emphasize a choice



At one point in *The Wolf Among Us*, the player must decide whether to pursue Dee or the Woodsman, both being suspects in Bigby's investigation. During this decision, the player is allowed to maneuver the game's camera around this scene as the two continue to gradually slip away in slow motion.

appears again in another crucial decision. When Bigby is given three locations to investigate but only time to investigate one, a loudly ticking clock is superimposed over the shot which makes the player feel pressured and that their decision holds great weight. Surprisingly, the threat that these impending choices present is often not artificial. In some scenarios the game will make the choice for you if you spend too long thinking or you will lose the option to speak entirely with Bigby simply standing still in silence. This is a significant consequence considering that *The Wolf Among Us* is a game about investigation and that missing a bit of dialogue can result in the player missing a clue or new lead in their investigation.



In Telltale Games's *The Wolf Among Us*, Sheriff Bigby Wolf decides the next location to continue his investigation. As the player makes this choice, a ticking clock is superimposed on the screen, giving a sense of urgency to the decision.

In addition to emphasizing their choices, Telltale also does well to tell the player what they will get when choosing a particular line of dialogue. The options are usually summarized in a few words instead of listing all the dialogue that will actually be said. This is important to quickly let the player know their options and to give them time to decide before their time to respond expires. When they finally make their choice, they get what they expected. If they were pressured into a decision or didn't understand the options then it would detach the player from the game's narrative since it is no longer what they wanted.

Investigation is a large theme in *The Wolf Among Us* and Telltale presents a means to learn information about characters that could impact their decision in the narrative. The characters that the player interacts with have details about their backstories unlocked after they are encountered, allowing the player to better understand their actions. This can either serve as a means to attain more information or as a reward for players that want to learn more about their favorite character. Bigby himself has a few different details about his backstory that unlock at the end of the game depending on the player's attitude and treatment of the game's characters as they played. Whether it be aggressive or kindhearted, these details say that either approach is justified given where Bigby comes from. This unlockable lore is important since it can make a

player feel justified in their decisions or more sympathetic to a character they originally misunderstood.

Since Telltale's games are entirely narrative in nature, it is unsurprising that they design their game and choices in ways that have lasting emotional impact. Their choices are memorable and lifelike, they accomplish this in a few key design choices. The first is reminders. A player can hardly be concerned about a choice they made if they forgot it happened. Telltale circumvents this by having the characters in the story constantly remind the main character about how they feel about their actions, whether they be positive or negative. Given the varying cast in the narratives, the player is sure to receive both praise and disappointment regardless of their actions. Telltale also visually lets the player know when their actions will have an impact on the narrative by presenting the words "they will remember what you did". Perhaps the best reminder of all is the consequences that follow the player's actions. Depending on previous choices, characters will choose not to help you later in the story if you were hostile to them previously. In *The Walking Dead*, if the player chooses not to help a character when he gets in a fight, this will prevent the character from helping the player later on. In *The Wolf Among Us*, being aggressive can lead to the player being rewarded with a faster answer than by taking the time to investigate, but this also makes the characters angry and unwilling to be cooperative later in the investigation. However, the most important design decision of all might be the inability to go back and reverse a decision after it has been made. When a decision has been made, the game automatically saves the player's choice and it cannot be changed short of starting a new game. Like real life, the decisions are permanent and the player is left to deal with the consequences that follow.

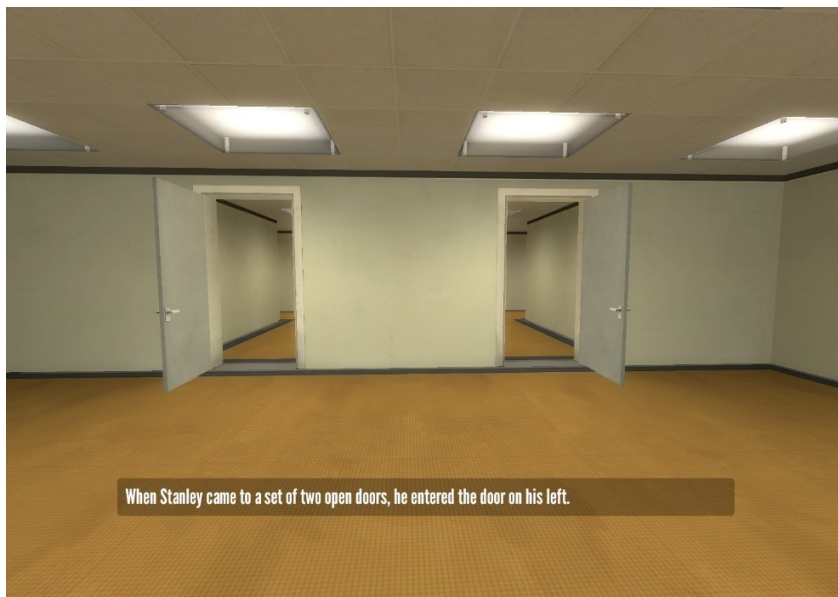
Being reminded of our choices and dealing with the consequences or rewards can create feelings of regret or relief in the player. Telltale designed their choices to illicit these feelings. If the player was unaware that their decisions held influence later in the story then they would have no reason to feel anything. Similarly, if the player was allowed to undo a mistake and reload a save file to reverse an unseen consequence, then this would undermine what makes these decisions seem so important to the player. They are permanent, you only get one try, and that is why you must choose wisely and weigh the options carefully because there is no turning back. Through these design decisions, Telltale is able to craft a narrative that is memorable due to the emphasis on emotion created through choice and the unforgiving nature of the narrative after a decision has been made.

Separate from the design decisions that make the choices emotionally heavy, Telltale also employs similar tactics as Bioware to ensure that authorial intent and player agency are balanced. Similar to Mass Effect 2, the player mainly has control on the attitude that the protagonist holds. The game's narrative is once again a river that carries the player to a predetermined outcome.

The decisions in Telltale's games affect the story to come. One challenge with this on the developer's part is to accommodate all of these intertwined decisions. To prevent the story's narrative from spiraling out of control and into branching possibilities, the narrative is divided into several chapters which serve as independent story arcs. There is typically a major decision in each chapter but its effects are separated from the ultimate outcome at the end of the story.

Choice in Indie Games I: *The Stanley Parable*

Several indie games* have recently taken to the frontline of exploring choice in games. These games are often produced by small studios, individual teams or even individual developers. These smaller development teams allows these games to often explore ideas that AAA studios would avoid or deem too risky or experimental. *The Stanley Parable* seems like one such experiment. The player assumes the role of Stanley, a typical office worker whose co-workers have mysteriously vanished. Throughout the game a narrator tells the player what to do but leaves the ultimate choice in the hands of the player. As an example, the game presents the player with the option of two doors, the narrator says “Stanley took the door on the left”. However, the player can just as willingly walk through either door. The rest of the game is filled with similar choices. The narrator always urges the player toward one option but never takes away the option to disobey.



The first decision a player makes is between the choice of two seemingly identical doors. The game’s narrator assumes the player’s decision in past tense. What was once a simple choice can now be argued to be: a choice whether to obey authority, a choice to follow or ignore the author’s narrative intent, or a question of whether free choice exists at all.

This implementation of choice could have many varying purposes. The author might be telling a story that says that the player should question authority and take their actions into their

own hands instead of letting someone else decide. It seems equally likely that they game might be using this structure of choice to question whether choice exists at all—maybe life is a series of predetermined outcomes that we have no control over. However, it is most likely that the author is using a narrator to symbolize the intention of the author themselves. The narrative and design of the choices in *The Stanley Parable* are used to explore the idea of player agency interfering with the author’s intent. We see this when the player chooses a path that goes out of its way to defy the wishes of the narrator. At first when the player shows defiance the narrator tries to account for it and explain the player’s actions in the context of the narrative. If the player continues to disobey the narrator, he becomes more aggressive asking “what did you want to see?” and saying “there’s someone you’ve been neglecting Stanley, someone you’ve forgotten about. Please stop trying to make every decision about yourself.” The narrator states that they had a story they wanted to tell but the player has ruined it because of their actions. This demonstrates that there is a point where it is impossible to reconcile a story if the player gets too off track.

When the player follows some but not all of the suggestions of the author, the events in the game seem to become more adventurous and rewarding, whether it be discovering a room with dazzling lights, weightlessly floating through the air with the absence of gravity, or undertaking a quest to find the story by following a painted yellow line that the narrator names The Stanley Parable Adventure Line™. The narrator expresses their satisfaction with these outcomes as well, saying things such as “I don’t want to forget this, I don’t want to restart.”

These design choices imply that the best use of choice is when it allows a balance between the player’s and the author’s desires in the story. *The Stanley Parable* makes use of choice to explore this concept in a way that couldn’t have been done in any other storytelling genre. In short, *The Stanley Parable* is an example of a game telling a story that only games can

tell and exploring ideas that only affect games. The game even acknowledges this at a certain point, saying that the only real choice is whether to continue playing the game, everything else has been written by the author. While the player is given possibilities to choose from, they have all been accounted for and written by the author. By trying to escape the narrative the author was trying to tell, the player actually played right into the author's intent in the story. This story seems to be a special case where the player being capable of entirely overwriting the author's intents is exactly what the author was trying to demonstrate. It seems that the author's use of choice in this game is a didactic one. By overwhelming the game with choice, the developer can demonstrate the same point made by Bizzocchi in *Mass Effect*: that if overused, choice can interfere with the player's enjoyment of the author's narrative.

Choice in Indie Games II: *Undertale*

Similar to *The Stanley Parable*, *Undertale* is another indie game that uses choice to investigate ideas that only affect games. In it, the player controls a small child that falls down a well and that begins to encounter monsters. As the player encounters 'enemies' in the game, they quickly learn that these characters are not sinister or irrational as one would expect, instead they are quirky, comedic, and often adorable. In role-playing games, a player will often assume that the enemies in a game must be killed to progress, to level up, and that they cannot be reasoned with. *Undertale* provides this option, however it also presents a pacifist approach to every encounter. By designing the game in this way, the game's creator, Toby Fox, helps to fight against some of the players' (and designers') engrained tendencies in games of the RPG genre. In this genre, the enemies in these games often exist merely to be killed. They have no personality and no motive; they exist only as containers of experience and loot for the player.

Undertale is a welcome example of a game that abandons these clichés and uses choice as a means to open new unexplored possibilities for the player. Sure, the game can be played as a typical RPG, but doing so would mean missing the emotional adventures and happiness that comes from the becoming friends with the ‘monsters’. Though the player is constantly confronted with battles, they may finish the game without violence, making this “the friendly RPG where no one has to die”.

Once again, we see choice being used as a means to make a statement about games themselves. This time it is being used to present an alternative to what gamers would expect to be a typically violent genre. Choice in *Undertale* is used to demonstrate what is lost when we assume that the goal of role-playing games is leveling up and killing monsters. Doing this belittles the intelligence and rationality of those that are supposed to be the enemy, and can reduce the reason for their conflict against the player to mere plot necessity. *Undertale* demonstrates that the enemy should have some logic behind their actions, that they can be reasoned with, and that they are complex enough to provide the player with resolutions to the conflict that aren’t merely killing all of those that oppose the player. *Undertale*’s use of choice is aimed at breaking these clichés of RPGs and to making the player feel more complex emotions for a game’s characters such as sympathy, understanding, and regret.

The Alleged Failure to Use Choice: *Beyond Two Souls* and *Fable II*

Like anything, there will be different opinions on how choice should be used based on who you talk to. *Beyond Two Souls* and *Fable II* have received reviews both praising and condemning their use of choice in their games. Besides, the studios that produced these games

have a history of producing choice driven games with Quantic Dream producing titles such as *Heavy Rain* in addition to *Beyond Two Souls* or the *Fable II* developer, Lionhead Studios which had a part in both the prequel and sequel in the *Fable* series in addition to the *Black and White* series. Let's look at the arguments that say the use of choice in these particular games is wrong.

Beyond Two Souls was criticized by one game journalist as an “endless sequence of practically preordained story beats” with choices that he rarely “ever stopped to consider”. His main criticism was that the game lacked any meaningful agency (Morrison). As we saw in our examination of Telltale's games, knowing that our actions have an effect on the actions to come create emotional ties to the storyline such as regret or pride in our past actions and concern about the consequences of our actions to come. In *Beyond Two Souls*, choices often seem to have no impact beyond slightly altered responses in dialogue, making the game have more of a cinematic feel than a game with a narrative driven by choice. The inclusion of choice is likely less accepted than in other games because to the player it is obvious that it doesn't add anything to the story—the game might have as well of been a film. In games such as *Mass Effect*, the narrative is a river where the player can maneuver and control the rate at which they flow down the progression of the story. *Beyond Two Souls* fails to do even this, and similar to a film, progresses whether or not the player allows it. This is well characterized by one scene where the main character is being pursued by men trying to capture her. The player is told they should move down a hill through the woods to escape. However, even if player gives no input to the game at all, the character will trip and fall, moving them farther down the hill and away from her captors. What follows is an extremely humorous series of ‘accidental’ somersaults that leads to the character to their inevitable escape. This leads one to believe that if they started the game and walked out of the room, when they came back they could potentially see the end credits

rolling. When player choices are given no impact on the story even to the extent of advancing the story, why should any player care about the decisions they make when there is no repercussion, no option for failure? Why should choice even be included in the game? Its presence in *Beyond Two Souls* only seems to undermine the intelligence of the players.

Fable II is a game that is both praised and criticized for how it uses choice. Peter Molyneux, the accredited creator of the *Fable* games, stated that his goal was to grant the player “maximum control” and not “tell [them] what type of character [they] should be” (Totilo). This is what the game is praised for. The player has control on whether their character “skews heroic or sinister” (Snider). The game is praised for its emotional appeal to the player, but from what has been described it seems that this occurs independently from the game’s choice: “We’re giving you a family that loves you and a dog that travels with you and loves you and a world that appreciates you” (Snider). These emotional ties were made on part of the author, not the player.

Others such as Cameron Moore have picked up on this lack of impact that player agency has in the story: “Ironically, *Fable 2*, the award-winning 2008 game by famed designer Peter Molyneaux which is all about making choices, is a prime example of... disregard for players’ choosing” (Moore). While Moore describes the “array of choices” the player has as “stunning”, their ultimate failure is that the game’s “narrative progression does not depend on them at all” describing the game as a “choose your-own-adventure novel in which all choices lead to exactly the same final chapter” (Moore). He argues that the game is primarily concerned with eucatastrophe, and such, neglects to draw distinctions between two clearly opposing forces such as good and evil.

From these observations, we see that the times that choice receives the most criticism is when it seems to have been included in a game for no discernable reason. Without a reason

behind it, it leaves the player asking “what was the purpose behind anything I did in this game?” Not all games should have choice; it is fine if a game doesn’t use choice at all. When games try to include choice without having a goal behind its inclusion, this seems to be when its inclusion runs into opposition.

As in the case of *Fable II*, the main criticism with the game’s use of choice was the lack of impact that choices had on the story later on—especially in the final outcome. If choices have no influence on the story to come, then it presents the choices as irrelevant. For players to experience feelings of regret, joy, or even concern for these decisions, they need to believe the choices they make will hold some impact on the game world.

Section 2: Summary of Findings

By looking through these examples, we can see that choice is being used to varying extents with varying purposes. *Mass Effect* and *Dragon Age* use choice to give the player control over what characters they ally with. In these games, choice also allows the player to decide how invested they become in a particular story arc. When given these controls, it is likely that a player is more interested in the game’s narrative since they decide the cast that accompanies them and the adventures that are taken. While the destination in these games is roughly the same, the player decides how they get there and when. *The Elder Scrolls* emphasizes this second point with its use of choice. While the main story is more static than that of Bioware’s games, the game world and the order that the player experiences the content is not. This game emphasizes the choice of what you do next, rather than the choice of what happens when you do it. This structure of choice also seems aimed at prolonging player interest by

allowing them to follow quests that interest them. After all, what good is a quest that emphasizes choice if the player isn't interested in completing it? It is also likely that the amount of content in games such as this seriously restricts the interactions that are possible within the content. If every action that the player made impacted every other storyline in the game, it would likely be too much for a team of developers to accommodate.

Telltale's and Bioware's games seem to employ choice to illicit certain emotions from players. Difficult decisions seem to be the most memorable, even more so if the consequences are significant. When a player realizes that their decision impacted the narrative in some way, it can make them feel regretful or prideful of their decision. When a character in one of these games expresses their discontent for a decision the player made previously, the player is often given a chance to defend their actions, making them feel better about a choice or worse when they realize they were wrong.

Choice is also being used to explore new ideas such as in *The Stanley Parable* where the game plays as a discussion on how to balance the author's intentions with the player's. This exploration of new ideas can also involve breaking old ones. *Undertale* uses its choice to break RPG clichés and breathe life into the genre with its idea of peaceful solutions to conflicts.

While the purpose of including choice varies, what might be the most important is that there is a purpose when choice is included. If the game plays the same regardless of the player's choices, then there was not a reason for including choice and it only served to waste the player's time.

Chapter 2: Game Goals and Player Expectations

In the previous chapter we saw some examples on how choice is being used in modern games and for what reasons developers are including it. Instead of looking at more examples of how games use choice to glean what benefits it has in a narrative, this chapter will attempt to answer this question in a different way. This chapter attempts to determine what it is that a player wants when they play a game. By determining the desires of a player that purchases a game, we can claim what goals that game should try to fulfill, and how it might use choice to meet these ‘game goals’. In contrast with the previous chapter that looked at how choice was used to determine the developer’s purpose behind its use, this chapter oppositely tries to determine the purpose and expectations of a game to claim how choice should be used.

As one might expect, the expectations of games is something that has continually changed over time. The first section of this chapter attempts to identify how player expectations of games have altered from the earliest games to now. It attempts to identify what technological advances might have led to this shift to support the next section that looks at the player expectations of modern games. By finding these expectations, we can make assertions about what the goals of video games should be and from there make claims on how choice might help to reach these goals.

Section 1: Choice and Technology

“Compared to the standards of today, the graphics and audio of the first video games were all very simple, as was the interactivity” (Garrelts, 6). In addition to increasing player interactivity, authors also gained new tools to express themselves. It is likely no coincidence that

as the technology used to create games advanced, they became more recognized as a means of storytelling.

In some of the earliest games, the goal of the game was to “manipulate the objects in [the] world more successfully than one’s opponent” (Garrelts, 7). This is seen in the table-tennis game, *PONG*, where the player only has control of the direction that their paddle travels. They must use their limited interaction with the game world more successfully than their opponent to score points while keeping themselves from being scored on. Even as some technological advances to games were introduced in the eighties in games such as “*Pac-Man*, *Donkey Kong*, *Frogger*, and *Q-bert* [which] were a bit more graphically and audibly advanced” in these games, players were still unable to alter the game worlds since they were “given almost no choice as to how they interacted within the virtual world of the game”. As a result, in early games like this, a player’s experience was “what every other player saw and experienced. The primary difference between one played game and another was how far a player progressed and how many points he or she achieved” (Garrelts, 7).

However, some early games such as the text-based game *Zork* allowed the player to manipulate the game world in some complex ways for the time. In *Zork* the player was allowed to interact within the game world by using verbal-noun inputs (e.g. “take sword”, “open door”) or complete sentences such as “attack the goblin with the silver sword”. By allowing the user more interactivity within the game world, this game was able to allow the player to take on the role of an adventurer and communicate a narrative. In all of these examples, the choice of the player exists in what inputs they can give the game. This seems fairly obvious and the same could be said for modern games: we can only influence the game world by using the means that the developer included. However, the complexity of player inputs in *Zork* compared to these

other examples is entirely different even though they were both very early installments in video gaming. This can show that choice is not something that is limited by technology but by the way that the game is designed.

As a counterpoint, one could reason that in every game there is some inclusion of choice. Since a game must receive inputs from the player, it is generally up to the player what inputs to provide. It is the player that controls a game: it is their choice to walk forward, to move left, or to jump. In games with a narrative, the inputs of the player are tied to a story in some way that it can influence the outcome of the narrative even if that influence is whether a story completes or not. However, consider this example. A game develops a plot and places the player in the role of a character with a backstory, motives, and personality but the player's only inputs are whether to allow the character to complete his quest. Is this actually choice? When watching a film, we have the choice to pause, play or rewind the film—we have some choice over whether we reach the end of the film. If control over the completion of a story is considered choice then films have choice too. I would argue that real choice in games is not whether a story completes but rather is how it is completed and what events took place in between the start of the game and the conclusion. Other means of storytelling do not share this choice since the audience has no control over the events in a story. No amount of pausing or playing will change the end of a film. Putting down and picking up a book will not keep your favorite character from dying. From this, we can see that having player inputs in a game is not enough to claim that a game has choice. Player choice is the control over the outcome of a story and the events in a story. This type of choice is something that was made easier to accomplish with the technological advances to games.

The more player interaction within a story, the more complex a story becomes. Increased computational power and the ability to store larger amounts of data in memory were the first steps to ensuring that player interaction in a game was possible. This point becomes increasingly true when we consider how games have shifted in how they tell their stories. While games were once limited with simple graphics or text to communicate their stories, this has given way to “near life-like graphics and spoken dialogue” (Garrelts, 10). As an example, modern game developers have the technology to alter the 3-D models of their character’s faces to communicate emotions, create advanced animations to demonstrate actions taken by a character, and many other tools the older games did not have at their disposal. The introduction of software with the specific purpose of designing games, known as game engines, provide similar benefits to the storytelling potential of a developer. Put simply, game engines provide the game developer with tools to generate the basic functions of a game. User interfaces, animation modeling, and nearly every other feature of a game can be developed inside of a game engine. This expedites the process of making a game and allows the author more time and more options on how they want to create their game. In many narrative games, this means the creation of a more complex story that has more opportunity for player interaction. While ‘real’ choice in games is not impossible without modern technology, it is certainly aided by it. These advances in game technology were what made the player interaction seen in the examples of the first chapter possible.

In an older game, all that a player might expect is a challenge to overcome whether it be an AI opponent or another player in a list of high scores. In games that allowed more player interaction such as *Zork*, the player might expect a small narrative component in the game but still would not expect to be able to significantly influence the outcome of the narrative. With the advancement of technology in games, the expectation to influence the events of a story has

become commonplace, so much so that the description of a game's narrative as 'linear' can have serious negative connotations.

Section 2: Expectations and Goals of Modern Games

When asked why people play games, naturally, one might respond that "people play video games because they are fun". The same could be said for any form of storytelling: we watch movies and read books if we find them to be entertaining. However, it is important to determine exactly what makes a game 'fun'. Even more so since it is likely that games, books, or movies are entertaining for different reasons.

In a study on game culture conducted in 2006 (Sherry et al) six dimensions were established for why people play video games. As explained by this study, the six "dominant dimensions video game use" can be listed as "Arousal, Challenge, Competition, Diversion, Fantasy, and Social Interaction" (Sherry et al, 11). Put simply, these are the six reasons that people play video games. A similar, more recent study made use of these same six dimensions when attempting to determine why people play single-player games (Herrera, 48). If these six dimensions are the reasons that people find games to be entertaining, then it is fair to say that fulfilling these six dimensions is the goal of video games. If this is true, then it is fair to say that in a game that is enjoyable, the player can expect some of these six dimensions to be fulfilled. But what does each of these "dominant dimensions" mean?

In support of the previous section that stated that player expectations of games are always changing, during Herrera's study he found that some of the definitions that were given to each of these terms no longer applied in his more recent research: "Although arousal in the previous

study only suggests graphics and fast action, this study resulted in an expansion to include control, character development, actor/actress voice-overs and motion capture, and storyline cut sequences that help stimulate emotion” (Herrera 49). Other dimensions seemed to remain fairly consistent in both studies: Diversion involves participants “using video games to avoid stress or responsibilities”, Competition is a person’s desire to “prove to other people who has the best skills”, and Social Interaction is a game allowing “interact[ion] with friends”. The remaining dimensions seemed to have the same meaning but were being fulfilled by narrative components of modern games. When discussing Challenge, one participant stated they enjoyed single-player games “because they offer unique interactive stories but can be challenging to play”; regarding Fantasy “several participants suggested single player games draw people in with immersive stories and characters” (Herrera, 48-51). It makes sense that Diversion, Competition, and Social Interaction have changed little since these were the goals of early games that didn’t have story elements or player choice. However, Challenge, Fantasy, and Arousal are becoming increasingly fulfilled by the narrative aspects of video games.

In Herrera’s survey, since the definition of Arousal needed to change to include story elements of games, and since it seemed that Challenge and Fantasy were being increasingly fulfilled by the narratives of games, this is indicative that the player expectations of games have changed as well. Put simply, players were once able to be entertained in all of these dimensions by games without stories. As narratives in games became more prevalent, players have come to expect interactive stories in single player games. A linear story and limited interaction with a game’s world will no longer be enough to entertain players that now “find enjoyment with video games through interactivity and control” (Herrera, 50).

While the player's expectation of Arousal, Challenge, and Fantasy seem to have become increasingly tied to the narrative of a game, this does not seem to indicate that the other dimensions will ever be achieved through a game's narrative. In fact, for Social Interaction, the opposite seems to be true. This dimension can take away from a player's enjoyment of a game's story. In Herrera's explanation of his findings, "social chatter can break the flow or immersion in a video game" so that players turn to single player games when they want to find "solitude" and to be "embedded in a game world without player interference" (Herrera, 66). Tassi provides an appropriate example: "It's nearly impossible to be immersed in a world where you're supposed to be the 'chosen one' only to have 50 other chosen ones hopping around in circles shouting obscenities" (Tassi). With this being the case, a game that tries to create an immersive storyline while allowing multiplayer and social interaction among players is likely to run into conflict: "Making these games "social" in any way would have butchered the narrative, reduced immersion and they would have been worse off for it" (Tassi).

From this we can see not all games will have the same goals. While the goals of games seems to be contained within these six dimensions, it is very unlikely that a game will be able to successfully fulfill all six, especially considering that trying to do so would likely make the game worse. Therefore, a game's goals should go along with the genre of the game. Developers should try to fulfill the goals that make sense in the type of game they are creating. When a player buys a game of a particular genre, they have an expectation of that genre. In single player games, the players want to "embed themselves in the game world" by engaging with an "interactive game world to be fully immersed in the story" (Herrera, 61). Meanwhile, in competitive games, players like to "distinguish their skill level" and compete "in a free for all multiplayer experience or work with a team" to overcome their human or AI opponents.

Based on a game's genre, players will have an expectation of what that game will deliver. A challenge that developers face is determining what goals they want to achieve through their game: is it a game that immerses player in an emotional narrative, is it a game that allows players to compete against each other, or is it merely a pastime where friends can hang out? Whichever a game might be, it is important that the goals of the developer, the genre of the game, and the expectations of the player align.

In any form of entertainment, the audience has already preordained what they will receive. If a person went into a theatre to view an action film, it would be jarring if the movie turned out to be a comedy. If their expectations are not met then it is likely that the audience will be upset since they weren't given what they wanted. It should be obvious that the same applies to video games. A developer should actively determine what an ideal game of their genre looks like and what a player that purchases that game expects to receive. Meeting these expectations will go a long way to improving the audience's opinion about the game. It also helps to ensure that those that play the game are people that are actually interested in the game's content (that they are the target audience). However, meeting player expectations is only one of the goals of video games. Forgetting to balance this with artistic expression, and new ideas from the developer will leave a game that is unmemorable and generic. In the study conducted by Herrera, participants made complaints about games that neglected innovation to produce something 'safe': "Companies just tweak the game a little bit and push it out as a sequel. The state of games is expensive and not as creative." However, when commenting on games from independent developers, the feedback from the participants was positive: "Indie game developers seem to me that they are making games for the love of it and we don't see that when a developer is backed by a big publishing company" (Herrera 54).

For modern narrative games, players expect an immersive story with interactive decisions. Delivering a game that is innovative seems to be equally as important as meeting these narrative expectations. In many ways, choice can be used to meet both of these goals.

Section 3: Using Choice to Develop a Narrative

As we saw in the previous section, a growing number of games fulfill the “dimensions of video game use” by integrating a narrative (Sherry et al, 11). Half of the dimensions (Arousal, Challenge, and Fantasy) seemed to be increasingly tied to narrative components of video games. Since these dimensions are what make a game entertaining, and since narrative helps to fulfill them, bettering the narrative components of video games should go a long way to increasing player enjoyment. Specifically, we will be looking at how choice can improve the narrative aspects of video games.

In the examples such as *Dragon Age* and *Mass Effect*, choice allowed the player to explore the narrative to the level they wanted while never forcing game lore or plot onto the player unless they looked for it. Both games accomplished this by using what they call the Codex, which logs details about all enemies, locations, characters, books and historical events in the game as the player encounters them. Several games in *The Elder Scrolls* take a similar approach and scatter numerous books and diaries around the game world. If the player is particularly interested in a historical event, then a book in the game can provide some backstory; if the player is curious about the motives of a character they meet, reading their diary is sure to glean them some knowledge. Even better, for players that don't care, these texts can be ignored entirely.

In several role-playing games, a similar technique is used for the quests in the game as well. As the player progresses through the game, only a fraction of the narrative content of the game will be exposed to them often called the ‘Main Quest’. However, optional or side-quests usually exist to provide additional content if the player seeks it out. Only exposing part of the narrative to the player allows them to see new content on each playthrough of the game and ensures a fresh experience. This gives the game and its narrative more longevity to the player.

Choice also helps the player to role-play as their characters. This was seen in Bizzocchi’s examination of *Mass Effect 2*’s dialogue system where several characters were created to see how much control the player had on their personality. Bizzocchi found that *Mass Effect* allowed the player to imitate a variety of personalities including “a vicious but pragmatic renegade,” a “paragon” of “virtue” and a “suicidal nihilist” (Bizzocchi, 5). Giving players the ability to enact different personalities allows the player to immerse themselves in the mind of the character to a deeper level and to gain understanding about the character’s motives: “each version of the character evoked very different personal narratives for who the character was and what he or she was fighting for” (Bizzocchi, 5). This understanding is invaluable for a game that is attempting to develop characters and a narrative.

In addition to developing a character’s behavior, choice can be used to solidify the character’s personality by giving the player control over actions the character takes. As an example, in *Dragon Age: Origins* the player has the option to choose the backstory behind their character. Not only does this alter the location where they begin the game, it can also provide several interesting options for the player to role-play. If they chose to play an elf from the city, they have a background of racial tension and poverty. The player might wish to adopt this role as they play and accordingly react more impolitely to characters in the game that are wealthy or

that have tones of racism. By allowing a choice of actions, players can enact their characters to a greater degree. Each action that the player takes makes their character more complex. This choice acts as a supplement to the game's world and narrative.

Just as choice can allow the player to role-play a variety of personalities, it also can be used to showcase a variety of emotions from the non-playable characters in the game. A character in a narrative is more believable if they are designed to react accordingly to player actions. The ways that a character reacts to the player can reveal traits of their personality as well. For example, if a player makes a snarky remark about a character, the character can react several ways indicative of who they are. The character might get offended and tell the player to be serious showing they are 'all business' and lacking humor. Instead the character might laugh it off and make a joke of their own showing they are charismatic or optimistic. Choice allows the player to invoke these emotions out of the characters in a narrative and gives the game developers a means to explain who their characters are. This makes the characters feel genuine by showcasing their complexity and variety. Believable and complex characters are objectively beneficial to any narrative that the game is telling.

In conclusion, choice can be beneficial to any game's narrative in a variety of ways. It can allow the player to explore more narrative content at their own pace, allow them to portray the character they create by deciding their actions and dialogue, and give depth and development to characters encountered within the game. Since narrative contributes to the "Fantasy" and "Arousal" that players seek when playing a game, using choice to improve the narrative of a game is sure to increase the enjoyment that players feel when playing the game.

Perhaps it is for these narrative benefits that games that use choice are becoming more common. The following section tries to determine if the increasing prevalence of choice in

games has had an effect on game culture. Specifically, it is something that consumers now expect from modern narrative games? And do games that don't use choice pale in comparison to games that do?

Section 4: Has Choice Affected Modern Game Culture?

A part of modern video game culture has grown around the concept of choice in games. Gamers might find it increasingly common to be asked how a game handles choice. As a result, different genres of video games are often distinguished by the way that they integrate choice and an entire vocabulary of game related terminology has developed to describe these genres. For example, games described as linear make little to no use of choice in them. These can be described as closed-world games or games that are 'on rails' where you must proceed along a specified path (like walking down a hallway with no doors). In contrast, games in the sandbox genre place the player in an open world that they are free to explore as they see fit. A further distinction can be made in the games that integrate choice. Games that allow choice can either be described as having static or dynamic choices. If choices are static, then a decision that the player makes often does not come back or is not referenced later in the story. In games with dynamic choices, decisions that the player makes will come back to haunt or help them. A significant part of game culture and terminology was developed to relay these ideas about choice.

At many gaming conventions, people will often dress as their favorite character and mimic their appearance, actions, and dialogue, known as cosplay. One might assume that cosplay will become more popular with the rise of narrative games and more developed

characters. Participants in Herrera's focus group seemed to confirm these expectations, and authors such as McAllister claim that this is due to the "shared agency" connection that players have with their avatars (Herrera, 60). As we saw before, choice in games can be used to develop a game's characters and narrative. It is likely that the integration of choice contributed to the increased feeling of "shared agency" that players feel with their game characters.

Shared agency could also help to explain the concept of saying "I" when something happens to a game character that is being controlled by the player. It would be awkward to say "Oh no! My character fell down a hole! My character died!" when the player is responsible for the actions of the character. Since the actions of the player and the character align, players unconsciously identify themselves as the character by using the word "I" even though they consciously know that the character is not them.

With the influence of choice on modern game culture, a fair question is whether players now expect choice from narrative games. Many sources seem to indicate that they do. While Herrera was quoting an article examining the future of interactive media, the next generation of games were expected to have "more choice and greater control" since this is what the users expect (Herrera 23). In Garrelts, he examines the fact that "increasingly, gamers are given the choice of how to tailor their individual game experience" (Garrelts, 185). Other authors now define the role of the game developer as handlers for the choices that players make: "If a game developer isn't constantly thinking about, anticipating, and working with the uniquely destabilizing presence of the player, he or she isn't properly doing the job." This argues that interactivity is natural to games since it gives the player "tacit coauthorship" (Bissel, 2012). The inclusion of choice in games has steadily increased over time. It is likely not going to change this trend and players will increasingly expect to have it in narrative games.

Chapter 3: Guidelines for Using Choice

Up to this point, this thesis has looked at how choice is being used in modern games and the reason behind its use. It has also tried to determine the reasons that people play games, their expectations of the games they play, and thus how choice can be used to meet these expectations. With the increase in games that use choice, one question is becoming more and more relevant: how and why should choice be used? This final chapter tries to answer this question by using our examination of choice thus far as supporting evidence. I do not expect there to be a universal answer on how choice should be used. As stated by Bizzocchi:

Narrative expression within games manifests in a variety of forms, ranging from carefully crafted game storylines (e.g., *Bioshock* [2K Games, 2007] or *Metal Gear Solid* [Kojima Productions, 2008]) to games that deemphasize pre-authored narrative content, instead focusing on providing the player with a toolbox of narrative possibilities from which narratives can be built (e.g., *The Sims* [Maxis, 2000] or *Fable II* [Lionhead Studios, 2008]). This range of different narrative manifestations within the medium highlights the heterogeneity of the phenomenon and suggests that there will be no single solution to the challenges facing interactive storytellers, game narrative theorists, and game designers.

The applications of choice vary from genre to genre and story to story. Instead of making an impossible claim on how choice should be used for any given game, this chapter aims to give some possible applications that choice has in a given narrative so that designers know what tools choice puts at their disposal when they are telling their narrative.

Section 1: When and Why Should Choice be Used

When determining whether to include choice in a game, it is best to look at the genre of game being created first. Depending on the genre of the game, players expect to receive different things. In single player games, players often expect a narrative-driven game with developed characters, locations, and history. As we saw with *The Elder Scrolls*, *Dragon Age*, and *Mass Effect*, choice is particularly useful in these games that are trying to develop an immersive world. In these types of games, choice can be used to:

- Expose the player to different narratives, characters, and content in the game, guaranteeing a unique and tailored gaming experience for each person that plays the game.
- Give the player freedom to choose which content they complete first. This ensures that the player is always doing what they think is interesting or the most beneficial to them in the game.
- Allow the player to explore the game's lore to a level they are satisfied with. Some players will be fine with what the game requires them to know, others will exhaust all dialogue options, read every text, and interact with everything so they know as much about the world as possible.
- Expose the differences between the characters in the game in order to develop their personalities. This character development is an invaluable asset to the game's narrative.
- Demonstrate the interconnectedness of the game world, where every action influences the narrative to come.

These are only a few examples of how choice can be used in narrative games that are rich in content and characters. By expanding our scope to role-playing games in general, several more applications of choice come to mind. Choice can also be used to:

- Allow the player to role-play as their character, taking actions only their character would take, saying dialogue that their character would say.
- Present intriguing philosophical or moral choices that might give the player a greater understanding about themselves or the world (in game or in real life).
- Demonstrate that there is more than one way to solve a problem or challenge the player to find a solution that is more appealing.
- Tell stories and present ideas that only games can tell.

In *The Stanley Parable*, the game focuses on this last idea significantly as it introduces the difficulty that games face when balancing the author's and player's role in a storyline. By focusing on this, *The Stanley Parable* helps to answer a challenge posed by Bunting, who stated that "the question game scholars and gamers should *really* be asking is not "Can games tell stories?" but instead "What stories can games tell that other media cannot?" (Bunting 3).

One of the "dominant dimensions of game use" was challenge. While this predominately takes the form of player versus player, or player versus environment (i.e. the player trying to survive against the AI enemies or difficult environment in a game), challenge can also take on the form of difficult choices. As an example, one of the greatest challenges in *Dragon Age* is trying to resolve the conflicts in the game with the best possible outcome. If a game makes it difficult to determine what the best option is, then the player can find themselves having to defend their actions against characters in the game that oppose what they did. If a player

manages to find an alternate resolution to a conflict by investigation and cleverness, then they will feel accomplishment just as if they had defeated a difficult opponent.

As another example of these listed applications of choice, *Undertale* combines the ‘moral lesson’ and ‘more than one way to solve a problem’ applications of choice when it allows the player to use nonviolent approaches to solve problems. The game teaches that if conflicts can be resolved nonviolently where everyone can be happy, this will create a better world than one where conflicts are resolved by force and violence.

In games whose focus isn’t a narrative, the applications of choice seem to become more limited. However, in these sorts of games, choice can still be applied to give some variety to the gameplay experience. As an example, many non-narrative games give the player a choice in how they play the game, often called classes. Some common classes could include a rogue, a mage, or a knight, each usually entailing a significant shift in how the player has to behave in their gameplay to be successful. These changes in gameplay can make the game feel ‘like new’ whenever the player changes their class. In multiplayer games, classes usually have a role assigned to them as well, whether that might be healing the player’s allies, protecting players using more vulnerable classes, or serving as the assassins to eliminate the party’s enemies. These roles expose players to different responsibilities and give a sense of teamwork whenever everyone on a team fulfills their roles. By introducing choice in this way, a game can promote communication and coordination among its players. Several non-narrative games design with this model in mind, such as Blizzard’s *Overwatch*, or Riot Games’ *League of Legends*. However, games needn’t lack a story to implement choice in this way. As an example, Gearbox’s *Borderlands* series gives the player the choice of several classes to choose from while still focusing on quests, characters, and the game’s narrative.

In summary, if a game is focusing on narrative or could be described as a roleplaying game, then the applications that choice has seems to be much more numerous than other games of other genres. If any of the applications listed above are a goal of a game, then choice can help to fulfill this goal. What is most important is that choice has a designated purpose when it is included in a game. As was seen in the examination of *Beyond Two Souls*, choices that don't have a designated purpose in the narrative can feel as though they have been pointlessly included. If the choices in a game feel this way, then steering the purpose of the choices to one of the applications listed above can help. If this cannot be done or a separate reasoning cannot be made to use choice, then it is beneficial to the player to do without it.

Section 2: Challenges of Using Choice

As seen in the prior section, there are several reasons to use choice, each reason benefitting the game's narrative, didacticism, or player's enjoyment in some way. In fact, the majority of this thesis has focused on the benefits that choice can have in a game. In contrast, this section tries to determine the negative impacts of choice, specifically in the challenges that it forces upon the game developer.

The challenge that has been discussed the most thus far is how to balance player intent with the author's intent. When freedom of choice is given to the player, it can often result in the player doing things that the author didn't intend or that don't make sense in the scope of the narrative that the game designer is trying to tell. This challenge is significant enough that *The Stanley Parable* makes this challenge the key focus of the game. In games that fail to balance player freedom with the narrative, it can result in the player getting off track. This can be seen in

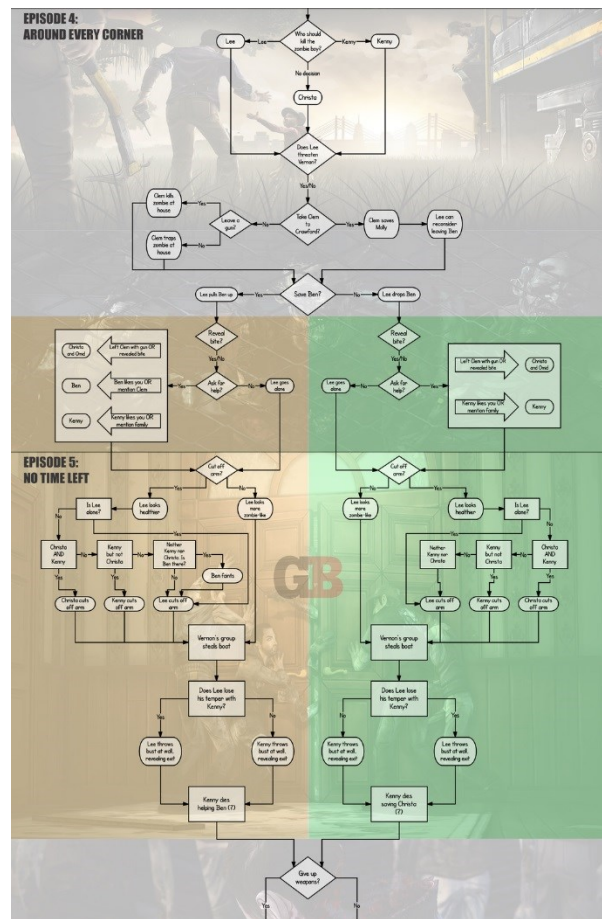
the games developed by Bethesda Game Studio such as *The Elder Scrolls* series or *Fallout 3* and

4. The player is given a motivating goal: finding your father, locating your missing son, stopping a crisis that threatens humanity, but the player is then turned loose into a world of quests, characters, and locations that distract them from following the main goal of the narrative. How can the author force the player to follow a specific path if they want the player to decide what they do and when they do it?

The most common way to solve this problem seems to be limiting the time that players have before some consequence occurs for not meeting the objective of the main storyline. As an example of this, we can look at the original *Fallout* games, developed by Black Isle Studios and Interplay Entertainment. In *Fallout*, the player is tasked with finding a ‘water chip’ to repair the water purifier in their vault (an underground settlement of people avoiding the harshness of a wasteland). In *Fallout 2*, the player must find a device that will end the drought that is killing their village. Similarly, to the games developed by Bethesda, the player is turned loose into the game world with a main goal to fulfill. However, in the original *Fallout* games, the player is constantly reminded of the impending consequence should they fail to complete their task in a timely manner. Repeatedly ignoring the goal of the game eventually results in failure and a ‘game over’. In the more recent series: *Dead Rising*, the player is placed into a world with a specified amount of time to finish the main story of the game. They are given ample free time to do what they want but are reminded that the game isn’t waiting for them by a timer that is constantly ticking down. Another solution to this problem is to restrict the player to a “bounded agency” such as in *Dragon Age* or *Mass Effect*. Instead of being given a sandbox to play in, the player is instead placed in a river, constantly being driven to a specific destination but still having some control on how they get there.

The author cannot give the player total control over their actions and expect the player to follow the path that the author wants. At some point there must be some consequence or restriction posed upon the player to steer them toward the outcome and story that they author is intending. Through these methods, or another clever decision in game design, player freedom and authorial intent can both exist in the same game. Instead of one dominating the other, a balance seems to be the best possible solution since it can create stories that have been developed by the author but personalized to the player.

In addition to these challenges of balancing the game between the developer and player, choice also can increase the scope of the game to far beyond what was intended by the developers. If each choice that a player makes influences the choices later in the story, this can lead to multiple branching paths that can be impossible for a developer to accommodate. Essentially, they would have to assume every choice that a player can make and account for each of them with a separate narrative path. As a result, by producing one game with integrated choices, a developer would have done the work of producing several other games didn't use choice. As we saw in the examination of Telltale's games and *Dragon Age*, by



In this excerpt of the decision tree in Telltale's *The Walking Dead*, it is easy to see how the story diverges but eventually converges before the paths branch too significantly.

Image is adapted from (Killham)

interconnecting the decisions that the player makes and by reminding them of the effects that their decisions are having, the player feels like their decisions mean something and that the game world is alive and adaptive rather than static and scripted.

To solve part of this problem, Telltale and Bioware broke their game into smaller chapters. Each chapter integrates the decisions of the player into the story and present several branching choices to the player. However, these branching paths often converge at the beginning of the next chapter. Essentially, they would allow the player's actions to branch a certain amount before converging the storyline back to a predetermined focal point. By handling choice this way, the developers can make the actions of the player feel intertwined and impactful while still giving themselves a realistic amount of work for the development of one game.

Conclusion

There are numerous applications of choice in game development, each contributing significant benefits to the narrative, gameplay, or emotional appeal of a game if done well. In narrative and non-narrative games alike, it is becoming increasingly common for developers to include choice in some manner. While choice can also pose some difficult challenges for a developer to overcome, the rewards of using choice are well worth the effort. Ultimately it should be left up to the game designer to decide whether they are up to the challenge that choice can make and whether it has a place in their game.

However, players are expecting developers to be up to this challenge in recent years. The successful narrative games that were examined in this thesis have players expecting more from games that claim to be narrative driven or to have interactive stories. Using choice in a narrative can guarantee player interest in the story since it is their story as well. Choice can be used to explore new ideas and break old clichés, creating an experience that is memorable and unique. In a time when an increasing number of games make use of “cinema like graphics, dialogue, [and] narrative...” it is important for games to use choice as well to diversify themselves as a unique form of storytelling.

Choice offers significant benefits, especially for the stories in video games. Whether it is used to develop the personalities of non-player characters, illicit emotional responses from the player, or tell an original story, most importantly it can guarantee a narrative experience that is more enjoyable for the player and better fulfilling of the author’s goals.

References

- Ahn, Luis von, and Laura Dabbish. "Designing Games with A Purpose." *Association for Computing Machinery. Communications of the ACM* 51.8 (2008): 58. *ProQuest*. Web. 29 Nov. 2016.
- Aslett, Will. "The Rise of the Indie." *Design Week (Online)* Jul 18 2012 *ProQuest*. Web. 30 Nov. 2016.
- Batchelor, Kim. "How to Speak Gamer: Lingo for n00bs." *University Wire* Sep 28 2015. *ProQuest*. Web. 30 Nov. 2016.
- Bizzocchi, Jim, and Joshua Tanenbaum. "Mass Effect 2: A Case Study in the Design of Game Narrative." *Bulletin of Science, Technology & Society* 32.5 (2012): 393-404. *Academic Search Complete*. Web. 19 Apr. 2016.
- Bunting, Ben S., Jacob Hughes, and Tim Hetland. "The Player as Author: Exploring the Effects of Mobile Gaming and the Location-Aware Interface on Storytelling." *Future Internet* 4.1 (2012): 142-60. *ProQuest*. Web. 11 Feb. 2016.
- Chiang, Oliver. "The Master of Online Mayhem." *Forbes* Feb 28 2011: 1. *ProQuest*. Web. 30 Nov. 2016.
- Cormier, Amanda. "Indie Developers make Games as a Labour of Love." *The Times – Transcript*. Apr 09 2016. *ProQuest*. Web. 30 Nov. 2016.
- Ellithorpe, Morgan E., et al. "Moral License in Video Games: When Being Right Can Mean Doing Wrong." *Cyberpsychology, Behavior & Social Networking* 18.4 (2015): 203-207. *Academic Search Complete*. Web. 19 Apr. 2016.
- Ferro, Lauren S., Steffen P. Walz, and Stefan Greuter. "Towards Personalised, Gamified Systems." *Proceedings of The 9th Australasian Conference on Interactive Entertainment Matters of Life and Death - IE '13* (2013): n. pag. Web. 6 Oct. 2016.
- Garrelts, Nathan Clinton. "The Official Strategy Guide for Video Game Studies: A Grammar and Rhetoric of Video Games." Order No. 3100425 Michigan State University, 2003. Ann Arbor: *ProQuest*. Web. 30 Nov. 2016.
- Green, Daniel. "New Game +: Unlocking New Paths into Gamer Culture." Order No. 1566623 Northern Illinois University, 2014. Ann Arbor: *ProQuest*. Web. 30 Nov. 2016.
- Herrera, Benjamin A. "The Edge of Reality: A Contemporary Analysis of the Video Game Culture." Order No. 1585972 University of the Pacific, 2015. Ann Arbor: *ProQuest*. Web. 30 Nov. 2016.
- Killham, Evan. "Here's a Chart of Every Choice in The Walking Dead: Season 1 (Image)." *Venturebeat.com*, GamesBeat, 31 Mar. 2013, venturebeat.com/2013/03/31/the-walking-dead-season-one-plot-graph/.
- McAllister, K. S. (2004). *Game work: Language, power, and computer game culture*. Tuscaloosa, AL: University of Alabama Press.
- Moore, J. Cameron. "Making Moral Choices in Video Games." (2011): www.baylor.edu. Baylor University. Web. 19 Apr. 2016.

- Morrison, Brice. "Gamasutra: Brice Morrison's Blog - Meaningful Choice in Games: Practical Guide & Case Studies." *Gamasutra Article*. Web. 19 Apr. 2016.
- Mukherjee, Sayantani. "Fun Element in Product Experiences: Insights from Young Adults' Engagement with Video Games." Order No. 3260730 University of California, Irvine, 2007. Ann Arbor: *ProQuest*. Web. 29 Nov. 2016.
- Narrative Legos*. Perf. Ken Levine. *Gdcvault.com*. Game Developer's Conference, 2014. Web. 6 Oct. 2016.
- Peterson, Andrea. "Inside Valve's Plan to Revolutionize the World of Video Games." *The Washington Post*. Nov 24 2013. *ProQuest*. Web. 30 Nov. 2016.
- Salen, K., & Zimmerman, E. (2004). *Rules of play: Game design fundamentals*. Cambridge: MIT Press.
- Rice, John W. "Assessing Higher Order Thinking in Video Games." *Journal of Technology and Teacher Education* 15.1 (2007): 87-100. *ProQuest*. Web. 29 Nov. 2016.
- Ryden, Malin. "The Importance of Choices?" *Choice of Games Forum*. N.p., 10 Jan. 2015. Web. 13 Sept. 2016. <https://forum.choiceofgames.com/t/the-importance-of-choices/6730>
- Schneider, Edward F. "Death with a Story." *Human Communication Research* 30.3 (2004): 361-75. *ProQuest*. Web. 11 Feb. 2016.
- Schneider, Edward Francis. "The Effects of Story Elements in Violent Video Games." Order No. 3005489 Indiana University, 2001. Ann Arbor: *ProQuest*. Web. 11 Feb. 2016.
- Shackford, Scott. "Gaming the Game." *Reason* 45.9 (2014): 58. *Academic Search Complete*. Web. 19 Apr. 2016.
- Shackford, Scott. "Video Game Morality." *Reason* 47.9 (2016): 60. *Academic Search Complete*. Web. 19 Apr. 2016.
- Sherry, J. L., Lucas, K., Greenberg, B., & Lachlan, K. (2006). Video game uses and gratifications as predictors of use and game preference. *Playing computer games: Motives, responses, and consequences*, 213-224.
- Snider, Mike. "A Look at the Future of Video Games." *USA Today*. usatoday.com, 11 Sept. 2010. Web. 5 Sept. 2016.
- Snider, Mike. "Do video games have a motion picture-like future?" *USA Today: Academic Search Complete*. Web. 19 Apr. 2016.
- Sohn, Emily. "Games with a Purpose: Playing some Online Games May Help Computers Get Smarter." *Science News for Kids* Feb 21 2007: n/a. *ProQuest*. Web. 29 Nov. 2016.
- Tassi, P. (2012, September 6). *Single player matters: Why not all games need to be 'social.'* Retrieved from <http://www.forbes.com/sites/insertcoin/2012/09/06/single-player-matters-whynot-all-games-need-to-be-social/>

- Totilo, Stephen. "Letting Gamers Play God, and Now Themselves." *New York Times* 02 Sept. 2004: G1+. *Academic Search Complete*. Web. 19 Apr. 2016.
- Vowles, Andrew. "Indie Video Gaming Creativity is Something Like Making Literature." *The Guelph Mercury*. Apr 03 2014. *ProQuest*. Web. 30 Nov. 2016.
- Weaver, Andrew J., and Nicky Lewis. "Mirrored Morality: An Exploration of Moral Choice in Video Games." *Cyberpsychology, Behavior & Social Networking* 15.11 (2012): 610-614. *Academic Search Complete*. Web. 19 Apr. 2016.
- Wilson, Jonathan. "Examining Choice in Dragon Age: Origins." *GameCritics.com*. Web. 19 Apr. 2016.
- Xu, Yan, Hyungsung Park, and Youngkyun Baek. "A New Approach Toward Digital Storytelling: An Activity Focused on Writing Self-Efficacy in a Virtual Learning Environment." *Journal of Educational Technology & Society* 14.4 (2011): 181, n/a. *ProQuest*. Web. 11 Feb. 2016.

Glossary

AAA Games: Triple-A games are those that have the largest budgets and that are often the best sellers. People often expect these games to have high standards of quality.

Cosplay: The act of dressing up as a character. Often game fans will create their own costumes and wear them at gaming conventions.

Cut-scene: A short piece of a game where the controls are removed from the player. During cut-scenes, games resemble movies since the player must watch the characters (often including their own) move and act outside of their control.

DLC: Downloadable Content. Additional content for a game (more levels, more characters, more story) that are released by game publishers after the original game release (often for a price).

Indie Game: A game that was developed by a small studio, small team, or one independent developer. These games are often smaller in scale and budget than their AAA counterparts but are more free to pursue nuanced ideas with their lack of corporate ties.

MMO: Massively multiplayer online game. A game that can support many players (hundreds to thousands) at once in the same world.

NPC: Non-playable character. A character that is not being controlled by a human. If a player has interactions with this character, then they must be designed and written by the game's author.

Sandbox / Open-World Games: Games that place the player in a world where they have freedom of movement and a large area to explore. The opposite would be a game that is a straight hallway with only one direction to travel.

RPG: Role-playing games. The player takes on the role of a character and must play as that character (e.g. play the role of a knight during the middle ages).