# Layers of Videogame Narrative and Interactivity

by

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#### Abstract

Narrative in videogames remains a frequently discussed topic in game studies. In 1997, two books offered differing points of view on the value of videogames as storytelling mediums: Janet Murray's *Hamlet on the Holodek* and Espen Aarseth's *Cybertext*. In the former, though Murray refers to the narrative content of series such as the Mario or Mortal Combat as "thin", she recognizes videogames' potential for "evocative theatre experience" and new expressive possibilities. She includes videogames among other digital artifacts under the term "cyberdramas"- a reinvention of storytelling through digital mediums<sup>1</sup>. In the latter, Aaerseth argues for the need to work with the game-text and that play and narrative are two distinct modes of discourse. To deny that there is no difference between the two is to deny the "essential quality of both categories." These arguments helped set the tone of early debates surrounding how to study videogames, let alone how to define game studies as a unique field.

However, the videogame industry has greatly evolved since 1997, resulting in a numerous genres and approaches to game design, causing a growing overlap between narrative and ludic elements. As such, putting aside the narratology versus ludology debate, the next natural question is what makes narratives 'gamely'? How do we work with game-texts? What does it mean to interact with games from the two supposedly distinct discourses – play and narrative – if videogames are a distinct field? And, for my primary interest, what makes videogame narrative 'gamely' – compared to traditional narrative mediums such as novels or films – and how should we analyze it?

<sup>&</sup>lt;sup>1</sup> Janet Murray. *Hamlet on the Holodek: The Future of Narrative in Cyberspace* (New York: The Free Press, 1997). 51, 53, 271

<sup>&</sup>lt;sup>2</sup> Espen J. Aarseth. *Cybertext: Perspectives on Ergodic Literature*. (Baltimore and London: John Hopkins University Press, 1997). 5

To attempt to answer these questions, I propose a two-part framework that can be used as a guide to recognize different types of interactive elements. The first part consists of a narrative spectrum, which helps articulate the general shape of a game and how much impact the player's actions have on the overall narrative. The second part consists of a rubric of significant, overarching interactive elements – both narrative and ludic based - in games, which is geared around different ways players directly interact with the game's content. This is not an all-inclusive framework, nor will it account for all kinds of games, but it should act as an alternative guide for i) identifying interactive elements that appear throughout games, ii) providing an idea of how much control the player has over the game, and iii) exploring questions surrounding narrative interactivity.

By analyzing how interactivity occurs, it is not only possible to identify how players interact with a game's content but also the overall impact of their actions on the narrative and, by extension, how players create meaning.

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#### 1. Introduction

Narrative is a broad term. It is conventionally defined as "a spoken or written account of connected events; a story[...]the narrated part of a literary work, as distinct from dialogue," and includes "the practice or art of telling stories [or] a representation of a particular situation or process in such a way as to reflect or conform to an overarching set of aims or values". Other definitions expand the term to include narrative as a "sequence of pre[-]planned and connected events that have been laid out by a designer [that] have been purposely placed and in some way connect to one another" or a change in state and the insight brought by the change; the personification and representation of narrative; and the patterning and repetition of representation of. These definitions are not inaccurate but they lack nuance. As Zimmerman observes, the problem with general definitions of narrative is that while a book can be defined as narrative, so could a game of chess, a conversation, a ceremony, or even a meal. <sup>7</sup> To breakdown narrative into a working term within the context of this

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<sup>&</sup>lt;sup>3</sup> Oxford Dictionaries. "Narrative". *Oxford Dictionaries*, accessed October 13, 2014. http://www.oxforddictionaries.com/definition/english/narrative

<sup>&</sup>lt;sup>4</sup> Oxford Dictionaries. "Narrative". *Oxford Dictionaries*, accessed October 13, 2014. http://www.oxforddictionaries.com/definition/english/narrative

<sup>&</sup>lt;sup>5</sup>Thomas Grip. "How Gameplay and Narrative kill Meaning in Games". *Official Blog of Frictional Games*, accessed September 1, 2014. http://frictionalgames.blogspot.ca/2010/01/how-gameplay-and-narrative-kill-meaning.html

gameplay-and-narrative-kill-meaning.html <sup>6</sup> Eric Zimmerman. "Narrative, Interactivity, Play, and Games: Four naughty concepts in need of discipline". *Eric Zimmerman.com*, accessed March 20, 2014. www.ericzimmerman.com/texts/Four Concepts.html

<sup>&</sup>lt;sup>7</sup> Eric Zimmerman. "Narrative, Interactivity, Play, and Games: Four naughty concepts in need of discipline". *Eric Zimmerman.com*, accessed March 20, 2014. www.ericzimmerman.com/texts/Four\_Concepts.html

thesis, I draw from Bateman's definition of narrative, which defines narrative as "the methods by which story materials are communicated to the audience".

For the sake of simplicity, it is useful to compare how narrative elements are used in traditional narrative mediums compared to videogames, particularly in how they are structured. One of the common templates for understanding narrative structure includes the typical narrative arc. A typical narrative arc tends to consist of a setup, complication, development, resolution, and denouement broken into three acts. First, the characters, circumstances, and the problem that drives the plot are introduced. Second, the core conflict, which makes up the bulk of the narrative, is instigated and characters undergo major changes or character development. Third, the problem is confronted and plot elements are drawn together and resolved. Rather than simply a beginning, middle, and end, the narrative arc identifies how specific narrative patterns interlink to form a sequential narrative arc. By identifying patterns in the narrative shape, it is not only possible to track the order of the narrative but also how a person experiences it, providing a comparative means of analyzing different kinds of stories.

Many videogames and traditional narrative mediums like movies and books share narrative elements like character, themes, and general narrative shape. As such, some scholars argue it is possible to excise narrative elements from ludic or 'gamely' elements through categorizing elements such as cutscenes as passive or 'non-interactive' while categorizing elements such as gameplay segments as active or 'interactive'. Players themselves have begun creating 'movie' versions of videogames by ripping a game's

<sup>&</sup>lt;sup>8</sup> Chris Bateman. "Game Writing Narrative Skills for Videogames", edited by Christ Bateman (Rockland: Charles River Media, 2006), 298

<sup>&</sup>lt;sup>9</sup>Paul Cheng. "Waiting for something to happen: Narratives, interactivity and the video game cutscenes" (paper presented at DiGRA, 2007), 15

cutscenes and editing out the gameplay portions. By this logic, it should be possible to watch all the cutscenes and understand videogame narrative the same way you would a movie. In practice, treating narrative elements in videogames the same as traditional narrative mediums becomes problematic.

As an example, I have taken the typical narrative arc and attempted to analyze *Mass Effect 2*'s narrative structure with it. *Mass Effect 2* is not only part of a highly successful game series but also has garnered praise for its characters and cinematic style of storytelling. Though the game allows some player choice and branching, most of the core narrative plays out in mostly linear cutscenes and could, technically, be understood through cutscenes alone. According to the typical narrative arc, *Mass Effect 2* can be read as:

**Set up:** Commander Shepherd is killed in an attack by an unknown ship. Two years later, she is resurrected by an organization named Cerberus to construct a team to defeat the Collectors, an alien race behind the disappearance of colony citizens.

**Complication:** The Collectors reside beyond the Omega-4 relay, a place no ship that has entered has returned from.

**Development:** Shepherd travels across the galaxy building a team, reinforcing her ship, and preparing to enter Omega-4 and stop the Collectors.

**Resolution:** Shepherd enters Omega-4, discovers the Collectors' plans, and defeats them.

**Denouement**: Armed with new information of the greater enemy, Shepherd prepares of the coming of the Reapers.

Though the narrative arc seems straight forward, this denouement only occurs if
Shepherd makes it out of the final mission with at least one other surviving squad
member. Depending on player interference, Shepherd can potentially be the only squad
member and subsequently die after the final fight, changing the denouement to:

**Denouement**: Shepherd defeats the Collectors but dies in her escape.

As Bizzocchi observes, narrative arc is a "powerful tool for channeling and guiding the reader's experience of story" and depends on tight control of design and implementation of detail<sup>10</sup>. In videogames, however, interactivity disrupts this process and the control of detail, resisting the concept of the grand narrative arc. The overarching narrative of Mass Effect 2 is constant across playthroughs but the narrative elements change due to player interference, affecting Shepherd's gender, history, personality, relationships, and even what types of gameplay are available to the player. Though these may seem minor in terms of the overall narrative at a glance, these elements subtly alter the interlinking patterns in the game and have a rippling effect. For example, did Shepherd end up the only surviving squad member because the player gave them a consistently abrasive personality, creating weaker relationships with squad mates and, subsequently, making it easier for their squad mates to die? Or did the player give Shepherd a more amiable personality, creating strong relationships with their squad mates but still failing to keep their squad mates alive due to bad gameplay and/or narrative decisions? Though there are some set narrative points in Mass Effect 2, how these points

<sup>&</sup>lt;sup>10</sup> Jim Bizzocchi. "Games and narrative: An analytical framework". *Loading: The Journal of the Canadian Games Studies Association*, 1 no. 1 (2007): 3.

occur and are structured differs across playthroughs, creating different narrative experiences.

There are key difference in how videogame narrative and traditional narrative treat narrative elements, changing the question "are videogames narratives?" to "how do videogames produce narrative?".

#### 1.1 Videogames as Storytelling Mediums

Narrative in videogames remains a frequently discussed topic in game studies. In 1997, two books offered differing points of view on the value of videogames as storytelling mediums: Janet Murray's *Hamlet on the Holodek* and Espen Aarseth's *Cybertext*. In the former, though Murray refers to the narrative content of series such as the *Mario* or *Mortal Combat* as "thin", she recognizes videogames' potential for "evocative theatre experience" and new expressive possibilities. She includes videogames among other digital artefacts under the term "cyberdramas"- a reinvention of storytelling through digital mediums<sup>11</sup>. In the latter, Aaerseth argues for the need to work with the game-text and that play and narrative are two distinct modes of discourse. To deny that there is no difference between the two is to deny the "essential quality of both categories." These arguments helped set the tone of early debates surrounding how to study videogames, let alone how to define game studies as a unique field. Among these debates was the question of ludology versus narratology.

Ludologists emphasize the ludic dimension of games, suggesting that videogames are unique and should be treated differently from other mediums. Eskelinen argues that

<sup>&</sup>lt;sup>11</sup>Janet Murray. *Hamlet on the Holodek: The Future of Narrative in Cyberspace* (New York: The Free Press, 1997). 51, 53, 271

<sup>&</sup>lt;sup>12</sup> Espen J. Aarseth. *Cybertext: Perspectives on Ergodic Literature*. (Baltimore and London: John Hopkins University Press, 1997). 5

The old and new game components, their dynamic combination and distribution, the registers, the necessary manipulation of temporal, causal, spatial and functional relations and properties not to mention the rules and the goals and the lack of audience should suffice to set games and the gaming situation apart from narrative and drama, and to annihilate for good the discussion of games as stories, narratives or cinema. In this scenario stories are just uninteresting ornaments or gift-wrappings to games, and laying any emphasis on studying these kinds of marketing tools is just a waste of time and energy <sup>13</sup>.

Though Eskelinen is an extreme ludologist, his core interests - rules, goals, mechanics, procedures, and play – are typically shared among ludologists. Frasca, for example, does not dismiss narratology entirely and even sees the potential for traditional narrative elements to enhance videogames. However, his primary interest is ludic elements. As he points out, some videogames produce narrative but not all narratives are adventure games; while videogames tend to have a correct course of action, videogames encompass several possibilities of what may occur while traditional narrative is a set of chained actions<sup>14</sup>.

Narratavists, however, believe that there is enough overlap between videogame narratives and traditional narratives that narrative theories and approaches can be applied to videogames. Rather than treat videogames as simply an extension of traditional narrative (though extreme narratavists may take this approach) many narratavists acknowledge videogames as its own medium and understand the limits of using

<sup>13</sup>Markku Eskelinen. 2001. "The Gaming Situation". Game Studies, 1, no. 1.

<sup>&</sup>lt;sup>14</sup>Frasca, Gonzalo. "LUDOLOGY MEETS NARRATOLOGY: Similitude and differences between (video)games and narrative". *Ludology.org*, accessed December 14, 2012. http://www.ludology.org/articles/ludology.htm

narratology. In her analysis of *Resident Evil 4*, Carr approaches the game as a 'playable text' and uses structural, textual, and inter-textual analysis while refining the terms to apply in a game context. She relates structural analysis to game design and form and relates "textual analysis to signification and to the game as actualized in play" <sup>15</sup>. Though Carr found her framework useful for articulating the difference between game textuality and structure, she concluded not all elements could be neatly defined into these categories. Due to videogames' play and emergent gameplay elements it becomes difficult to maintain distinctions between 'games as texts' and 'games as played'.

These theorists establish many of the points that have come up in the ludology versus narratology debate and there is merit to them: narrative and ludic elements are not quite the same, videogames are a different medium from traditional media and should largely be studied as such, and interactivity is an important element for studying what is unique about games. However, though ludology versus narratology is useful for articulating early theories and opposing points of view, the game industry has greatly evolved since 1997, rendering many other points in the narratology versus ludology debate inadequate.

A common point in the narratology versus ludology debate is the contradiction between narrative and ludic elements. In his critique about videogames as art, Ebert argues that videogames' malleability weakens artistic expressions because one, it takes control away from the artist, and two the possibility of choice potentially devalues the emotional journey of a story path<sup>16</sup>. While I do not agree with Ebert's stance, videogame 'malleability' or the ability for player interaction versus what the original creators'

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Diane Carr. "Textual Analysis, Digital Games, Zombies" (paper presented at DiGRA, 2009), 2
 Roger Ebert. "Gamers VS. Art: Ebert VS. Barker". Rogerebert.com, accessed November 30, 2014. http://www.rogerebert.com/rogers-journal/games-vs-art-ebert-vs-barker

intended is a fair point. Klejar describes the contradiction as a conflict of agency, where "there is a balancing, and a struggle, between the agency of the story-game and the agency of the player". On one hand, there is the concern that a videogame narrative cannot be as strong as traditional narrative mediums because the narrative is interrupted by player agency and play elements. On the other, there is the concern of the narrative and/or cutscenes getting in the way of player agency and play elements by forcing the player into a passive position.

In Kostner's critique of narrative and game design, he argues that while videogames can have strong narratives and create great game experiences, if a game provides more narrative than "problems" to solve then the game poorly designed Rostner defines videogames, at their core, as a problem or series of nested problems to solve. Problems translate into simple and complex forms of gameplay, ranging from mashing a button for a power up to figuring out a series of steps for destroying all the enemies on a map. The richer the problems, the more rewarding and fun it becomes for the player to learn the rules and solve the game's "black box". Narrative, then, is a flashier form of feedback that rewards the player for solving problems. Rather than simply hearing a button click to signify success, the player is treated to a cutscene. The problem, Kostner argues, is when the game starts becoming more "feedback" than "rich systemic gameplay". A cutscene may not necessarily be completely passive and include quick-time-events to encourage interaction with narrative segments but those are simplistic problems and do not offer a rich gameplay experience, particularly if

<sup>&</sup>lt;sup>17</sup>Rune Klejar. "In Defense of Cutscenes." *Rune Klevjer Home Page*, accessed November 25, 2012. http://folk.uib.no/smkrk/docs/klevjerpaper.htm

<sup>&</sup>lt;sup>18</sup>Raph Kostner. "Narrative is not a game mechanic." *Raphkostner.com*, accessed October 17, 2015. http://www.raphkoster.com/2012/01/20/narrative-is-not-a-game-mechanic/

sandwiched between lengthy cutscenes. Likewise, even if the game offers some opportunities for gameplay and problems to solve, if there is more narrative than gameplay segments then the game becomes an "interactive movie [...] first and game [...] second".

However, as Cheng points out, not only do videogames have strong narratives but also reflect a growing overlap between narrative and ludic elements in videogames<sup>19</sup>. The game industry has attempted to address the supposed contradiction between ludic and narrative elements by unifying them together to create new meaning ludic-narrative opportunities. For example, in their case study, Bizzocchi and Tanenbaum argue *Mass Effect 2* makes two successful attempts: first, through the incorporation of 'narrative texture' into design and across the experience of the game; second, the incorporation of narrative into the design of the interface<sup>20</sup>. When Shepherd takes damage it is not represented with a health bar as but through Shepherd staggering, the screen growing blurry, and the audio washing out. From a gameplay perspective, this represents that your hit points (HP) are low and you need to recover or stop taking hits before you die; from a narrative perspective, it represents Shepherd slowly dying.

Game developers may not have the same motives as academic researchers but there is a growing interest in closing the gap between narrative and ludic elements.

\*Assassin's Creed: Revelations' creative and artistic director, Alexandre Amancio, states that he feels, based on his work and what he has seen in the industry, that "narrative and gameplay will become more of a unified force [...] instead of gameplay-cinematic-

19 Cheng. "Waiting for something to happen: Narratives, interactivity and the video game cutscenes". 15-16

<sup>&</sup>lt;sup>20</sup> Jim Bizzocchi and Joshua Tanenbaum "Mass Effect 2 : A Case Study in the Design of Game Narrative". *Bulletin of Science Technology Society*, 32 no. 5 (2012): 394

gameplay-cinematic"<sup>21</sup>. He predicts the game industry going further away from the separation of gameplay and narrative, instead seeing the potential for them to be used together to create a stronger, more meaningful experience.

Tørnquist, creator and project lead of the *Longest Journey* saga, shares a similar stance. Though his focus is narrative, he ties narrative and characters to gameplay by stating that not only did he learn from his work that it is "the characters build the narrative" but also that for his *The Secret World*, "character development is the gameplay. But it's also the story. It's how you transform yourself within the game. It's character development as narrative. Which is how you tell stories through RPGs and MMO"<sup>22</sup>. Though ludologists argue that it is the pure game mechanics, rules, and practices matter the most, comments like Tørnquist's suggest that not only can narrative cross over with gameplay but also that narrative *can* be the gameplay, it *can* be the force of interactivity.

These trends of 'narrative is play' or 'play is narrative' open up the possibility for variety in narrative interactivity, allowing more games that do not fall neatly into the ludic/narrative binary. For example, an atypical game genre is the visual novel. Visual novels are generally defined as interactive fictions using mostly static images, music, and sounds. They usually lack or are mostly devoid of traditional ludic elements such as stats, overt game mechanics, or over exploration. Though there are exceptions that include game mechanics beyond progressing text and selecting choices, a visual novel's strengths lie in story, not gameplay. As Gay states in his article:

<sup>&</sup>lt;sup>21</sup> "Video Interview-Storytelling in Games". YouTube video, 0:37, from video interview with Alexandre Amancio regarding his thoughts on storytelling, gameplay, and how Revelations will set the stage for Assassin's Creed III. Posted by WerWills Wissen, May 15, 2011, http://www.youtube.com/watch?feature=player\_embedded&v=PEO-Eg1tf-U

<sup>&</sup>lt;sup>22</sup>Ragnar Tørnquist. "Ragnar Tørnquist on...the Longest Journey". Interview with John Walker. *Rock, Paper, Shotgun,* accessed April 2, 2013.

http://www.rockpapershotgun.com/2008/08/19/ragnar-t%C3%B8rnquist-on-the-longest-journey/

Narrative is the center of the entire package and if it doesn't function properly, the entire thing comes crashing down. Unlike any other genre in gaming save for perhaps sports, visual novels have nothing else to fall back on because they're already incredibly stripped down experiences<sup>23</sup>.

Likewise, Tale of Tales' *The Path* is stripped down to the narrative. There are no score counters, no enemies, no obstacles, and no gameplay incentives to collecting things. Above all, *The Path* is described as the game in which the only way to win is the break the rules and die. However, the game's strength is the significant space for "narrative potential of a situation" to occur. The player is still provided with the opportunities to alter the journey, such as mood and time of day, the behaviour of the characters, the continuous shifts of music, and the length of the journey, though the outcome remains the same.

Despite videogames like visual novels and *The Path* lacking traditional gameplay elements, it would be difficult to dismiss these as not being games. These games present a strong potential for player to narrative interaction, differentiating these games from the traditional storytelling. As Zimmerman comments,

It is clear that games can signify in ways that other narrative forms have already established: through sound and image, material and text, representations of movement and space. But perhaps there are ways that

with Mark Newheiser. Adventure Classic Gaming, accessed September 14, 2014.

http://www.adventureclassicgaming.com/index.php/site/interviews/473/.

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<sup>&</sup>lt;sup>23</sup> Elliot Gay, "Japan games week: Visual novels and the power of story". *Japanator*, accessed November 29. http://www.japanator.com/japan-games-week-visual-novels-and-the-power-of-story-23658.phtml <sup>24</sup> Auriea Harvey and Michaël Samyn. "Michaël Samyn, Auriea Harvey-Tale of Tales". Interview with Mark Newheiser. *Adventure Classic Gaming*, accessed September 14, 2014

only games can signify, drawing on their unique status as explicitly interactive narrative systems of formal play<sup>25</sup>.

### 1.2 A Structure for Studying Videogame Narrative and Interactivity

As Holleman observes, although videogames use design elements from traditional games and narrative elements from traditional works of art, videogames are different from media forms that came before. He states,

Certainly, nothing in the ancient world predicted videogames; it is absurd, therefore, to use a Greco-Latin term like ludology or narratology for the study of them. I suggest we simply settle on the name videogame studies. Videogames are what we are studying, and any attempt to add to or subtract value from our subject through a name in a dead language is entirely unnecessary. Our discipline is alive in the here and now<sup>26</sup>.

Holleman's dismissal of ludology versus narratology is not incorrect but it is simplistic. By simply saying we should study "videogames as videogames", he glosses over why there is such a point of contention over the question: what makes videogames 'gamely'? How do we work with game-texts? What does it mean to interact with games from the two supposedly distinct discourses – play and narrative – if videogames are a distinct field? And, for my primary interest, what makes videogame *narrative* 'gamely' – compared to traditional narrative mediums such as novels or films – and how should we analyze it?

<sup>26</sup>Patrick Holleman. "Narrative in Games". *The Game Design Forum*. Accessed March 27, 2013. http://thegamedesignforum.com/features/narrative in games.html

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<sup>&</sup>lt;sup>25</sup> Zimmerman, "Narrative, Interactivity, Play, and Games: Four naughty concepts in need of discipline".

To attempt to answer these questions, I turn my focus to the element that many consider unique to videogames: interactivity. There are several different ways you can interact with media objects but videogames allow explicit interaction, allowing for direct interaction between the participant and the object. This sets videogames apart from other mediums in two ways: first, there is a difference between interacting with a physical object (i.e.: the game controller) and interacting with the content; second, game interactivity is a reciprocal relationship – when the player interacts with the game, the game interacts back. Though Aarseth argued narrative and play as separate categories, I argue that videogame narrative stands apart from traditional narrative mediums because the interactive elements in video games provide a means for the player to directly interact with the game's narrative content to create meaning. However, while interactivity is arguably a constituent element of gameliness, it requires a more nuanced understanding to break 'interactivity' into a manageable working term.

This thesis will begin with an overview of methodologies towards game analysis and a breakdown of the term 'interactivity'. This is to set the groundwork for my own framework and to articulate why I have chosen my approach to videogame narrative. Part one of chapter two will review methodologies that touch on general approaches to game analysis and focused approaches to analyzing specific elements of videogames, both narrative related and not. Part two will review interactivity, with an emphasis on explicit interactivity, to understand the player-to-content relationship and to break interactivity down into a useable work term.

In chapter three, I will walk through an overview of a proposed two-part framework that can be used as a guide to recognize different types of interactive elements

- in both gameplay and narrative. It is not an all-inclusive framework, nor will it account for all kinds of games, but it should act as an alternative guide for identifying interactive elements that appear throughout games, providing an idea of how much control the player has over the game, and exploring questions surrounding narrative interactivity. Both parts of the framework will include examples from recent and relatively known games as a means of articulating my points and referring to trends in the game industry, rather than presenting definitive representatives.

The first part of the framework consists of a narrative spectrum, which helps articulate the general shape of the game's narrative (i.e. whether its an open game or a linear one) and how much impact the player's actions have on the overall narrative. This helps gauge the amount of game space and potential for interactive possibilities the game offers the player, or, by contrast, where the game restricts the player. The spectrum consists of four categories that help articulate how the game narrative manifests:

- Extreme narrative, games that are narrative heavy with limited overt ludic
  elements but still contain interactivity to differentiate it from traditional
  narrative. Extreme narrative games are not to be mistaken for fully traditional
  narratives, which are entirely non-interactive.
- 2. Interactive traditional narrative, games that, borrowing from Lebowitz and Klug, "allow players some degree of freedom to interact with the world and characters" <sup>27</sup>. However, the player cannot alter the core narrative in a significant way.

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<sup>&</sup>lt;sup>27</sup> Josiah Lebowitz and Chris Klung, *Interactive Storytelling for Videogames: a Player-centered Approach to Creating Memorable Characters And Stories* (Burlington, MA: Focal Press) 121

- Branching stories, games that contain multiple branches that allow the player to significantly affect the main plot.
- Player-generated, games where the narrative is mostly or entirely generated from player actions.

The second part of the framework is a rubric consisting of ludic and narrative elements, though few are exclusive to one field - for example, 'rewards' under ludic may apply to objects dropped from battles but under narrative it may apply to taking over a base in the story after winning a battle. This is, in some ways, subjective categorization but interactive elements are not bound to just one meaning. Likewise, not all games will share all these categories. However, the categories are geared to look at what are the different ways in which players directly interact with the game's content.

Finally, I will accompany the framework with a close-reading and comparison of four videogames, to demonstrate the practical use of the framework and to further articulate my points:

- Hakuoki: Demon of the Fleeting Blossom: A visual novel game which, like a
  Choose Your Own Adventure novel, is driven by player choice. Though it has a
  lack of overt ludic mechanics, the game encourages minor and major branching
  to explore the game space.
- Machinarium: A point-and-click based puzzle game which tells its narrative
  through environmental clues and on-screen actions rather than dialogue.
   Deviation from the overall narrative is fairly limited, instead encouraging players
  to complete a desired outcome.

- Walking Dead: An episodic game that mixes point-and-click with quick-timeevents and action sequences. Though it has an overall consistent narrative, the game is made up of several branching micro-narratives that flavor the main character's personality, relationships with other characters, and tone of scenes.
- The Path: A psychological horror game that relies on the player inferring
  narrative from the Red Riding Hood fairy-tale, symbolic imagery, and character
  specific interactions. The player is locked into fulfilling the fairy tale with all
  playable characters but narrative manifests through the player's action within the
  setting.

Though these are not triple-A level games, they are all relatively well known in game studies and exemplify particular types of videogame narrative without being too niched.

These particular games have been chosen for both practical reasons and for their narrative content. In terms of practicality, they are short games that can be completed in less than ten to fifteen hours and have a simpler set of interactive elements. This allows me to keep my scope manageable while ensuring I will be able to provide a nuanced analysis. In terms of their narrative content, they not only emphasize narrative but also offer unique interactive elements and opportunities from one another. Despite the fact that these games are stripped of overt gameplay mechanics, the means through which they provide the player with explicit interactivity gives the player very different narrative experiences and interactive possibilities while still providing enough recognizable elements that can be identified and compared and contrasted.

#### 2. Towards a Framework

How do you analyze where narrative interactivity occurs? How do you know what elements to look for, let alone how they should be analyzed? There are two preliminary steps needed to answer these questions. The first is a review of established methodologies that approach videogames via a systematic analysis of their contents, which includes frameworks that address narrative and those that do not. While it is tempting to only focus on frameworks that study narrative elements in videogames, as Newman observes, approaches to videogame narrative that simply reduce videogames to just their narrative components (i.e. studying only the cutscenes) can, at worse, ignore the variability of videogames and the impact the player has<sup>28</sup>. Videogame narrative elements do not exist within a bubble but are expressed through other elements, such as the player's cognitive understanding of the narrative, through in-game objects or characters, or through semiotics. While my framework does not incorporate all approaches covered in the reviewed frameworks, it is necessary to acknowledge the work already done to augment my understanding necessary elements of study and to articulate why I have chosen to structure my framework the way it is.

The second is a breakdown of term 'interactivity' in relation to videogames and narrative in videogames. Though it is typically agreed that interactivity is a chief definer of videogames, it is a broad concept that encompasses several types of interactions.

Interactivity can refer to the relationship between the player and the hardware, the player and the meta-context, or between the player and the game's content. Likewise, how the player interacts with the narrative content of one game may differ significantly from another game. For example, a point-and-click text-based adventure and a role-playing

<sup>&</sup>lt;sup>28</sup> James Newman. *Videogames* 2<sup>nd</sup> Edition. (London and New York: Routledge, 2013) 90.

game are both reliant on narrative to engage the player. However, the narrative experience differs significantly when the player may only interact with the game through clicking on the game world versus having a combat system, an over-world, and side quests and mini-games to interact with. More than simply gameplay mechanics or genres, the experience differs based on the interactive opportunities, control over the overall narrative, and how much of an impact the player has on the game world. As such, it is not enough to say 'videogames are interactive' as much as identify how interactivity occurs.

#### 2.1 A Focusing of Analysis

According to Aarseth, there are three main approaches to studying videogames: studying the rules, game design, or gameplay mechanics; observing players or reading their reports and reviews; and playing the game. While he considers playing the game as the most important approach, Aarseth adds "we should use as many sources as possible. Playing is essential, but should be combined with other sources if at all possible [...but] there must also be a balance between free play, analytical play, and nonplay" <sup>29</sup>. Though I do not agree with his dismissal of resources like walkthroughs or cheat codes (both because they are useful resources and because many normal gamers use them), I agree with the importance he places a player-centric point-of-view. The relationship between the player and the game's content is one of the most important aspects of videogames, partially because of interactivity and partially due to how videogames are designed. Regardless of whether videogames are linear or open, videogames are typically designed to lead the player to some form of a desired outcome. The difficulty, however, is deciding which elements should be focused on during play in the first place.

<sup>&</sup>lt;sup>29</sup> Espen Aarseth. "Playing Research: Methodological Approaches to game analysis" (paper presented at Melbourne, 2003) 3, 7

In his framework, Konzack proposes that videogames must be understood from more than simply the ludic or functionality angles. Emphasizing technical, aesthetic, and socio-cultural perspectives, he proposes seven layers to videogames: hardware, the physical nature of the game itself or materials used to play the game; program code, the game's source code; functionality, the behavior of the computer and its interface in response to user actions; gameplay, the game's ludic elements; meaning, the semantic meaning and sign systems; referentiality, characteristics or traits in the game setting or genre; socio-cultural, the relation between the game and the player outside the game's content and the relationship between fellow players. Though Konzack states each layer can be studied separately, he believes that studying a game in fragments carries the risk of losing perspective<sup>30</sup>.

While this is a valid concern, Konzack's framework relies heavily on its broadness to account for all potential angles of game study, making it difficult to tie together all his categories for a nuanced overall analysis. For example, 'gameplay' includes elements such as "positions, resources, space and time, goal (sub-goals), obstacles, knowledge, rewards or penalties" In themselves, the elements are part of a dense area of study but not completely unwieldy. However, once you start to bring in categories such as meaning or socio-cultural, it is not only necessary to analyze two other dense topics but also consider how to tie all three together into one game. Ironically, by focusing on too much generalness, it makes it easier to lose perspective of the original analysis questions and makes it more difficult to make a nuanced analysis. Therefore, a more focused approach is necessary

Lars Konzack. "Computer game criticism: A method for computer game analysis" (proceedings of the Computer Games and Digital Culture conference at Tampere, Finland, 2002) 89, 91-98.
 Ibid. 93

One possibility is, rather than look for all possible categories, narrow down analysis to look for all instances of one specific category. For the sake of my framework, that would apply to interactive elements. However, while it is technically possible to playthrough a videogame and note any interactive element that occurs, it is inefficient. For example, in Wei's embedded narrative framework, instead of viewing videogame narrative as a single, linear arc he views videogame narrative as being composed of "narrative units that tell a mini story, which deviates from the main storyline"<sup>32</sup>. By using narrative layers, it allows him to distinguish between multiple narrative acts, including a shift in "narrator" or narration devices on the same level (arranging the sequence and organizing narrative content), a shift in narrator or narration devices on a new level, and a shift of the reality or story world (extending to in-game and out-of-game interactions and to different game levels). Though the game-text may look fragmented, the framework provides focused discrete segments, areas to guide questions, and a more coherent method of analysis. These layers can operate across the spatial-temporal, characters, objects, narrators, and even cross over across embedded layers, allowing a greater understanding of how the narrative devices structure the narrative and what are the effects it produces on the overall game.

However, Wei's framework has some weaknesses. First, is that it is almost impossible to create an exhaustive list of all narrative devices, let alone easily catalogue every narrative device being used in a particular game. Second, because it lacks an overall guiding focus to filter the data, it will likely cause an overload of data. And third,

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<sup>&</sup>lt;sup>32</sup> Huaxin Wei. "Embedded Narrative in Game Design" (paper presented at Futureplay '10 Proceedings of the International Academic Conference on the Future of Game Design and Technology, 2010), 248-250

it is extremely time consuming. For short videogames or videogames with little interactive elements, this approach is more feasible. For videogames that are long and complex such as *Skyrim*, it would not only be impractical but also allow less flexibility for cross-comparison with other games or genres. Even if you are analyzing a game from a case study point of view, it becomes difficult to offer a more nuanced analysis if you cannot compare with other works to analyze the larger trends.

By contrast, Consalvo and Dutton's framework offers a narrower but more flexible methodology<sup>33</sup>. Instead of an exhaustive list of elements, Consalvo and Dutton's framework breaks game-texts into four categories: object inventory, a catalogue of all objects that can be interacted with (through finding, buying or selling, stealing or creating) and their various properties; interface study, a study of any onscreen information; interaction mapping, tracking the choices and interactions between the PC and other player characters or between PCs and NPCs; and gameplay logging, analyzing the overall game world, the look and feel of the world, and the space for possible emergent gameplay. These are not rigid categories or all encompassing but it serves to draw some lines to make between different elements for a closer look at different game components, create a toolkit that guides qualitative analysis, and represent elements "most relevant for play and encompass static and dynamic, changeable and unchangeable aspects of the game". Though different elements can be studied separately, viewing them together offers greater insight and more consistent analysis. However, like Aarseth, Consalvo and Dutton also stress the importance of combining analysis with 'play'. Or, as I intend to focus on, how players interact with the game's narrative content through play.

<sup>33</sup> Mia Consalvo and Nathan Dutton. 2006. "Game Analysis: Developing a methodological toolkit for the qualitative study of games". *Game Studies*, 6 (2).

In terms of applying a more focused analysis from a narrative perspective, there are two useful angles: studying a game through its semiotics and language or through how narrative is expressed in other interactive elements. Like other scholars, Ensslin acknowledges the need to account for ludic element when studying narrative based videogames or narratives that use ludic-like elements. However, she also highlights the need to acknowledge literary techniques used in videogames to create atypical experiences. In her framework on functional ludostylistics, Ensslin analyzes how computer games combine ludic elements with literary techniques (such as, poetic, dramatic, or narrative based techniques) to "explore the affordances and limitations of rules and other ludic structures and processes",34. Her framework comprises of: ludology, as outlined in the previous chapter; ludonarratology, which studies in-game narrative elements; ludosemiotics, which studies elements like interface and verbal and text language; and mediality, which studies the technical, material, and medial elements. Rather than focusing on purely ludic or narrative elements, her framework includes a focus of the combination of ludic-narrative elements in interfaces, texts and language, signs, and audiovisuals. Though not applicable to all sorts of games, her framework is applicable to digital literature that uses ludic techniques or literary art games, allowing her to analyze games that do not neatly fit into 'traditional' videogames or 'traditional' narratives.

The problem of attempting to cover both semiotics and interactive game elements, however, is scope. As I highlighted with Konzack, the risk of attempting to study multiple dense areas of study includes the possibility of losing focus and lacking nuance.

Though Esslin's framework works for short games and fulfills a particular niche of

<sup>34</sup> Astrid Ensslin. *Literary Gaming* (Massachusetts: MIT Press, 2014). 6, 52

analysis, moving onto longer or more complex game carries the risk of too dense an analysis to juggle both angles for analyzing videogame narrative, at least for my purposes. There exists crossover between semiotics and interactive elements, particularly in elements such as interface, but to do a nuanced analysis for both is beyond the scope of my thesis. As such, I have chosen to focus less on how narrative is expressed through semiotics and more on how it is expressed through interactive game elements.

### 2.2 Interactivity, the most basic element

Interactivity is, arguably, the fundamental component of gameliness. However, the term 'interactivity' is also prone to being abused - especially in relation to computers or videogames - without substantial meaning<sup>35</sup>. As with the term 'narrative', 'interactivity' can refer to many different activities. For example, it is possible to interact with a controller through using it as a tool to interact with a videogame; physically throwing it against a wall; theorizing about its mechanics; using the cord as a substitute garrote wire, etc. As such, a more specific definition is needed to break interactivity into a manageable working term.

Interactivity can generally be defined as the active relationship between two things – human or objects. In Salen and Zimmerman's *Rules of Play*, they describe four modes of interactivity: cognitive interactivity or interpretive participation, such as complex player-to-content imaginative interaction; functional interactivity or utilitarian participation, such as how clear is the interface or how functional was the controller; explicit interactivity or participation with designed choices and procedures, such as

<sup>&</sup>lt;sup>35</sup> Dominic Lopes. "The Ontology of Interactive Art". In *Journal of Aesthetic Education* 35 no. 4 (2004): 67.

overtly participating through following rules or making choices; and beyond-the-object-interactivity or or participation within the culture of the object, such as discussing the game on messageboards. They state that while explicit interaction is the closest to what it means to define videogames as 'interactive', they also stress the importance of designed context and meaning. They situate play interactivity as "not only to the concept of player action and system outcome, but also to a particular context in which the action occurs" <sup>36</sup>, which resembles Miller's definition of interactivity in a narrative context. There, Miller argues that interactivity in the videogame narrative "indicates a relationship where both entities—the audience and the material—are responsive to each other".

The reciprocal relationship between agents can also be applied to Sicart's definitions of game mechanics<sup>38</sup>. Sicart defines game mechanics as methods invoked by agents – player or AI - for interacting with the game world. He proposes two kinds of core mechanics, which are used by agents "to achieve a systematically rewarded endstate". First, primary core mechanics, which "can be understood as core mechanics that can be directly applied to solving challenges that lead to the desired end state". And second, secondary mechanics, which are "core mechanics that ease the player's interaction with the game towards reaching the end state". For example, in *Mass Effect 2* selecting a button shoots your equipped weapon, serving as one of the core gameplay mechanics. Shooting is a player-driven action but without context or goals it lacks in-

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<sup>&</sup>lt;sup>36</sup> Katie Salen and Eric Zimmerman. "Chapter 6: interactivity" in *Rules of Play: Game Design Fundamentals*. The MIT Press, 2003. 2-5

<sup>&</sup>lt;sup>37</sup> Carolyn Handler Miller, "Chapter 11 - Interactivity and Its Effects", in *Write Your Way into Animation and Games*, ed. Christy Marx. (Boston: Focal Press, 2010), 178.

<sup>&</sup>lt;sup>38</sup>Miguel Sicart. 2008. "Defining Game Mechanics". *Game Studies*, 8 (2).

game response, creating little meaningful interactivity; shooting to defeat oncoming enemies to reach the end of the level gives context, goals, and meaningful interaction.

For a videogame narrative to be 'interactive', it must follow the same rules. As Lopes observes, there is a difference between choosing the order in which "representational structures" are experienced and player interaction having an impact on how representational structures are depicted.<sup>39</sup>. For example, the 1985 film *Clue* contains three possible endings. In its theatrical release, different theatres aired one of the three while some home releases have included the option to view the movie with an ending chosen at random or to view the endings sequentially. Though this adds branching to the movie, it lacks explicit interaction. The viewer cannot directly alter the contents of the movie as much as restructure them.

In contrast, though *Mass Effect 2* has a consistent overall narrative, the player has a lot of control over the narrative elements. For example, one of the core gameplay mechanics is the dialogue wheel. The dialogue wheel presents potential responses or actions, ranging from minor choices with short-term impact to major choices with long-lasting impact. In the former, this includes options to investigate for more information or to decide Shepherd's dialogue response. These choices usually do not drastically change the gameplay or plot in themselves but they serve a purpose of imparting information and gaining "paragon" or "renegade" points, which serve to shape Shepherd's personality as either a pleasant and diplomatic or aggressive and direct. The game adjusts accordingly by referencing the type of person Shepherd is and presenting minor routes that suit their character (i.e. allowing the player to resolve a situation by talking their way out versus

<sup>&</sup>lt;sup>39</sup> Lopes. "The Ontology of Interactive Art". 68-69.

throwing a guard out a window to) while still following the overall narrative. In the latter, player choice causes drastic changes to the characters, narrative, and what gameplay is experienced.

For example, in order to optimize your squad you must complete their character missions to resolve their lingering problems and secure their loyalty. For the mercenary Zaeed, the player must help him get revenge on the man who betrayed and almost killed him. However, midway through the mission you are forced to choose between saving a burning facility filled with innocent bystanders or abandoning them to chase Zaeed's target. If the player chooses to chase Zaeed's target, the gameplay section and the ingame rewards differ from if you chose to save the bystanders, the player catches Zaeed's target before they escape, and Zaeed's loyalty is secured. However, the game informs the player that the bystanders died by letting the player hear their dying screams and the mission report states that all personnel inside the facility was lost.

If the player chooses to prioritize saving the bystanders, the gameplay and rewards change, the facility and its workers are saved, but Zaeed's target gets away and Zaeed is in danger, with his fate left to the player. The default choice is to save him but without securing his loyalty, making him vulnerable in the final mission. However, if the player has enough paragon points he or she will be able to select the charm option (see Figure 1) and persuade Zaeed to accept their decision, resulting in not only saving him but also securing his loyalty despite Zaeed not getting his revenge. However, if the player does Zaeed's mission after the game's final mission and the player still at least two other squad members alive, the player can choose to leave Zaeed to die (see Figure 2), permanently costing you a squad member.



Figure 1 – Charming Zaeed, Mass Effect 2



Figure 2 – Abandoning Zaeed, Mass Effect 2

Not only is the dialogue wheel the core gameplay mechanic in this context but also becomes the means in which the player directly interacts with the game's contents. The

dialogue wheel allows the players to make an impact on the representation structures within the game, thus allowing the player's choices to be responded to by the game itself.

Mass Effect 2 is only one type of interactive narrative, however. Just as there is a significant difference between comparing the branching in Clue and Mass Effect 2, there is a significant difference in comparing a game like Mass Effect 2, which offers some branching but an ultimately mostly consistent experience, to an open world narrative that is primarily driven by player choices. This is not simply tied to which game is more 'gamely' but how much control the player has over the narrative and where interactivity occurs. In Lebowitz and Klug's interactive storytelling spectrum, they identify types of interactive narrative based on how much control the player has over the narrative. Their spectrum includes fully traditional stories, which are non-interactive narratives; interactive traditional stories, which are narratives that allow some control while maintaining a consistent core narrative; multiple-end stories, which are like interactive traditional stories but allow different endings; branching-path stories, which allow the player alter the core narrative through a series of choices; open-ended stories, which are highly complex, player-driven branching stories; and fully player-driven stories, which provide a setting or sandbox for the player to form a story from their actions<sup>40</sup>. Games are broken down into categories that look past mechanics and player choices alone and instead focus on whether the player has a significant impact on the overall narrative. Taking this a step further, analyzing the impact of the player's action, it is possible to look at the game's interactive components used to facilitate player actions to understand

 $<sup>^{40}</sup>$  Klung and Lebowitz, Interactive Storytelling for Videogames: a Player-centered Approach to Creating Memorable Characters And Stories. 120-122

which are the most significant ones, where the game opens up or restricts the player control, and how player-to-content interactions produce narrative.

With these concepts in mind, my guiding definition of interactivity includes the following: interactivity is a defining trait of videogames; interactivity relates to relations between player, system, and the context; interactivity is done to achieve a meaningful purpose; and interactivity is mutually responsive, both through minor and major interactions. These guiding elements make up the core my framework.

#### 3. Layers of Videogame Narrative and Interactivity

There is many different kinds of interactivity. It is not enough to identify that players interact with the game and vice versa but to understand how interaction takes place, especially when accounting for different genres and styles of gameplay. Even if a game has fewer opportunities for interactivity, it is no less worthy of study than a game that offers many interactive opportunities. However, analysis must be broad enough to account for their distinct elements while also being specific enough to provide a comparative base for how players interact with videogame narrative. Additionally, analysis must be capable of sifting through the sheer volume of data in game-texts without being overwhelmed or straying from the initial research questions.

With all of this in mind, I propose a two-part framework that emphasizes narrative interactivity based on explicit interactivity and the player-to-content relationship. Though the rubric of elements and the narrative spectrum can be used separately, I have chosen to treat them as part of the same framework due to their complementary nature. While the rubric was designed to break games down to their most significant interactive elements, the spectrum was designed to articulate the general overall narrative shape of a game. Rather than individual elements or overall shape existing within a bubble, a game's individual elements helps explain how a player interacts with the game while the overall narrative shape helps explain the impact of the player's actions on the narrative. Together, both parts of the framework aim to act as a guide for organizing and identifying interactive elements, allowing a firmer idea of what to look for in the first place while providing a base for comparison between games, giving an idea for how much freedom and variability the player has to interact with the game's content, and helping to develop

and explore further questions on narrative interactivity and how it occurs. The framework is not intended to be an all-inclusive one but it is intended to be broad enough to highlight the overarching interactive elements in videogames while being flexible enough to be applied across different kinds of games.

Like many of the reviewed frameworks from the previous chapter, my framework uses content analysis as a base. First, content analysis is a systematic and repeatable approach for compressing large amounts of data into fewer, clearer categories<sup>41</sup>. In order to preserve consistency, manageability, and overall usability across multiple games, it is essential to have a clear set of categories, otherwise, the framework lacks nuance in its analysis and lacks a means of creating a comparative base, limiting its usefulness. More than simply completing a checklist of possible elements in a game, content analysis is a guide for coding and identifying patterns, which, for my purposes, is part of identifying and analyzing how interactivity occurs in games. Second, content analysis is a means of grounding and testing the framework itself. As Hsieh and Shannon observe, having an existing framework from the start not only helps focus research questions but also allows the framework to be validated, extended, or dismissed based on the results of testing<sup>42</sup>. In short, content analysis becomes a means of testing whether my framework even works in the first place.

Through practical use, I intend to apply this framework to case studies (see next chapter) to test its effectiveness and provide feedback for future revision.

<sup>41</sup> Steve Stemler. 2001. "An overview of content analysis". Practical Assessment, Research & Evaluation, 7(17)

<sup>&</sup>lt;sup>42</sup> Hsiu-Fang Hsieh and Sarah E. Shannon. "Three Approaches to Qualitative Content Analysis". *Qualitative Health Research*, 15 no. 9 (2005): 1281

#### 3.1 Narrative spectrum

As I stated in the previous chapter, a typical narrative arc consists of a linear format of setup, complication, development, resolution, and denouement. In videogames, however, this format is resisted and the elements of an individual narrative arc are not only open to change but also allow the player to potentially alter the whole narrative arc. Ebert criticized this aspect of videogames, claiming the possibility of *Romeo and Juliet* having a happy ending<sup>43</sup> could weaken the overall narrative or cheapen the emotional journey by saying any possibility is valid. However, the question of 'would *Romeo and Juliet* be better with a happy ending?' is less interesting than 'how would *Romeo and Juliet* be structured to offer players the possibility of another ending?' Would the player have multiple opportunities to interfere with the narrative? Would the narrative have multiple branches? Would collecting an item (such as an antidote) change events? Or, conversely, would the narrative stricture allow for a lot of opportunities for player agency and control over the main narrative except for the ending?

As Alexander notes, even the simplest games include choices. The more meaningful the choices, the more potential for narrative has to feel "more complex and powerful because you feel responsible for it", The difficulty, however, comes from how to balance player interactivity with the overall game. One of the supposed contradictions of videogames is that allowing player interactivity introduces a contradictive vision to the game's overall narrative. On one hand, the game developer may have one master authorial version of the narrative while the player had their version, thus creating tensions when the versions clash. On the other, it is impossible to completely support all possible

<sup>&</sup>lt;sup>43</sup> Ebert. "Gamers VS. Art: Ebert VS. Barker".

<sup>&</sup>lt;sup>44</sup> "The New Significance of Games", YouTube video, 3:45, posted by PBS, October 26 2011, https://www.youtube.com/watch?v=w0ERL20lr1U

player actions and outcomes. As such, videogames attempt to resolve this contradiction through different approaches. Some videogames maintain a tight control of the overarching narrative arc, only allowing the player little freedom to interact with the content, while other videogames are almost entirely driven by player action. This creates different 'overall' shapes to videogame narrative.

Drawing inspiration from Lebowitz and Klug's storytelling spectrum, I have broken different videogame narrative approaches into a narrative spectrum. The spectrum runs from "extreme narrative" games (games which are more heavily narrative based and allow limited player interaction) to "player-generated" (games where most of the narrative is created by player actions), as summarized below.



These are not intended to be hard categories – as different approaches overlap at times or have multiple variables – but it helps articulate how much freedom the player has to interact with game's narrative and to affect the overall narrative.

#### 3.1.1 Extreme Narrative

Extreme narrative videogames – in contrast to extreme ludic videogames – are videogame narratives that emphasize the narrative content and have little to no overt ludic elements. While these games resemble traditional narratives, it would be a mistake to put them in the same category. There is a difference between players reordering the way in which they experience content versus having an impact on the content. A book can be read out of order or have its pages torn out or have its contents analyzed but the content does not change. In an extreme narrative game, no matter how limited the

example, *Song of Saya* is a short videogame that consists almost entirely of reading save for two decision points. While this does not give the player much room for interaction, only allowing the player to determine which of the three endings they get, the moments the game allows the player control remain important. *Song of Saya* centers around Funomori, a student who suffers a medical condition that makes everything 'normal' appear grotesque and everything 'monstrous' look beautiful. He meets and falls in love with a human-looking girl named Saya, who is actually a hideous monster. Each choice the player makes determines whether Funomori clings to normality or willingly becomes a monster to stay with Saya, regardless of the consequences and how many people he hurts. There are only a few choices but they are meaningful, allowing the player a huge impact on the direction of the game and its content.

Extreme narrative based games, arguably, offer the greatest authorial control to the game developer. While not completely linear or without branching possibilities, extreme narrative games offer limited potential for player interactivity, keeping the narrative shape mostly streamlined. Because they typically lack traditional overt gameplay mechanics, it can lead some players criticizing extreme narrative games as not being 'gamey' enough and being more like interactive movies or books.

#### 3.1.2 Interactive Traditional Narrative

In interactive traditional narrative videogames, the main plot cannot be changed or altered in a significant way but still "allow[s] players some degree of freedom to

interact with the world and characters". This includes solving puzzles, combat sequences, side quests, mini-games, game world exploration, and interaction with NPCs.

Though the main plot cannot be altered, there can still be many alternative means of interaction that gives the feeling of freedom. For example, in *Persona 3* the game progresses through an in-game calendar that allows the player to experience the game on a day-to-day basis. In terms of micro narrative segments, *Persona 3* offers a lot of player agency by allowing them to manage their free time in a variety of ways, including collecting, using, and crafting objects; building their personal and battle stats; attending special mini-events; battling enemies and exploring the randomized dungeon; interacting and building a relationship with major NPCs through the social link system; or ignoring everything and sleeping to pass the time. Many of these, particularly the battle mechanics and social link system, are core gameplay mechanics but the player can complete the game regardless of whether they do the bare minimum or maximize everything. However, the overall narrative remains constant and certain days are set plot points that automatically progress the game, allowing the player little to no significant impact on the main plot. Though *Persona 3*'s rerelease, *Persona 3 Portable*, allowed the player to change two important character deaths – the first character is resurrected while the second becomes comatose – for all intents and purposes the main plot still treats them as though they were still dead and continues without missing a beat.

Interactive traditional narratives, though also more linear, offer more freedom to the game developers and players. For the former, it allows a tighter control of the overall narrative and progression, allowing the main plots to be set while allowing the player some control. In the latter, by giving the player some opportunities for control, it allows

<sup>&</sup>lt;sup>45</sup> Ibid. 130-31.

them a greater feeling of agency despite the fact the fact their impact on the overall narrative is limited. However, the choices that the players do have can seem 'minor' or 'superficial' if they are not meaningful enough.

## 3.1.3 Branching Stories

Branching videogame narratives contain multiple narrative branches. This includes scene branches, dialogue branches, or complete narrative branches. Comparable to choose your own adventure novels, branching paths are among the most overt examples of player-to-content interaction affecting the overall narrative. While some branching has only minor effects (i.e: a scene plays out slightly differently but the outcome is the same), others can have a large impact on multiple variables. For example, in *Shadow the Hedgehog*, the game centers on an amnesiac Shadow and his quest of self-discovery. The game is notable because, while there are ten "alignment" based endings and one "true" one for completing all the endings, there are three hundred and twenty six possible branching paths. To progress through the game, the player must complete one of three possible missions per level. Each mission represents 'hero', 'normal', and 'dark' alignments. The accumulation of alignment choices made during the level determines the general plot for the level, which levels are played, and which ending path the player is on (see Figure 3<sup>46</sup>).

<sup>&</sup>lt;sup>46</sup> "List of Shadow the Hedgehog Library Sequences". *Sonic Retro*, accessed December 11, 2014. http://info.sonicretro.org/List\_of\_Shadow\_the\_Hedgehog\_Library\_sequences.

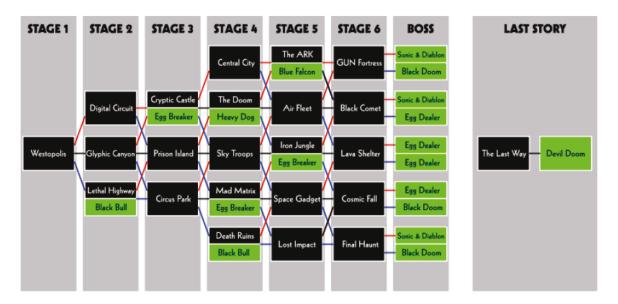


Figure 3 - Blue=Hero; Red=Dark; Black=Neutral, Shadow the Hedgehog

Though branching games offer potential for greater player agency and interaction with the game's content, it is uncommon for videogames to support multiple, complex narrative branches. Potential problems include the creation and tracking of multiple story paths and character relationships<sup>47</sup>, the costs to create the content versus how much content will the player actually see, and the reuse of material from other paths negating the uniqueness of a individual path. As such, most games are forced to simplify the amount of branching (and, by extension, player agency) or offer a stripped down experience to support more branching.

## 3.1.4 Player-Generated

Player-generated videogame narratives are games where the narrative is mostly or entirely generated from player actions. In these games, the emphasis is typically on creating a world for the player to fill rather than forcing the player to follow an overarching plot. For example, the *Sims* is a life-simulation series with few, if any,

<sup>&</sup>lt;sup>47</sup> Timothy Garrund, "Chapter 18 – The elements of Interactive Multimedia Narrative", in Write Your Way into Animation and Games, ed. Christy Marx. (Boston: Focal Press, 2010), 312.

defined goals (though it is possible to 'fail' at managing the Sims' virtual lives or for Sims to die), instead intended to be a "a kind of interactive doll house that adults would like as much as children". While some later versions have attempted to incorporate a guiding plot, the original concept revolves around managing the life of a person. A player's Sim can get married, have kids, get a job, or buy the most expensive houses or objects in the game but these are not the stated in-game roles. The game offers feedback for the player's actions, such as reflecting a change in happiness levels or having another Sim rebuff romantic attempts, but the guiding 'narrative' comes from the player's interactions with the characters and the larger Sim world.

While other types of videogames place an emphasis on the overall narrative, player-driven plots emphasize player agency over the progression and events of the videogame's narrative within a sort of sandbox. Arguably, player-driven games offer the greatest player freedom. However, as Lebowitz and Klug note:

No matter how much time, effort, and money are poured into a game, it's impossible for the player to ever have the amount of freedom and choice that's present in any real-life situation. Simply put, creating a perfect fully player-driven story in video games can't be done<sup>49</sup>.

#### 3.2 Rubric of Interactive Elements

While it is inefficient to track every interactive element that occurs within a videogame, it is also difficult to decide which elements are worth tracking and whether certain elements should be considered distinct or folded into other categories. For

<sup>&</sup>lt;sup>48</sup> John Seabrook. "Game Master". *The New Yorker*, accessed January 7, 2015. http://www.newyorker.com/magazine/2006/11/06/game-master

<sup>&</sup>lt;sup>49</sup> Klung and Lebowitz, Interactive Storytelling for Videogames: a Player-centered Approach to Creating Memorable Characters And Stories. 235.

example, are rewards their own system or do they count as objects, core gameplay mechanics, or objectives? Are obstacles worth examining alone or should they be studied with the core gameplay mechanics? There are countless resources regarding game design and game analysis and they all have different examples of what they consider the most significant elements in videogames. Frameworks can be as extensive as Schell's<sup>50</sup>, which offers over hundreds of self-reflexive questions regarding different game elements, or as broad as Consalvo and Dutton's, which is only four categories. While both approaches are useful in their own right, no singular framework is account for all different kinds of videogame or research questions.

With this in mind, my rubric of interactive elements focuses on seven overarching elements: objects, core mechanics, objectives, interface, interactions, character, and game space. I do not claim this rubric can account for all interactive elements or purposes. For example, the 'character' element of the rubric would not apply for games like the original *Tetris*, which lack identifiable characters. However, these elements have been selected to represent the most overarching elements of interactivity in regards to narrative interactivity and how the player interacts with the game's content. This helps to draw lines between elements to help with organization and identification of elements, provides a base to guide deeper analysis of specific parts of a game, and allow room for flexibility. While it may seem strange to include ludic elements if the main focus of the framework is largely narrative, the crossover between ludic and narrative elements are important to note as they serve to strengthen and work off each other in the overall game.

<sup>&</sup>lt;sup>50</sup>Jesse Schell. *The Art of Game Design: A Book of Lenses* (San Francisco: Morgan Kaufmann Publishers Inc., 2008)

## 3.2.1 Objects

Objects can be generally defined as things "that can be seen and touched"<sup>51</sup> or, in regards to videogames, refer to objects that can be interacted with by playable characters and non-playable characters. Objects appear in the inventory or exist in the game-world, allowing the player can use, collect, or interact them in some way. According to Murray, objects play an important role in immersing the player by encouraging engagement<sup>52</sup>. Objects become meaningful to the player not because they exist but through how the player is able to use and interact with objects. For example, in *Final Fantasy*, potions are some of the most prominent objects players interact with. Potions primarily serve to heal characters with the main restrictions being: the players can buy, sell, and pick up potions but can only hold 99; each potion can only be used once; and potions cannot be used on a character with max hit-points. Though potions serve as an important healing mechanic, they do not have much in-game description beyond their purpose (i.e. "Restores 200 HP" <sup>53</sup> in *Final Fantasy VIII* or "Restores a small amount of HP"<sup>54</sup> in *Final Fantasy II*), they are easily expendable, and they are not needed to clear the game. By contrast, in Ace Attorney objects carry significant gameplay and narrative weight. Each object is unique and includes a detailed description that updates when you learn new information. Objects are 'evidence' with which the player can interact, collect, present to NPCs for more information, and use to contradict conflicting information. However, objects can also be ineffective or penalize the player if used outside a correct context. While the objects in Ace Attorney cannot be used as freely as the potions in Final Fantasy, they are treated

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<sup>&</sup>lt;sup>51</sup> Oxford Dictionaries ."Object". *Oxford Dictionaries*, accessed October 13, 2014. http://www.oxforddictionaries.com/definition/english/object

<sup>&</sup>lt;sup>52</sup> Murray, Hamlet on the Holodek: The Future of Narrative in Cyberspace. 111-112.

Final Fantasy VIII (PSX), Square (Square, 1999)
 Final Fantasy II (Famicom), Square (Square, 1988)

with greater importance in both the narrative and gameplay and are necessary to completing the game.

Some possible questions to address in the rubric include

- What do objects do?
- Do objects have a description?
- Are objects single or multi-use?
- Are there conditions regarding use of objects?

# 3.2.2 Core Gameplay Mechanics:

Sicart defines gameplay mechanics as methods that agents invoke to interact with the game world. Core gameplay mechanics are mechanics used repeatedly by agents "to achieve a systematically rewarded end-state" <sup>55</sup>. The first are primary gameplay mechanics, which are consistently available to the player, directly help players, and usually necessary to reach the desired end state. The second are secondary core mechanics, which cannot be used exclusively to reach the end state but help ease the player's interaction with the game. While there are various gameplay mechanics that can appear in a single game, such as open-world games like *Skyrim* or *Grand Theft Auto*, core gameplay mechanics are created with intent to guide the player to an intended result as according to the rules of the game world.

Even if two videogames share a similar narrative arc, the gameplay mechanics can create a vastly different experience and means of player agency. For example, *Portal* and SoTC (*Shadow of the Colossus*) are both traditional interactive narrative games that contain puzzle elements. In *Portal*, the core gameplay mechanics include using two-way

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<sup>55</sup> Sicart. "Defining Game Mechanics".

portals to create new pathways and to transport players and objects. What makes *Portal* special is that it integrates the gameplay 'training' level with the narrative and game space: the player progresses from learning the basic mechanics from the game's instructions and 'tests' to later demonstrating their agency by using what they have learned to disobey the game. In SoTC's, the core gameplay mechanics are search (using your sword to guide you to the next colossus and to find their weak points), grip, climb, and stab. Though the player can technically get through the game without using the search command, the last three are imperative to finding and defeating the colossi. For the first colossus alone, the player must navigate a cliff using the grip and climb commands, which trains the player for how to defeat the colossi. To defeat the colossi, the player must often climb the surroundings and the colossus themselves to reach their weak point, which is the only place where stabbing the colossi will do damage. In *Portal*, the core gameplay creates an experience geared towards emphasizing adaptability and survival; in SoTC, the core mechanics emphasize epic scale and overcoming daunting odds.

Some possible questions to address in the rubric include

- What are the 'primary' and 'secondary' mechanics?
- What opportunities do the mechanics afford the player?
- What conditions allow the mechanics to be used?

#### 3.2.3 Objectives

Though a game can have many different kinds objectives (including the ones players bring into the game), for my purposes I define objectives as the desired outcomes within the game world. While core gameplay mechanics help guide the player actions,

objectives define what the game is attempting to guide the player to. According to Stout, objectives must be clear so the player knows what is necessary to complete the challenge so they can master the game mechanics and feel meaningful to the game's challenges rather than a shallow to-do list<sup>56</sup>. To make the objective seem active and meaningful, something like 'player shoots gun' should be 'player shoots gun to push blocks into grooves to trigger the switch so the exit door appears, allowing the character to escape the room'.

Objectives often work on both micro and macro levels. The macro level establishes the context while the micro level determines the individual units required to progress. In *Portal* the macro objective is use the portal gun to solve puzzles, survive the tests and escape. While this is more specific than 'player shoots gun', this objective is still too broad to be used for the whole game. On a micro level, objectives can be seen as specific levels or puzzles. For example, in one level the player must carry and use a cube until they are forced to place the cube in the incinerator. This serves a dual purpose by training players to use the incinerator, which is a key part of the final level, and foreshadowing GLaDOS' true character<sup>57</sup>. According to the project lead,

We had a long level called Box Marathon; we wanted players to bring this box with them from the beginning to the end. But people would forget about the box, so we added dialogue, applied the heart to the cube, and continued to up the ante until people became attached to the box<sup>58</sup>.

<sup>56</sup>Mike Stout. "Evaluating Game Mechanics for Depth". *Gamasutra*, accessed January 20, 2015. http://www.gamasutra.com/view/feature/134273/evaluating\_game\_mechanics\_for\_depth.php <sup>57</sup> Jeep Barnett. "83". *Portal* (PC version), Valve Corporation (Valve Corporation, 2007).

<sup>&</sup>lt;sup>58</sup>Shawn Elliot."Beyond the Box: Orange Box Afterthoughts". *IUP*. February 14, 2008. http://www.lup.com/do/feature?cId=3165930. Quoted in Wikipedia contributors, "Portal (video

Some possible question to address in the rubric include

- What are the macro and micro objectives?
- Are objectives explicitly stated or implied?
- How do the gameplay mechanics guide the player to desired outcomes?

## 3.2.4 Interface

Interface generally refers to information relayed to the player onscreen regarding player status and allows the player to interact with the user interface. While interface studies in other fields prioritize usability, for my purposes, I am interested in how the interface is designed to allow player interaction with the game and what sort of information is relayed to the player. Interfaces usually include gameplay elements such as health or status bars, counters, navigation or maps, icons, chat boxes, game menus, and more, depending on the game and genre. However, due to factors such as evolving technology, a changing audience, and arising opportunities to create better immersive gameplay, there has been increasing interest from game developers to convey interface information in alternative ways<sup>59</sup>. Instead of overcrowding the interface with a checklist of 'typical' information, game developers are looking for ways to integrate that data into the gameplay and narrative itself. For example, in the game *Black & White*, the player takes the role of a god. There is almost no interface whatsoever and interaction with the game world occurs through a 'hand'. This minimalist interface reflects and enhances the power of the player to interact with the world through integrating the lack of traditional interface elements with narrative reasoning, such as why would a god need a hit point

game)", *Wikipedia, The Free Encyclopedia*, accessed February 1, 2014. http://en.wikipedia.org/wiki/Portal %28video game%29

<sup>&</sup>lt;sup>59</sup> Greg Wilson. "Off With Their HUDs!: Rethinking the Heads-Up Display in Console Game Design". *Gamasutra*, accessed January 3, 2015.

#### counter?

Studying the videogame's interface tells us how information is conveyed to the player, what aesthetics were used, what data the game developers thought was important to show the player (or, alternatively, what data is hidden from the player), and how it interface is designed to direct player's actions and options. For example, in the *Dragon Age* series, one of the core mechanics is the companion approval system, which determines what your PC's relationship is to your party members. Depending on what dialogue and plot decisions the player makes, party member approval either goes up or down. In *Dragon Age: Origin*, approval changes appear after a decision as a numerical value (i.e: 'Morrigan Approves (+6)') and current approval is viewable in the status screen. (see Figure 4).



Figure 4 - Companion Status Menu, Dragon Age: Origins

However, *Origins*' approval system was criticized for feeling artificial by basing the companion relationships on stock numbers, giving players the feeling they needed to

companion content. In *Dragon Age: Inquisition*, BioWare replaced with numbers with 'approval' and 'disapproval' notifications (using modifiers like 'slightly' and 'greatly' to inform how big the approval change) and did away with the current approval counter. According to Mike Laidlaw, the aim was to create more realistic reactions and relationships with your companions by putting emphasis on the events and decisions you make over the game rather than numbers<sup>60</sup>. Though the player is still made aware of the approval shift through the popup in the interface, currently approval is shown not through the interface information but in the tone of the companion conversations and the companions' reactions to the PC. By hiding the approval information, it encourages players to role play more or actively pay attention to what their party members are saying and reacting to versus how much more points you need.

game the system to keep their approval counter up or risk limiting their access to

Some possible questions to be addressed in the rubric include:

- What information is consistently shown on the interface?
- Is there any information that is not relayed by the interface?
- How does the interface guide player actions?
- What aesthetics does the interface use?

#### 3.2.5 Interactions

Inspired from Consalvo and Dutton's concept of interaction mapping, interactions refer to the player's interactions with other player-characters or NPCs. As Consalvo and Dutton note, tracking interactions is tricky due to its dynamic, changeable nature,

<sup>&</sup>lt;sup>60</sup>Kimberly Wallace. "Romance In Dragon Age". *Game Informer*, accessed December 23, 2014. http://www.gameinformer.com/b/features/archive/2013/08/28/romance-in-dragonage.aspx?PostPageIndex=2

especially in regards to expansive gameplay<sup>61</sup>. Though interactions can be relatively simple in a small game or one with fewer characters, in huge open-world games mapping every single interaction available can become near impossible. *Skyrim*, for example, has over one thousand named characters—including PCs and NPCs—and with interactions that are fixed, player initiated, and random. As such, it is necessary to narrow the scope.

Rather than simply look at the number of interactions that occur, it is more useful to look at how these interactions occur: are the interactions limited (i.e. can they only occur once or twice or can you continue to interact); do interactions change; and what is the range of interaction. For example, the backbone of *Ico* is the interaction between the characters Ico and Yorda, which not only drives the narrative but also serves as one of the core gameplay mechanics. Throughout the game, the player must rearrange the environments so Yorda can progress and also to fight the Evil Queen's minions who attempt to kidnap Yorda whenever they appear. If the player fails, Yorda is kidnapped and Ico is turned to stone and game ends. On the flipside, while Yorda cannot fight, run fast, jump long distances, and or climb tall objects, Yorda can open special doors that Ico cannot. Additionally, rather than passively wait for the player to clear the area, Yorda will call out to Ico or point out area progression hints. There is only a little dialogue and a few cutscenes for Ico and Yorda's relationship but the player-to-NPC interactions between Ico and Yorda take up the bulk of the game, emphasizing their trust and dependency on each other. Though the Japanese and European editions of the game allow the player to restart the game in two-player mode, Yorda players are still limited by the same restrictions that the computer controlled Yorda is, creating similar meanings but

<sup>&</sup>lt;sup>61</sup> Consalvo and Dutton. "Game analysis: Developing a methodological toolkit for the qualitative study of games".

between player-to-player instead.

Some possible questions to address in the rubric include

- What context does player-to-player or player-to-NPC interact occurs?
- What is the range of interaction?
- Is there many or limited opportunities for interaction?
- Do interactions change over time?

# 3.2.6 Playable Character

Objects are made 'real' not by their existence but in how the player interacts with them. Likewise, characters, namely PCs, are not defined by their appearance but the characteristics they possess and how the player interacts with them. Though there are games that do not have a character avatar – such as the original *Tetris* – characters add context to characteristics similar to how the paddles in *Pong* provide context for particular "gameplay-affecting characteristics" Newman comments that 'character' exists in two senses. First, characters exist on a non-interactive level autonomous to the player, such as during cutscenes. Second, on an interactive level, during interactive sequences, where the "individuality and autonomy of a character is subsumed to game-specific techniques and capabilities the player uses, or embodies, within the game world" <sup>63</sup>

Playable characters, then, are not only a means of interacting with the game world but also frame the actions afforded to the player. For example, in *Dragon Age:*Inquisition the player is allowed to choose their race, class, and appearance, which all present different gameplay and narrative opportunities. From the gameplay perspective,

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<sup>62</sup> Newman. Videogames . 125

<sup>&</sup>lt;sup>63</sup> Ibid. 130

not only are class abilities different but also allow the player to interact with the game world in unique ways. Warriors can bash through walls, rogues can pick locked doors, and mages can light magical fire or rebuild broken objects to clear paths. From a narrative perspective, while the PC will always gain the title of Inquisitor, rise to power, and save the world, how the game world and the characters react to the PC varies depending on your choice. This includes NPCs having biases against your character, refusing to romance you, or opening up unique dialogues and choices. For example, if you play as an female elf mage you can romance six potential characters, use a mageexclusive judgment option when judging other mages, access dialogue about the elven culture or the Inquisitor's Elven roots, and see subtitles for Elven language translated to English, but you experience the slowest approval gain with Sera and NPCs may respond negatively to you. However, opportunities change if you tweak your character. If you play as a male elf warrior instead, you can only romance four potential characters and you cannot use the mage-exclusive judgment ability. Or, if you play another race and class entirely, the opportunities afforded to your character could be vastly different.

Some possible questions to address in the rubric include

- What gameplay-affecting characteristics does the playable character have?
- Is the player allowed to alter the playable character in some way? If so, do any opportunities change?
- How does the playable character work within the constrained context?

#### 3.2.7 Game Space

Game space is one of the most important interactive elements. Game space represents the design of the game world, how open or limiting the game is, and the space

for potential player control over the narrative. As Cassidy observes, though the player has *some* agency, it is a mistake to consider videogames purely collaborative or truly interactive experiences<sup>64</sup>. Players are ultimately limited by what the game developers allow them, which creates a supposed contradiction between what the player desires and the game's restrictions. In short, game space is defined largely by the opportunities that the player is allowed to shape the game world and how integrated player action is into the game space.

In their case study of *Portal*, Burden and Gouglas argue these limitations can enhance player immersion rather than restrict it<sup>65</sup>. Though *Portal* is linear and set in a restrictive game space, its restrictive nature causes synchronization between the gameplay, narrative, and player-character goals. In order to escape the facility, the player must work through a series of rigid tests while guided by GLaDOS, fulfilling both the 'training' portion of the game and the narrative path. However, towards the midway point, the player is essentially given instructions to die in the incinerator. In order to survive, the player must go against what the game tells them and make an active decision to use the skills they have learned to survive. This is a necessary choice to progress the game, as the only options at that point are do as the game says, die, and receive a game over or go against the game's instructions to progress. This does not offer the same expansive game space as a game such as *Dragon Age: Inquisition* but it creates a particular narrative experience by limiting the player's possibilities. In *Dragon Age: Inquisition*, the game space is centered around the Inquisitor's rise to power to restore

<sup>&</sup>lt;sup>64</sup> Scott Brenden Cassidy. "The Videogame as Narrative", Quarterly Review of Film and Video. 28, no. 4 (2011): 296

<sup>&</sup>lt;sup>65</sup> Michael Burden and Sean Gouglas. 2012. "The Algorithmic Experience: Portal as Art". Game Studies, *12* (2).

order throughout the continent. They are allowed to explore vast amounts of areas and perform multiple quests to gain 'influence', build up their power and alliances, and gain access to new resources and areas, which the game space considers as important to the overarching goal of restoring order. By contrast, *Portal*'s is about survival and free will. As Chell goes against what GLaDOS wishes, so does the player, allowing them to make the key choice that shapes the narrative of the next half of the game.

Some possible questions to address in the rubric include

- Is game space open or limited?
- What sort of narrative possibilities does the player have?
- How integrated is player action within the game space?

## 4. Case Studies and Comparison Analysis

As other game studies researchers have highlighted<sup>66</sup>, it is important to augment theory and analysis with actual play. Though it is possible to watch someone else play a videogame and analyze their playthrough, watching and playing a videogame offers different kinds of experiences. In the former, the player takes on an outside observer role, which, while still allowing for other forms of interaction, does not allow explicit interaction. In the latter, the player plays a key role in negotiating interactive game elements and directly participating with the game.

Actual play deepens the player's understanding of the game, where he or she learns how gameplay mechanics work, which elements are more decorative than functional, how to interact with the game space, and what limitations the game puts on the player. However, the need for analysis adds an additional layer of complexity because the player is no longer playing just for 'pleasure' anymore. While the game may be intended for a core audience and a particular play style, proper analysis requires adjusting your playthrough to reflect the data or research questions. While it is possible to playthrough extensive, 80+ hours long, content-heavy games like *Skyrim* or *Dragon Age* and then attempt to retroactively build your analysis, it can result in a lack of or inaccurate data that does not effectively answer your research question. First, it can take significant time to playthrough the game and you may not be able to remember, let alone document, all the important data. Second, more importantly, retrofitting your means of analysis afterwards may limit the usefulness of analysis because your framework may not

<sup>&</sup>lt;sup>66</sup> Aarseth. "Playing Research: Methodological Approaches to game analysis"; Consalvo and Dutton. "Game analysis: Developing a methodological toolkit for the qualitative study of games".

properly fit the game(s) or research questions and can cause a gap between your original intentions and available data<sup>67</sup>.

To balance 'play' with 'analysis', my initial playthrough was done mostly blind while subsequent playthroughs or revisits to specific parts of the games were focused. I still used my framework as a guide but the first playthrough served to familiarize myself with the game, record initial impressions and areas of interest, and note what parts of the game required further testing. The subsequent playthroughs focused more analyzing specific framework elements, following up on notes from the first playthrough, recording focused stream of conscious impressions through taking audio notes as I played, and collecting screencaps and outside supplementary references (i.e. YouTube Let's Plays, walkthroughs, or relevant wiki articles). For example, with *Hakuoki* and *Walking Dead: Season One*, I was less focused on the overall game and used features like the skip function to get through what I had already seen and focus on specific elements. Though this may not have been the perfect approach, this method helped create consistency in my analysis and data collection while balancing practical aspects like time.

Likewise, I attempted to select my games based on how practical they were, how well they fit my areas of interest, and whether they had a manageable amount of interactive elements. My games have been selected based on the following criteria.

- They are videogames with an emphasis on narrative and offer unique interactive elements and playing experiences that differentiate them from each other.
- They are stripped down videogames allowing for a manageable scope of analysis
  of what interactive elements there are and how they are used.

<sup>&</sup>lt;sup>67</sup>Gee et. all, 2014. "Assessing Serious Games: The GRAND Assessment Framework", *Digital Studies/Le champ numérique*, 4.

- They are short-to-medium length games where a single playthrough can be completed in less than ten to fifteen hours.
- There are enough comparable interactive elements and overall narrative shape between games that they can be compared and contrasted.

The following section has been broken into two parts. First, a case study analysis of four games: *Hakuoki: Demon of the Fleeting Blossom, Machinarium, Walking Dead: Season One,* and *The Path.* Each case study will focus on identifying interactive elements, as per my framework's rubric and example framework questions. This will help me to gather data and create an initial analysis of the components to answer my overall question of how narrative interactivity manifests in the overall game. Second, each game will be linked to a part of the narrative spectrum, not only to get a feel for the overall narrative shape of the games but also to create a comparative analysis between them. By doing so, it is not only possible to identify where different videogames overlap but also how they use similar elements to create different meanings through the player's interaction with the narrative content.

## 4.1 Rubric of Interactive Elements and Content Analysis

## 4.1.1 Hakuoki: Demon of the Fleeting Blossom

Hakuoki: Demon of the Fleeting Blossom is about a young girl (default name: Chizuru) looking for her father during the end of the Edo period. After a run in with a silver-haired, blood thirsty demon called a Fury, the Shinsengumi take her into custody and agree to keep her around to aide their own search for her father. Though the game's overall narrative is broken into seven main branches (two of the paths share large chunks of narrative content, however), the game generally follows two main overarching plots.

First, there is Chizuru's relationship to demons and the secrets behind her father's work. Second, there is Shinsengumi's rise to political power and their subsequent fall with the dissolution of the shogunate. The core gameplay mechanics and narrative, however, revolve around Chizuru's relationships with members of the Shinsengumi.

Hakuoki is a visual novel game, which is generally defined a game that consists mostly of static images, sounds and an emphasis on text. Though some visual novels contain overt gameplay mechanics like puzzle solving and exploration, most visuals novels do not. In many visual novels explicit interactivity only occurs through a series of choices players make at set decision points, often creating opportunities for branching narrative (see figure 5). In Hakuoki, decision points do two things. First, depending on the decisions the player makes, the player gains access to different narrative branches, which allows them to interact with different characters and experience a different, unique piece of the overall narrative. Second, depending on their choices, the player accumulates points with their potential love interests, which affects romance and corruption meters, narrative branches, and potential endings.

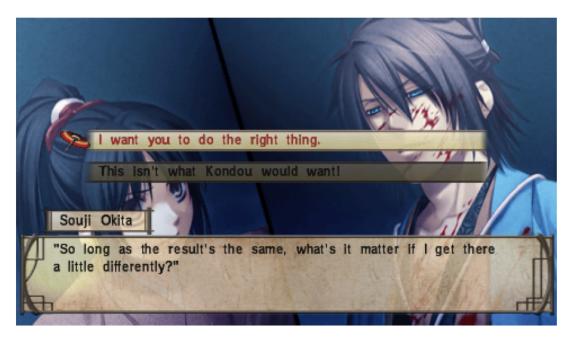


Figure 5 – Decision Point (red is already selected choice, black non-selected), Hakuoki: Demon of the Fleeting Blossom

Though the game is an extreme narrative experience and contains no overt gameplay mechanics, *Hakuoki*'s emphasis on the narrative allows it to synchronize what ludic elements it does have with the narrative in a subtle, immersive way. For example, though almost all of the choices involve one of the potential love interests, the game does not directly state which character the player is following. Instead, it relies on the player to infer the correct decisions based on the text and interactions. Many interactive elements, then, appear within the narrative itself rather than explaining through system text or in traditional gameplay elements like an item inventory.

## Objects:

Hakuoki does not have a traditional inventory or object system, let alone explicitly interactive objects. Though the player has access to a gallery for unlocked computergenerated (CG) art or movies and an encyclopedia for characters, terms and important dates, these are do not appear in the main game, cannot be explicitly interacted with, and are treated as collectibles. The gallery and encyclopedia's contents are unlocked when the player encounters them in game or if proper conditions are met (i.e. completing a character path unlocks a unique CG). The player may view the content or unlock them in any order but this is closer to restructuring the content than affecting it.

By contrast, the game establishes items in Chizuru's possession in the narrative – such as her sword, her blood, and medicine—but the player can only interact with them through decision points. For example, in four of the seven main paths, the love interest becomes a Fury who struggles with his blood lust and the player must manage his

corruption meter to keep him sane. Whenever the love interest has a blood lust attack, the player has three possible actions: give him the medicine, give him her blood, or make him endure it. Each option has a slightly different success rate at different points of the game and can result in a bad ending if the player uses the wrong option at the wrong point of corruption. However, the game only tells Chizuru about the effects of each option through the narrative (see Figure 6 and 7).



Figure 6 – An explanation about the bloodlust and object use (part 1), Hakuoki: Demon of the Fleeting Blossom



Figure 7 – An explanation about the bloodlust and object use (part 2), Hakuoki: Demon of the Fleeting Blossom

It might seem odd to have the objects built into the narrative rather than freely available to the player but the absence of a traditional inventory has an interesting effect. For one, even if there was a traditional inventory, the game does not give the player many objects to manage in the first place, instead emphasizing object use as simply an alternative option among other options (i.e. in a decision point, your options maybe be attack someone with your sword, struggle against captor, or trust someone to help you). Secondly, it encourages the player to pay attention to the narrative and what characters say to decide which is the better use of an object.

## Core Gameplay Mechanics:

The main mechanics in *Hakuoki* include decision points, the romance system, and the corruption system. The decision points serve as the chief mechanic for interacting with the game's content. Comparable to choose your own adventures or game books, each decision point allows the player to affect the course of the narrative through minor

and major narrative branches. Unlike CYOAs, which are typically 120 pages with 20-40 pages for various endings and have little room for character development or deep plots<sup>68</sup>, *Hakuoki* is not bound to a page limit. This allows *Hakuoki* greater freedom to present a longer, deeper narrative that expands on plot and characters while still allowing meaningful player choice. None of the decision points in themselves directly leads to a 'good' or 'bad' ending but they mediate the romance and corruption mechanics with player choice.

The romance system tracks the player's relationship with the potential love interests. At decision points, the player can get points with one of the potential love interests by making a choice that either allows the player to spend more time with the character or making a choice the character approves. If the player maintains a high romance meter with a potential love interest, the player unlocks unique events, character branches, and multiple endings. For example, in order to unlock Okita's story branch the player must have the highest romance points for him out of the potential love interests and watch a unique event at the end of chapter 3. If the player's romance points are not high enough, even if the player chooses to see the event, a different scene occurs and Okita's branch does not progress. Conversely, if the player fails to maintain romance with the potential love interests, this has two potential outcomes. If the player reaches the point where a character branch is selected and they do not have a high romance with anyone, the player is locked into a significantly shorter, linear 'alone' ending path. If the player has enough romance to get onto a character's narrative branch but fails to continue to raise it, the player will encounter bad endings.

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<sup>68</sup> Lebowitz and Klung, Interactive Storytelling for Video Games. 183-84

Finally, the corruption system tracks a character's blood lust and mental state. The player only manages corruption in four of the seven potential character branches, as those are the only paths the love interest becomes a demon, but corruption becomes arguably just as important as the romance system. Throughout the four branches, the characters' corruption meter rises to reflect growing insanity state and blood lust in the narrative. The correct choices help lower the character's insanity while the incorrect ones fail to lower the meter enough or raise the meter. If the character's corruption meter is too high then a bad ending will occur despite having a high romance meter.

Hakuoki is an extreme case of a videogame lacking overt gameplay mechanics. Its chief mechanic is based on decisions players make at set decision points and players lack the ability to interact with the game's content outside that. However, it would be a mistake to say its mechanics lack meaningful interactivity. By tying the player's choices to the game's other mechanics, the choices feel more complex and gives greater player agency regarding their relationship with the characters, creating a more interactive experience than simply restructuring what part of the story comes next.

# Objectives:

Though *Hakuoki* is known for its romantic elements, the game itself does not explicitly outline romance as an objective, let alone any other objectives. Instead, objectives are implicitly revealed through the guiding gameplay and the narrative. The premise of the game is about Chizuru trying to find her father but the core gameplay mechanics rarely directly lead to that goal. The mechanics allow her to make some choices about pursuing her father, such as deciding whether she wants go on Shinsengumi patrols to find him, but none of the choices actually further the outcome.

Instead, the objectives within the game world are introduced to the player early on through the introduction of the core gameplay mechanics and subsequent feedback. After the player makes their first choice, their romance meter goes up with one character and unlocks a specific scene with that character. This repeats throughout the game, teaching the player to prioritize choices that raise their romance with certain characters without directly telling the player this is necessary. As such, the player does not find out the consequences of failing the in-game objectives until a bad ending occurs.

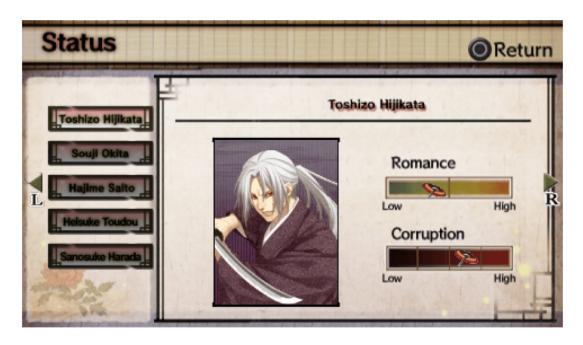
Like *Hakuoki*'s treatment of objects, its treatment of objectives relies heavily on the implicit feedback. On one hand, because the game is extremely stripped down to begin with it does not require explicitly stated objectives to beat the game. On the other, though game also does not tell or force the player down a path, it provides strong hints of what the player should do based on the outcomes of their choices. For example, while it is possible for the player to avoid raising romance with any of the love interests and for Chizuru to remain single, it limits the player to one narrative branch, one ending, and a depressing outcome. In order to experience all the branches and parts of the overall narrative and attain a happier ending, the player must follow the game's implied objectives and raise romance with different characters.

# Interface:

As per the name 'visual novel', *Hakuoki* is presented with a look and feel of a novel with images. *Hakuoki* has a minimalistic interface consisting of mostly still images and text boxes. Though other information appears on screen, such as whether the game is on auto-play or fast-forward, the interface emphasizes the game's storytelling elements and characters. Information consistently shown on screen includes informing the player

when words are added to the encyclopedia, what choices the player made on previous playthroughs, and when they have raised the romance meter. However, the most overtly 'gamely' interface element and, arguably, one of the most important pieces of information is the status menu.

The game typically delivers information implicitly but the game breaks this format to directly inform the player about the status menu. The status menu unlocks shortly before your first decision point and helps track your relationship with the potential love interests. From then on, the status menu continually changes to reflect both the consequences of the player's interaction with the characters and narrative through the game. For example, in Hijitaka's branch, Hijitaka, Heisuke, and Saitou become Furies. When you check the status menu after each character becomes a Fury, the status menu reflects the change by changing their character art and adding a corruption meter (see figure 8). However, the corruption meter only changes if the player is on the character's branch.



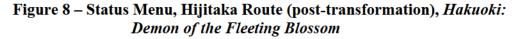




Figure 9 - Romance points up, Hakuoki: Demon of the Fleeting Blossom

Interestingly, while the status menu tracks both the romance and corruption systems, changes to the meters are reflected differently in play. When the player makes a choice that raises romance points, a cherry blossom appears on screen (see figure 9). The player can turn this feature off in the settings menu but the default is for this information to consistently appear on screen. By contrast, the corruption meter is only reflected in the narrative. If the character's corruption is low and their romance meter is high enough, the game continues. If a character's corruption is too high, a bad ending will occur regardless of the romance meter. Arguably, both meters are equally important but the romance meter is given a higher priority. It guides players to keep in mind the romance meter first, which is a constant in all the paths, while the corruption meter is only relevant in four branches.

#### Interactions:

Hakuoki's range of character interaction, despite being a game that centers on the main character's relationship with the potential love interests, is deceptively limited compared to the sheer amount of possible interactions. The players have 142 possible choices in the game with 35 of those appearing in the first chapter alone, allowing the player many different opportunities to interact with the characters at different points in the game. The player cannot see all the scenes in one playthrough, as the game forces the player to pick between branches, but they can choose to interact with one character or interact with all the characters at different points in the same playthrough.

The plot and characters are largely set and certain aspects are independent of player actions. Unlike games such as *Dragon Age*, where the player have a nuanced range for how characters feel about them (i.e. a character seeing you as a best friend or hating you enough to leave the group), *Hakuoki* sets it up so Chizuru will always grow close to the Shinsengumi, even if she does not romance someone. None of the player's decisions will make a character like or dislike her more outside romance. Even if the player romances one character while also having high romance points with another, the non-romanced character's relationship with the player is treated the same as a character the player has no romance points with.

Likewise, while the first three chapters are open and allow the player to interact with almost all the potential love interests, once the player is locked into a character's branch the interactions become limited. The player cannot raise their relationship with another character and their choices with their chosen character become more limited,

usually consisting of two possible choices with the 'correct' one raising the romance meter and the 'wrong' doing nothing.

# Playable Character:

One of the main critiques about Chizuru is that she is bland or does not have much of her own character. While the other characters grow and develop, especially within their own narrative branch, Chizuru lacks a strong character arc. Instead, she serves as a point of view character that is more important for what gameplay characteristics she has. Though Chizuru has a backstory and dialogue, it mostly serves to provide context and a means for her and the player to be involved. Chizuru unknowingly being a demon does not affect 'her' specifically but the plot, setting, and gameplay around her. It fuels why other demons try to kidnap her, why the other characters need to protect her, why her father disappeared, and why her blood is special and can be used to help other characters' corruption. Technically speaking, the mechanic 'decide whether to use blood to manage your love interest's corruption' does not strictly have to be related to Chizuru's backstory. However, Chizuru's backstory provides a reason for the mechanic to exist and why Chizuru and the player would be compelled to use it, thus fulfilling the game's mechanics and objectives.

As argued by Ronen<sup>69</sup>, this is a common immersion technique used in visual novels. By having Chizuru rarely appear on screen and not giving her a voice actor, the game not only encourages the player to project his or herself on her but also makes Chizuru malleable. The player can make several different choices in one scenario – such

<sup>&</sup>lt;sup>69</sup> Oren Ronen. "Otaku Immersion: The depiction of the protagonist in visual novels" (proseminar paper for *Cool Japan: Contemporary Japanese Popular Culture*, 2008), 2-3. <a href="http://www.matsunoki.net/files/visual\_novels.pdf">http://www.matsunoki.net/files/visual\_novels.pdf</a>

as, whether to attack, struggle, or wait and see – and explore different branching paths without having to worry about maintaining consistency over the main character. In short, Chizuru's character has more emphasis on her role as a vehicle for player to interact with the game world than on her own independent character traits.

#### Game space

In contrast to *Hakuoki*'s interactions, the player has a fair bit of agency to explore the game's game space. On one hand, the only means the player has to interact with the game world is through set decision points and the player is unable to alter the setting or characters' personalities directly. On the other, the sheer number of choices, particularly in early chapters, gives the player significant control over the micro narratives, allowing them a greater game space to play with while maintaining the overall setting.

Hakuoki typically uses what Garrund calls "parallel graph" structures, where several versions of the same story run parallel to each other and depending on the player's choice they move from one path to another <sup>70</sup>. In Hakuoki, though an event may be 'the Shinsengumi hears of a secret imperialist meeting and launches a raid' and the outcome 'Shinsengumi succeed' is set, the player's action and what version of the story they are on can vastly differ depending on the accumulation of player choices. For example, early on the player has a choice whether they want to take an offer to leave the Shinsengumi compound and join patrols of the city to find clues of Chizuru's father.

Depending on the choices they make, they are either part of the raid itself, part of the reinforcements, or on standby. The shape of the event looks like:

**A** – Leave and search for father **1** – Look for Okita

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<sup>&</sup>lt;sup>70</sup> Timothy Garrund, "Chapter 18 – The elements of Interactive Multimedia Narrative", in *Write Your Way into Animation and Games*, ed. Christy Marx. (Boston: Focal Press, 2010), 312.

**1a** – Decided to distract the ronin (romance up)

1b – Looked around the room

2 – Look for Heisuke

2a – Stop Heisuke

**2b** – Help Heisuke (romance up)

 $\mathbf{B}$  – Stay at compound

1 – Stay with Hijitaka

2 – Head to Ikeda Inn

2a – Follow Saito

**2b** – Follow Harada

Though the branching stops being as extensive when the player is locked into a particular path, character branches take up the second half of the game and are unique from each other. In the overall game, paths still occur during the dying days of the Shinsengumi but they focus on different characters, conflicts, and scenarios for the player to experiment with. This encourages the player to replay multiple times to try different choices and branches.

Granted, player choice is still largely constrained around maintaining interactions with the potential love interests. However, the game integrates the game space with player choice by not always linking player choice to a particular outcome or character. In the above branch, the player can directly get closer to a character but there are also choices presented as viable player actions first and excuses to get closer to the characters second. When the game presents the choice, 'do you want to leave the compound?' it is presented within the context of 'do you want to be proactive in your search for your father or do you want to wait and trust the others to find him?' Even the possibility of getting the romance meter up is presented as a player action rather than a direct romance one.

#### 4.1.2 Machinarium

Machinarium is about a world populated by robots, the city of Machinarium, and a robot named Josef, who is dumped into the scrapheap and must find his way back into the city. Along the way, Josef uncovers a plot by the Black Cap Brotherhood to set off an explosion in the city. Josef must find a way to save his girlfriend, Berta, and stop the Brotherhood's plans. *Machinarium* is important because it portrays information almost entirely through visuals and on-screen action – both on the narrative and gameplay levels. In the former, though there is an overarching narrative, there is no narration or text, and narrative is relayed through onscreen actions or cartoonish thought-bubbles (see figure 10). In the latter, though the game directly tells players the basic controls and core gameplay mechanics at the start, the game relies on the player inferring information and solving puzzles based on visual clues and interaction with the area. It is impossible for the player to simply look at the screen, figure out what to do, and do it<sup>71</sup>. The player may interact with a loose stair rail and realize they need to push it against a lever to progress but the play must interact with the rest of the area to figure out all the necessary steps to do so.

Machinarium is a traditional interactive narrative that takes advantage of its setting and unique characters to enhance immersion. The core gameplay mechanics include point-and-click mechanics based around puzzles and mini-games but the onscreen action reflects Josef's capabilities. For example, even though the player can move the cursor anywhere on screen, the player can only interact with objects within

<sup>&</sup>lt;sup>71</sup>Jacub Dvorsky. "Interview: Amanita Design's Dvorsky On Machinarium's Eerie Adventure". Interview by Brandon Sheffield. *Gamasutra*, accessed May 27, 2015. http://www.gamasutra.com/view/news/116279/Interview\_Amanita\_Designs\_Dvorsky\_On\_Machinariums Eerie Adventure.php

reach. In some areas, this may only require the player to walk a short distance to reach an object. In others, Josef must climb, move and alter objects, and even alter his own body shape (see figure 11).



 ${\bf Figure~10-Narrative~thought~bubble,} {\it Machinarium}$ 



# Figure 11 – Squat-Josef reaching for an object, *Machinarium*Objects

Machinarium uses a small inventory but has many interactive objects. Though the player collects, combines, and uses several objects per area, objects are typically limited in use and disposed when the player no longer needs them. On the gameplay-level, this saves the player from blindly using obsolete objects to find a solution. On the narrative level, the inventory is Josef's own body. He stores objects within himself and takes them out when necessary, removing the infinite space inventory that appears in many games games and adds context to object usage and storage.

Objects generally appear as everyday objects and are geared towards solving a particular problem. Sometimes, object use is straightforward, such as having an umbrella so Josef can pass under falling water. Others require the player to combine or use objects in alternative ways. For example, one of the early puzzles requires the player to disguise Josef as a guard so he can re-enter the city. The player must collect a pylon, a light bulb, a rung, and paint, use the rung to climb the light pole to collect the light bulb, use the paint on a container so the player can dye the pylon, and combine the light bulb with the pylon to create a guard hat. By the time the player progresses to the next area, however, the paint and rung have been left behind or used up and the hat is lost during the area transition. Subsequently, the next area has new objects with new uses.

Though some objects may be used for more than one puzzle, they are generally only important within a constrained context and are more important for their purpose within an individual puzzle. The player cannot use the light bulb on the paint because it does not fit the puzzle's logic. Likewise, the player cannot hold onto the light bulb

beyond the area. The light bulb can only be used to combine with the pylon to create a hat.

# Core Gameplay Mechanics

*Machinarium*'s core mechanics includes point and click, the hint and walkthrough book systems, and, sporadically, mini-games. Point-and-click among the game's most prominent mechanics, having multiple uses and acts as the primary means of interacting with the game world through interaction points. Menus aside, the player can typically click on four main types of interaction points:

Environment: Interaction points that appear on the game world and are a part of the environment, often providing visual clues for progression. For example, while a player may not be able to directly interact with a door, they may be able to interact with a lever that causes a coal cart to run down rails and open the door.

Object: Interaction points allow the player to collect, combine, or use an object. Some of these points allow the player to pick up an object while others require a certain item first. For example, in Lowertown the player can interact with a swarm of flies but unless they player has flypaper they cannot collect them.

NPC: Interaction points for non-playable characters. Not all NPCs are interactive but most will either give information to the player through thought bubble dialogues or provide visual feedback. For example, when the player interacts with a group of troubled musicians, the Blower shows his horn plugged up while the Drummer's thought bubbles show the Brotherhood destroying his drum. This tells the player they need to unplug the horn and to find a replacement drum.

**PC:** Interaction points for playable characters. Aside from a sequence where the player takes control of Berta, this typically refers to Josef. There are two prominent interaction uses. First, the player can guide Josef's movements by clicking on paths on the game world for Josef to move to. Second, the player can manipulate Josef's shape. The player can make Josef taller, allowing him to reach higher places, or squat, allowing him to duck under low passageways.

Point-and-click's main restrictions are that: the player can only interact with things Josef can reach, the player cannot interact with non-interactive points, and select interaction points cannot be clicked until the right conditions are met. While these may seem simple, these limitations force the player to experiment with the environment and interactive objects from the start. In the tutorial level, Josef starts in the scrapheap with his limbs broken off and scattered and Josef unable to walk. The game first directs the player to interact with within-reach objects to connect Josef's head and torso and then leads the player through a chain of solutions to acquire the rest of Josef's limbs. This includes obtaining a nearby item to give to an NPC to walking around the environment to combining objects and altering the environment. This teaches players to interact with the game world while making them aware of the restrictions. This allows the game to create more complex puzzles while still allowing the player a sense of what to interact with and how to do it, even if they do not immediately know the solution.

Conversely, the hint and walkthrough systems serve as secondary core mechanics that gives the player solutions to the area's overall puzzle. When the player enters an area, they can select the hint icon to receive one solution needed for that area. Though accessing the hint has no restrictions, the hint does not tell the player what order they

need to perform the action or how to do it. The walkthrough book, however, gives players a detailed overview of the area's solutions (see figure 12). The only restriction to the walkthrough book is that the player must complete a mini-game. Even if the player wants a solution, they still have to work for it, which keeps the player involved in puzzle solving beyond simply clicking on the walkthrough book every time they get stuck.



Figure 12 - Walkthrough Book, Machinarium

Finally, mini-game mechanics appear, though they appear sporadically. These vary from the walkthrough book's mini-games to lining up tiles to form an electronic circuit. Mini-games often appear within a particular context and are often stand-alone. According to Dvorsky, mini-games present the player with diversity and things to "surprise and amuse" the player. For example, the player must answer questions of the Fan blocking the entrance into a vent. If the player answers the questions correctly, the

<sup>&</sup>lt;sup>72</sup>Jakub Dvorsky. "Amanita Design: How robots, insects and gnomes are helping a Czech indie reanimate the point-and-click adventure". Interview by Edge Staff. *Edge*, accessed May 24, 2015. http://www.edge-online.com/features/amanita-design-how-robots-insects-and-gnomes-are-helping-a-czech-indie-reanimate-the-point-and-click-adventure/

Fan slows down but not enough that the player can pass. The player must instead repeatedly fail the questions to make the Fan so angry it eventually flies off the hinges. The mini-game, more than being a one-off puzzle, becomes a means of expanding the narrative context and providing a unique challenge rather than simply letting the player click and enter.

# Objectives:

On a macro level, the overarching objective revolves around Josef stopping the Brotherhood and rescuing Berta. However, while the player's actions do eventually lead to this outcome, the gameplay and progression does not treat this as a driving force for most of the game. Most of the game's objectives focus on the immediate, micro objectives of an area while subtly guiding the player to a desired overall outcome. Whenever the player reaches an area, there are usually both explicit and implicit hints regarding the area's objectives. Each area usually begins with an explicit problem that leads to several other problems with implied solutions. In one area, Josef must unscrew a pipe to drain the water from a well. Through interacting with the area and the Pipe-Wrench, the game presents Josef with two problems and explicit objectives: first, the player must bring the Pipe-Wrench a music player to get his help (see figure 13); second, the player needs three wrenches to change the water flow. In the latter, the player finds the three wrenches inside the area but, in order to retrieve one of the wrenches, they must solve the additional problem of fishing out one of the wrenches from the drain. In the former, the player is forced to leave the immediate area and experiment with other areas to find a solution. The player may have seen the radio in one of the earlier areas, which provides a solution to 'where do I find a music player?' but obtaining it requires further

experimentation. In order to get the radio, the player must help the musicians who, every time they play, cause another robot to throw something from her window. This implicitly tells the player they need to keep helping the musicians until the radio is thrown.

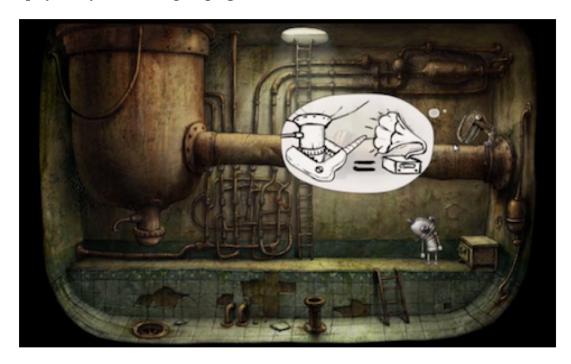


Figure 13 - Explicit objective, Machinarium

Rather than giving the player the macro objectives from the get go, *Machinarium* guides the player to the overall objectives by leading them with a chain of micro objectives. This not only allows Josef to progress to the next area but also trains the player to explore and infer answers from the hints.

## Interface:

Instead of text or several menus, onscreen information is relayed through visuals and onscreen action, ranging from interactions with the game world to the subtle transformations to game elements. Like *Hakuoki*, *Machinarium* has a minimalistic interface, consisting a wide view of the current area, Josef, and the cursor. Though the

interface shows other elements, such as the inventory or the main menus, these are hidden unless hovered over.

*Machinarium*, notably, does not have any text information save the tutorial (see figure 14). The game directly walks the player through the core mechanics but, once finished, switches purely to visuals and onscreen action to relay information.

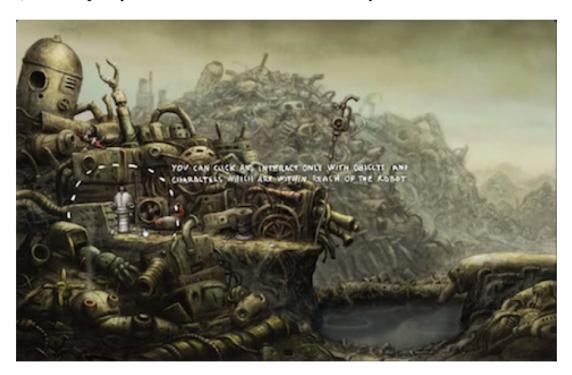


Figure 14 – Tutorial Text, introduction of limitations, Machinarium

Though this may seem like an odd choice, *Machinarium*'s stripped down gameplay, simple limitations, and constant feedback ensures the player knows what they can do without needing text. For example, the cursor subtly changes based on what it is hovering over and informs the player what they can do. The includes a neutral state, where the player cannot interact with anything; an interactive state, where the player can interact with an object or the game world; a movement state, which shows where players can make Josef walk; and a direction state, which shows whether to make Josef taller or squat. This not only saves the player from blind clicking but also, if the player is unable

to produce feedback where they should be able to, encourages the player to find a solution.

The game does not hide feedback or necessary information from the player, instead making elements accessible and built into the game elements. By making the player aware of the core mechanics early on and providing constant feedback for player actions, the interface subtly guides the player towards experimentation and emphasizes the interaction between the player and the game world.

#### Interactions:

Though *Machinarium* has many opportunities for PC-to-NPC interactions, it occurs within a limited range. Josef must often interact with NPCs to find clues, receive an object or service, or move NPCs. For example, in one area the player must pass falling water. The player must interact with the Dog-Owner to find out she will give them her umbrella if they bring her lost dog. This provides players with an objective, narrative context, and the solution for the area's puzzle.

However, NPC interactions follow a strict formula. Before a puzzle relating to an NPC is solved, the player can freely interact with the NPC, who will give a thought bubble or a visual hint. After the puzzle is solved, the NPC's reaction changes but the player can no longer meaningfully interact with them. Either the narrative constructs a reason (such as, the Dog-Owner being too busy cooing over her dog) or their interaction point disappears entirely. While a few NPCs have slightly more interactive opportunities, it is still fairly limited in the overall game. For example, the player can interact with Board-Player to nudge his head or to play a game with him. The player can keep playing a game until they win, which causes the Board-Player to knock the pieces everywhere,

giving the player another object. However, though the player has the object they need, they cannot play the board game anymore and may only nudge the Board-Player's head, giving the player no reason to return.

Additionally, this formula also makes it possible for players to miss interactions if they solve the puzzle before interacting with select NPCs. On a smaller level, this may include missing a minor scene like Josef getting yelled at for trying to enter the city without looking like a guard. On a larger level, it is possible to miss important scenes, such as how Josef ended up in the scrapheap in the first place. If the player interacts with the Mayor before solving the puzzle, a thought bubble reveals that Josef and Berta worked for the Mayor but the Black Hats came and sabotaged the Mayor, kidnapped Berta, and Josef was accidentally sent to the trash. If the player chooses to solve the puzzle first, the only interaction the player sees is the post-puzzle one, leaving the first interaction lost forever.

This is similar to the game's treatment of objects, player-to-NPC interactions are important chiefly through their relation to puzzles. On one hand, this prevents players from needing to constantly go back to areas to find clues if they are stuck. On the other, NPCs also become limited in their interactions and are defined more by their functional purpose.

### Playable Character:

Machinarium's characters are all robots. As such, their gameplay traits occupy an interesting space of being both functional like objects and acting independently as characters within the narrative. Despite having no dialogue and simply being referred to as 'the robot' in the in-game text, it would be a mistake to consider Josef a blank slate.

Josef is shown as luckless, clumsy, in love, and is often intimidated by larger robots. The player cannot make Josef behave differently towards other characters or situations. However, though they cannot alter his character, the player is still allowed to manipulate Josef's body within a constrained context. Players may change the shape of his body, move him around the screen, and store objects inside his body, which is reflecting by the gameplay's limitations. Though these traits makes Josef ideal for solving many problems, the player cannot use Josef alone to solve every problem. The player is forced to use objects and other characters with their own gameplay traits to solve problems that Josef cannot.

Other characters are often interacted with to receive an object or service or to move them. However, in a few segments, the player must directly interact with and use other characters. In one segment, the player controls Berta to give Josef an object. Interestingly, she uses the same gameplay mechanics as Josef, serving the same functional purpose despite being a different character, differentiated mostly by the fact she can access a spot Josef cannot. Likewise, in the segment where the player must unscrew the pipe, the player must interact with the Pipe-Wrench and use him like an object. In this case, it is because Josef's own abilities and the available objects cannot solve that problem. Arguably, the game could have used alternative solutions like letting Josef find the object he needed in another area or changed the puzzle to match Josef's abilities. However, by attaching these gameplay situations to characters, it not only expands on the narrative context around the characters but also creates more complex gameplay scenarios. The problem of unscrewing the pipe no longer becomes just about

the objective or securing an additional mechanic but helping another robot that has also been terrorized by the Brotherhood and gaining a favor.

# Game Space

Unlike *Hakuoki*, which has various narrative branches for players to experiment with game space, Machinarium's game space is limited. The overall narrative, character actions and puzzles are consistent across playthroughs and the core narrative is largely unalterable. According to Dvorsky, they intentionally limited the player's access to areas and objects to prevent players from having an infinite number of items and an infinite number of possibilities<sup>73</sup>. As such, *Machinarium* follows a mostly linear narrative progression and has strict control over the possible interactions players have at a given time. On one hand, this helps preserve a coherent progression path and makes things easier on the player. The player is always moving to the next logical puzzle and objective so the player rarely has to backtrack to previous areas or worry they missed something. On the other, it removes player agency over the core narrative and game world. The player cannot backtrack to many areas of the game and cannot interact with objects and interactive NPCs once they have fulfilled their overall purpose. Though the game provides some minor deviations, such as letting players solve puzzles in Lowertown out of order, skip dialogues and optional thought bubbles, and interact with select optional interaction points, the game provides little opportunities for exploration of game space. Though this limits the things that players are capable of doing, it also allows the game to more neatly integrate player action with the narrative, making the world feel responsive to the character even if the game space is limited. In order to progress, previous areas

<sup>&</sup>lt;sup>7373</sup> Dvorsky. "Interview: Amanita Design's Dvorsky On Machinarium's Eerie Adventure".

often end up blocked once the player clears the puzzle. However, this is still a consequence of player action. For example, in the first area, the player alters the environment by bending a pole to fish out their arm and swing across the gap. The starting area is now blocked off to the player, leaving players the only viable action of leaving the area, but the player still has some measure of control as their interactions with the game world are reflected appropriately.

## 4.1.3 Walking Dead: Season One

Walking Dead: Season One is an episodic game about Lee Everett, who must take care of a young girl named Clem and work with a group of survivors in the middle of the zombie apocalypse. While Walking Dead can be classified as a survivor horror, its emphasis is not on action tropes like shooter sequences, jumping, running and hording ammo. Instead, Walking Dead emphasizes player choice, consequences, morality, the relationship between the characters, and engaging players with the narrative<sup>74</sup>. Though the game is a traditional interactive narrative, the game provides multiple player choice branches – both minor and major – that affects the kind of man Lee is, his relationships with other characters, and what sort of morality guides the player's actions. These choices accumulate across the game's episodes, creating a wide range of possible narrative and gameplay potential.

According to the Venaman, they wanted to avoid the binary between action sequences and pre-rendered cutscenes by having the player play out the character and

 $\underline{http://www.gameinformer.com/b/features/archive/2012/11/26/lord-of-the-dead-an-interview-with-robert-\underline{kirkman.aspx}}$ 

<sup>&</sup>lt;sup>74</sup> Robert Kirkland. "Lord Of The Dead: An Interview With Robert Kirkman". Interview with Ben Reeves. Game Informer, accessed May 28, 2015.

story elements that would usually be told to the player in a static cutscene<sup>75</sup>. For example, cutscenes usually have a timer for player decisions, creating incentive for the player to participate with conversations and pay attention to the choices rather than simple waiting for the scene to finish (see figure 15). Also, these choices carry over to the player performing narrative actions in order to progress, making them feel responsible for what is occurring. In a cutscene, the player may have a choice between chopping off someone's leg to save them or leaving them to die but forces players to complete their choice by giving them control.

There are some shooter-like sequences but the core gameplay uses point-and-click and plot-integrated object use. Rather than the player needing to horde objects like ammo, the player only uses objects when it is necessary to the scenario. The player may need to use a shotgun and ammo to destroy a zombie in one scenario but another scenario will require the player to think strategically and acquire different objects to pick off zombies until they can reach a better weapon. Though the core gameplay mechanics remain constant, the objects and solutions are often particular.

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<sup>&</sup>lt;sup>75</sup> Sean Vanaman. "The Making of Walking Dead". Interview with Edge Staff. *Edge-Online*, accessed June 1, 2015. <a href="https://web.archive.org/web/20140202175231/http://www.edge-online.com/features/the-making-of-the-walking-dead/">https://web.archive.org/web/20140202175231/http://www.edge-online.com/features/the-making-of-the-walking-dead/</a>



Figure 15 – Cutscene choice timer, Walking Dead: Season One Objects:

Like *Machinarium*, *Walking Dead*'s inventory is simplified. Though the player can interact with many objects, the player carries a limited amount of objects per area and objects are often disposed or used up when the object is no longer needed. Unlike *Machinarium*, the player has more freedom with object usage, often resulting in objects being used in multiple instances or being used to initiate optional interactions.

Objects are generally everyday objects intended for a particular scenario. On one hand, the player cannot freely use or select objects on whenever they like from the inventory. When a player has an object, if they can use it, the available action appears in the point-and-click cursor when the player hovers over a useable interaction point (see figure 16). On the other, though objects are usually intended to solve a particular problem, they are not always limited to the core narrative or 'correct' path. For example, after Lee acquires the TV remote, he is allowed to use it on the nearby TV. Though the

TV shows only static, the object functions under the logic of 'a TV remote should work on a TV', regardless of whether it is a core narrative interaction or optional interaction.



Figure 16 - Selecting Object, Walking Dead: Season One

The remote does have an intended use within the core narrative, however. In a later area, the player must use the remote to distract a group of zombies. Once the player uses the remote in that instance, the game integrates the gameplay need of removing an unnecessary object from the player's inventory by having Lee give the remote to another character.

Interestingly, some collectable objects are only useable for optional interactions, serving to expand the possible interactions with the world and characters through side quests and conversations. For example, episode one introduces two side quests in the drug store: first, the player needs to find batteries and to make a radio; second, they can find energy bars and give them to various characters. In the former, solving the side quest unlocks a bit of information for the player about the outside world and opens up new

conversations with a character. For the latter, there are no long-term benefits towards deciding whom to give energy bars to but there are small nuances behind how each character reacts. Some characters, such as Clem, will freely take the energy bar while others will refuse to take it unless the kids have been fed first or will refuse the energy bar altogether. Even if a character refuses, the option to offer them the bar in the first place expands interactive opportunities beyond simply collecting items to solve a particular problem to progress through the game.

## Core Gameplay Mechanics:

Though Walking Dead has some action sequences, its core gameplay mechanics do not revolve them. Instead, Walking Dead's core gameplay mechanics include pointand-click, quick time events, the conversation and decision systems, and the notification system. Point-and-click is one of Walking Dead's primary means of interacting with the game world. Whenever the player hovers over an interaction point (generally an object, an environment detail, or another character) the cursor shows the player all possible performable actions. The player can usually perform up to two or three actions on an interaction point, but possible actions can change depending on context and objects in inventory. For example, at the start of the game, Lee must break his way out of the back of a police car. When the player hovers over the window, they see an option to 'look' or 'kick' the window followed by an option use 'climb' once the player performs 'kick' enough to break the window. Likewise, the option to give out energy bars only occurs when Lee has an energy bar in his inventory and disappears once Lee runs out. On one hand, these conditions allow more variable player actions by personalizing them to a particular scenario. On the other, player action is also constrained by the scenario's logic rather than what they player may wish to do. Though Lee may shout to someone in the distance in one scene, in another he must approach the character before the player can use 'talk'. The former is framed as Lee yelling at Clem in the distance to catch her attention while the latter frames it as Lee approaching someone for a conversation but the player cannot alter the logic behind the action.

Quick time events follow similar restrictions but include a timer component and potential game overs. Quick time events often combine point-and-click, successful button presses (see figure 17), and object usage, relying on players to put together what they need to do to complete an event. If the player fails, they may take a penalty, such as having Lee get hit or die. For example, one of the first quick time events involves Lee attempting to fend off Clem's zombie babysitter. The player must mash buttons to push her off, use point-and-click to fend off her approaches, obtain the hammer from Clem, and then use the hammer on the zombie. However, the sequence cannot be completed out of order or through alternative means. Otherwise, the sequence continues until the player receives a game over.



Figure 17 - Quick time event, button mashing, Walking Dead: Season One

The other primary means of interacting with the game world includes the conversation and decision making systems. Throughout the game, the player consistently chooses between potential dialogue and player actions during cutscenes. Interestingly, while many dialogue options have no long-term consequences or significant impact on the core narrative, they are still tracked by the game. For example, if the player chooses to have Lee say he is Clem's babysitter then another character will repeatedly refer to Lee as her babysitter and react confused if the player later contradicts their previous choice. Other choices carry across episodes and have a significant impact on the tone and character relationships. In episode 2, the player has a major decision regarding whether to kill or save a character that may or may not be turning into a zombie. If the player chooses to kill, the player gains more positive relationship points with Kenny, who treats Lee more amicably and refers to Lee as a close friend. If the player chooses try to save the character, Kenny will not come to Lee's aid later in the episode and will start taking

snipes at the player in the following episode. Even if the player chooses to support Kenny during other decisions, Kenny will still not treat Lee as warmly and still reference the incident Lee did not support him.

Though optional, the notification system acts as a secondary mechanic to the conversation and decision systems. When the player makes a choice that has an effect a notification provides instant feedback for their decision. This includes ambiguous notifications like "Clem will remember this" (see figure 18) and pointed ones like "Clem will remember you didn't save her". These generally appear within conversations and during major decision points, making the player aware of immediate and potential long-term consequences. Notifications are optional and are not needed to complete the game but they serve to help think about their actions as they make them. Rather than checking a relationship bar or finding out in a later conversation, the notifications inform the player which actions had an affect on other characters and how it impacted them, which encourages the player to consider their actions more carefully and makes the player feel more responsible for the choices.



Figure 18 – Notification system, Walking Dead: Season One Objectives:

Many of *Walking Dead*'s macro and micro objectives are told to the player through integrating narrative and gameplay action and goals. Instead of separating the gameplay section from narrative section, the narrative context often determines what gameplay actions are available to the player and what actions the player must complete to proceed. The overall objective of *Walking Dead* is survival. The game frames different scenarios around the theme, ranging macro objectives like 'we're low on food and need to find a way to procure more' to micro objectives like 'the player needs to fix the broken swing'. In the case of the former, it provides the narrative context, including why the swing needs to be repaired in the first place. The narrative tells the player they need to find ways to gain favor with a farming family that has an electric fence, food, and willingness to let Lee's group stay. As such, interacting with the broken swing prompts

Lee to consider repairing it as another way to gain favor. In the latter, interacting with the

broken swing explicitly tells the player they need rope and a board, encouraging the player to explore the area to find them. Unlike *Machinarium*, which relies on the player to infer what to do next, *Walking Dead* constantly updates the player's explicit objectives to reflect what the player has already done and what they need to do next. For example, if the player finds the rope before the board or vice versa, the dialogue from interacting with the swing updates to tell the player they have one of the objects but need the other. Even if the player finds board, the game will explicitly tell the player they need something to cut it down to proper size first. By integrating aligning macro and micro objectives, this fulfills two purposes. First, it helps integrate narrative action with gameplay action more smoothly. Second, it explicitly informs the player of the necessary objectives and helps guide them through the bare minimum needed to complete the game.

By contrast, the game's implied objectives are not technically necessary to complete the game but they have a huge impact on the players' experiences. Chiefly, in guiding the player to think about their choices and encouraging them to explore the game space. Though the game does use dialogue to explicitly tell the player to care for Clem, consider their companions, and remember that their choices will not make everyone happy, the strongest feedback comes from the consequences of the player's choice. For example, one of the first major decisions involves deciding who to save: Shawn, the man who helped Lee and Clem get out of town, or Duck, Kenny's young son. If the player saves the former, Shawn's father will be grateful Lee attempted to save Shawn and only blame Kenny for Shawn's death while Kenny will later talk to Lee about his guilt in saving Duck and leaving Shawn to die. If the player saves the latter, Shawn's father will blame both Lee and Kenny while Kenny will later agree they both left Shawn to die.

Though the outcome is the same, the tone of the scenes for both choices differs significantly and affects Kenny's relationship with Lee, encouraging the player to not only think about their decisions but also encourages them to pick other choices to see the alternative branch.

Though it is technically possible to avoid making choices, by consistently picking 'silence' or 'inaction' through letting the timer run out at every decision, the game punishes the player for not fulfilling the implied objectives. Not only will the game chastise Lee for being indecisive but also prevent the player from getting the best benefits, making it more difficult to get positive relationship points and may lead to a game over. In the first, when the player must choose between whom to save in a major decision point, if the player fails to make a choice then the zombies get through and they all die. In the second, in one scenario the player must talk to a group of bandits to stall them. If the player picks silence, Lee gets shot in the head. Though the game tells the player silence or inaction is a possible action, the game still prioritizes player choices and their consequences by forcing the player to make a choice and participate with the game.

# Interface:

Walking Dead's interface is minimalistic and cinematic. Rather than health bars or multiple menus, the game only shows the inventory (if the player has anything in it), cursor, possible gameplay actions, and, depending on the mode, player choice notifications. Though the game occasionally adds more overt gameplay interface features, such as tingeing the screen red when the player is in danger or showing button presses, the interface primarily draws attention to the game's narrative elements.

Interestingly, the game allows the player some control over what information appears through two potential interface modes (see figure 19 and 20). There is standard mode, which highlights all potential interaction points and provides notifications regarding player choices. The presentation detracts somewhat from the cinematic style but it provides more guidance by preventing the player from blindly clicking around and providing constant feedback for player choices. Second, there is minimal mode, which only highlights interaction points if the cursor hovers over them and turns notifications off. Minimal mode prioritizes the cinematic presentation by enhancing player immersion and encouraging players to make choices for the sake of choices without worrying about which choice had an impact and how. The game can be completed in either mode and the content is the same but the experience and what are considered necessary onscreen game elements differ. While standard mode may say "Kenny will remember this" and prepare the player for Kenny to bring up their choices later, players on minimal mode may not realize the choice had an impact and be surprised when Kenny brings the choice up several episodes later.



Figure 19 - Standard Mode, Walking Dead: Season One



Figure 20 - Minimal Mode, Walking Dead: Season One

The information consistent between modes includes the cursor system, the button mash prompts, the choice timer, and danger screen, which all help to guide the player's actions through mediating ludic and narrative elements. The cursor, arguably the most

important interface element, explicitly tells the player what the interaction point is and what possible gameplay actions will be performed. For example, hovering over a cabinet tells the player they can interact with the TV and either look at or use the remote on it. Regardless of the action the player picks, cursor feedback is instant and reflected on the game space rather than simply being relegated to a separate exploration segment. This carries over to the game's usage of button prompts, choice timers, and the danger screen. During a cutscene, the choice timer becomes a means of reminding the player they are in the middle of a conversation or action scene and button prompts become a means of not only progressing to the next segment but also represent Lee's attempts to push a zombie off him. Likewise, the danger screen is not just the screen turning red but also a substitute for a health bar or danger gauge. Without explicitly telling the player they are close to death, the danger screen provides feedback of the player's status through the narrative situation.

#### Interactions:

Walking Dead offers a wide range for player-to-character interaction, which is arguably one of the most important elements of the game. While the overall narrative is constant across playthroughs, how characters treat the player can drastically differ. This affects the tone of scenes, narrative branching, the available gameplay options or decisions, and even which characters survive longer. Lee generally travels around with a group of characters that are intractable through cutscenes, player-initiated conversations during exploration segments, and using objects on them. While the player can mostly avoid interacting with the NPCs outside the main plot, the game encourages the player to do so by having conversations constantly change to reflect the current plot, unlock side

example, in episode one, the player has several choices for interacting with Kenny during drug store exploration level: the player can offer an energy bar to him or his family, they can navigate through optional conversation trees and ask questions, and they talk to Kenny about their latest actions. There are additional branches in the conversation, such as Kenny only asking Lee about his family if Lee asks him about his, but the major variance in the tone comes from the consequences of the player's choices. If you agreed to throw his son out on the chance he was infected, Kenny angrily confronts Lee and the player unlocks an optional dialogue option. Likewise, depending on if the player attempted to save Duck or Shawn, conversation options change to reflect the possibility of blaming Kenny for letting Shawn die or taking the blame for letting Shawn die. Though the conversation tree does eventually exhaust, what the player chooses during this conversation carries over to later episodes.

A large part of what makes *Walking Dead*'s interactions complex is that characters will "remember" the player's actions across episodes, creating far-reaching consequences and more nuanced relationships. Even if a choice does not directly relate to a character, changes in character relationships are often framed within a difference of opinion or moral conflict rather than simply 'liking' or 'disliking' a character. With the sheer amount of choices and open range for interaction, the differences add up, allowing for vastly different experiences across playthroughs. For example, at the end of episode four, Lee is infected, Clem is kidnapped, and the player must go after her. Depending on the player's choices, the player has four potential characters and eight different combinations of who will go after Clem with Lee, ranging from 'all available characters

are alive and come' to 'Lee goes alone'. Some characters can come easily, like if the player kept them alive or were honest about being infected, while other characters are determined by how positive your relationship was with them. If the player had a friendly relationship with Kenny, he instantly agrees to help; if the player did not support a majority of Kenny related decisions, Kenny will hesitate and need persuasion; if the player had a negative relationship, not only will he refuse to help but also potentially leave town without Lee.

## Playable Character:

Like Chizuru, Lee's most notable way of influencing gameplay is his ability to make multiple choices, providing a means for player action. While the player cannot make huge changes to the core narrative like with Chizuru, the player has significant control over the type of person Lee is and his actions, which ripples out to affect other aspects of the game. Though Lee has a distinct character, he provides enough malleability that players can alter his personality to match the choice's context. Rather than providing distinct, colour coded personality traits like in Mass Effect, Walking Dead's choices are presented neutrally and are geared towards a particular dialogue or situation. On one level, this affects the nuances behind Lee's personality. The player may choose to make Lee a more stoic character by constantly choosing 'silence' options, more altruistic through 'compassionate' actions, or more 'ruthless' through pragmatic actions, which shifts the overall tone of Lee's character. On another level, how the player develops Lee affects how other characters view and treat Lee. This includes how some characters may not side with Lee later on and, more prominently, what Clem takes away from Lee's actions over the game. For example, at the end of the game, Lee is dying and Clem is left

with final pieces of advice based on what she has seen and heard Lee do. The player's final choice is whether to tell Clem to kill Lee before he turns or to leave before he turns to spare her the guilt. However, if the player lets the timer run out, Clem makes the choice based on the player's actions, making the choice she thinks Lee would do based on what she knows about him.

Despite the sheer number of choices the player can make with Lee, he still exists within a constrained context. His backstory, general personality, and many of his actions are set. Lee can rarely be overtly cruel or even abandon Clem, as the core narrative and the available choices do not allow these actions. Additionally, even if the player is allowed a choice, if it does not align with what Lee's general character then the game subordinates what the player wants with what Lee would do. Early on, Clem asks Lee why he does not want to talk about his family and among the possible answers is telling Clem that he murdered a man. If the player picks this, Lee is unable to bring himself to say it but he will be able to answer if the player picks the other choices. In short, the game only allows the player to make choices that 'Lee' would make, rather than simply making Lee completely the vessel for player action, reflecting the contradiction between the game's desires and the player desires.

### Game Space

At the start of the game, *Walking Dead* introduces itself as a "game series that adapts to the choices you make" and the story being "tailored to how you play"<sup>76</sup>. While it would it would be inaccurate to call *Walking Dead* a player-driven narrative, the game still offers a large game space. The player cannot change the core narrative but the game

<sup>&</sup>lt;sup>76</sup> Telltale Games (2012). The Walking Dead: Season One [Mac].

offers a significant amount of player agency over the game's micro-narratives and interactive elements.

Walking Dead typically has two or three branches depending on the player's choice, which eventually loop back to the main branch. The choices are often presented as binaries, such as 'which person do you save?' or 'what time of day do you attempt to escape?', often creating in minor and major changes in the game space. For example, in episode one, Lee must choose whether to save Carley or Doug. In terms of minor changes, this includes micro narrative elements such as whether Lily accidentally kills Doug because he jumped in to protect someone or whether Lily kills Carley in the middle of a heated argument. In terms of major changes, this includes the tone of scenes and gameplay opportunities. If the player saved Doug, there is less infighting in the group and the group makes use of his technological skills to create alarm systems around their camp. If the player saved Carley, the player unlocks a unique gameplay opportunity to reveal his past to members of the group before it comes up in the core narrative. It is not necessary for the player to do so but they are still given the option, allowing the player to decide whom to reveal it to and to see alternative reactions outside the core narrative. This also affects the reveal in the core narrative as characters who the player has already told will react with less surprise or anger than if the player continued to hide it.

Most player choices do not have the same significant impact on the core narrative as 'who do you save?' but it would be a mistake to say that most players share the same narrative experience. The player has access to a sheer amount of minor choices, side quests, and dialogue options that allow them to interact with the narrative content. As such, the in-game statistics that appears at the end of every episode implies very different

experiences from player to player (see figure 21). Not all choices are reflected but even these five choices do not have a unanimous consensus from players.



Figure 21 - Episode 1 Choice Statistics, Walking Dead: Season One

Taking into account the minor choices and optional dialogues and encounters, the differences greatly increase. For example, players generally have access to two to five (counting silence) dialogue options per choice. Some of these choices simply colour Lee's dialogue while others open up additional dialogue or details remembered while other choices are only available to the player based on their previous actions. As such, it becomes impossible to see every option in a single playthrough.

By preventing players from seeing everything in one playthrough, replaying the game becomes a necessity to view alternative branches. This makes the game space feel complex and more responsive to the player's actions, despite the overall narrative remaining constrained. The player does have control over the finer details and accumulation of their choices, including cosmetic differences (such as, whether Clem

wears a hoodie from the end of episode two onwards or if Lee carries a bruise from where he was punched), different relationships, and what choices the player considered the 'correct' ones.

### 4.1.4 The Path

The Path is a psychological horror game that interprets Red Riding Hood through six sisters, each representing a different aspect of a girl's life (see figure 22). The forest is randomly generated for each level load, giving access to different locations and objects that offer different interaction opportunities depending on the current playable girl. This encourages the player to experiment with each of the girls to explore the forest and, by extension, the overall game world. However, if the player encounters the girl's wolf then the player loses almost all control, the girl 'dies', and the player is forced to move onto the next girl. Paradoxically, though the game tells the player from the get to go stay on the path, the player will fail the level if they do so. In other to complete the game, the player must break the overt objective and fulfill the implied, more important objective of stepping off the path, meeting their wolf, and 'dying'.



Figure 22 – The Six Sisters, *The Path* 

According to the developer, their intention was to create a situation for player exploration of narrative potential while letting the "actual story" occurs through the game itself and from the player 77. On one hand, the overall narrative is technically set and the player cannot directly alter the characters or their potential interactions. On the other, the game gives the player greater control over the micro narrative elements and general narrative shape of the game. This ranges from allowing the player control over the time of day (and, subsequently, the mood) of their exploration in the forest; the length of their time in the forest and if the player uses a girl multiple times or only once; whether the player collects any objects in the first place or, subsequently, which girl collects shared

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<sup>77</sup> Harvey and Samyn. "Michaël Samyn, Auriea Harvey - Tale of Tales".

objects and what interaction the player sees instead; and whether the player unlocks optional interactions or 'special rooms', which are unique to each girl and expand their stories, or prioritizes progressing the core narrative. These choices may seem small but they still give players freedom to personalize each of the girls' journeys and, ultimately, the player's narrative experience.

### **Objects**

The Path has two types of collectable objects: first, 'memories', which are objects collected when the player interacts with an object or structure that holds significance to the current playable girl; second, flowers, which appear at random throughout the forest and may give players hints of an object's location. Though collecting objects is optional and objects cannot be freely used from the inventory, objects serve to expand on the girls' stories and provide incentive to switch between the girls and explore.

Memories are, arguably, among the most typical gameplay elements in the game. They may be collected, stored and viewed in the inventory, and have description boxes. However, what makes memories significant is how they relate to each individual girl. Multiple girls may be able to collect the same object but how the girl interacts with or describes the object differs depending on the current playable girl. For example, when collecting the 'treasure' as the youngest girl, Robin, she says, "I can buy all the toys in the world with this treasure!" The gothic girl, Ruby, however, says, "What's the point in wanting anything if you can't have everything?" Other objects require a specific girl to be collected, as they not only open the girl's special room but also relate to the particular themes of that girl. While other girls may be able to encounter the wrecked car, only

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<sup>&</sup>lt;sup>78</sup> Tales of Tales (2009). The Path [Mac].

Ruby will be able to interact it because it ties into her themes of 'decay' and 'dangerous thrills'. If the player plays as a girl who cannot interact with an object, the game will either prevent the player from interacting with it at all or, more often, show an image of a girl who can (see figure 23).



Figure 23 - Different character required to collect object, The Path

Flowers, on the other hand, straddle the line between having particular gameplay value and existing for the sake of object collection. Glowing flowers are scattered throughout the forest and can be picked by any of the girls. If the player collects enough flowers, a map marker will appear on screen to provide the player with a hint of where to find a object. However, if the player has already collected all possible objects with the current playable girl, a map indicator will not appear. There are no other rewards to collecting the flowers, let alone all 144 of them, and there are far more flowers than

objects to be revealed. Though flowers still act as markers that can encourage the player to keep exploring the forest, they begin to lose value beyond existing for the sake of collection.

# Core Gameplay Mechanics

The Path's core gameplay mechanics are stripped down. Technically speaking, the only primary gameplay mechanic is walking and interacting with interaction points. However, the secondary mechanics, such as the map system and using the Girl in White, serve an important role in guiding the player's actions. The primary gameplay mechanic is walking and interacting with objects, locations, and characters, much like point-andclick. This is the primary means players have of interacting with the game world and it is technically the only mechanic needed to complete the game. Though it may seem simple, the mechanic is flexible enough that it may be applied to all of the girls and their unique interactions and success conditions. This is tied to the fact the forest is randomized. The forest has a different shape, set of objects, and locations per level load, resulting in different playthroughs to unlock the special rooms and the girl's wolf location. Though the player only needs to find and successfully interact with the wolf to complete the level, the changing forest offers a different experience and different interaction opportunities every time the player enters the forest. Second, this mechanic is tied to the wolf encounters, which require different trigger conditions per girl. For example, while Robin only needs to walk up to and interact with her wolf, other girls require additional specific steps. Carman, one of the older girls, may find her wolf and interact with multiple objects in the area but she must steal her wolf's hat, sit in a specific spot, and wait for her wolf to eventually sit beside her to trigger the encounter. In short, even though the primary

mechanic is simple and shared between the girls, it is flexible enough to support subtle, unique experiences.

The map system works in two ways. By default, the game does not show the player any sort of marker or map but the player can unlock these features through exploration. First, as the player explores areas in the woods, if they encounter a location multiple times, the area becomes marked on the edges of the screen, providing the players with a sort of compass. If the player wants to return to the flower field, for example, all they need to look at their interface and walk towards the marker. Likewise, if the player collects enough flowers to unlock an object hint, the object locations are marked for as long as the player does not leave or complete the level. Second, the player may also unlock a detailed map of the area that briefly appears every 100 meters and shows where the player has traveled and what objects they have encountered (see figure 24). Though the player can unlock free access to the map through completing a playthrough or continuously going to grandmother's house, the default mode is that the player only has brief access to the map. Limited access may seem odd but it provides the player some idea of their progress and relative distance from objects while rewarding the player for exploring. If the player wishes to view the map again, they simply need to keep walking.



Figure 24 – Map, *The Path* 

Lastly, the Girl in White serves as both a character and a secondary gameplay mechanic. She appears randomly throughout the woods and can lead the player to a collectable object, a location, or back to the path. Though the player cannot freely call or use her, the Girl in White serves as a subtle way of giving players hints through interactions with her. If the player chooses to follow her, they have a reliable means of finding objects or locations. If the player chooses to interact with her, they may unlock an optional interaction with her or she may take them back to the path. She is also the only means the player has of getting back to the path if they choose to end the level without finding the wolf, which gives the player more freedom over when they wish to conclude the girl's story.

### **Objectives**

The Path has two conflicting objectives. Though the game explicitly tells the player to stay on the path, the game cannot be completed if the player does so. In order to progress, the player must "tell the story" of Little Red Riding Hood<sup>79</sup>. The game's overt objective of staying on the path comes from the fairytale but staying true to this objective fails to tell the story. As such, if the player simply stays on the path and goes to grandmother's house, they are told in the results screen that they did not encounter the wolf, have failed the level, and that they know where the wolf is. This not only explicitly tells the players why they have failed but also implicitly tells them what they need to do to succeed: find the wolf in the forest. Even if the player does not fulfill any other objective, as long as they encounter their wolf then the player succeeds.

Though the game does not explicitly tell the player to fulfill other objectives, the game subtly encourages the player to fulfill them. Among the scoring factors includes objects collected, special rooms unlocked, and distance traveled. Though it is seemingly impossible to get a perfect score, the game still rewards the player with a higher score for fulfilling additional objectives in addition to encounters the wolf. For example, when I completed the level by going straight to grandmother's house I received a 'D'. However, when I completed the level by finding the wolf, collecting some objects, and unlocked all the special rooms, I got a 'B', despite the results screen telling me I hadn't collected all the interactive objects in the forest. Aside from providing a score, the results screen helps track what the player has collected, missed, or unlocked which encourages replays.

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Though these objectives are, ultimately, optional, they help shape a large portion of player actions and the narrative experience.

The player may choose not to do any other objective than 'find the wolf' but finding the wolf takes up a small portion of the gameplay, despite it being a macro objective. Though the wolf is always somewhere in the woods, the woods are randomized and the player often does not have access to map elements early on, making it difficult to immediately find the wolf and complete the level. This leaves players with only the woods, objects, and locations to interact with, ultimately forcing the player to explore the space.

### Interface

The Path has a minimalistic but dynamic interface that heavily relies on imagery. Though The Path does have some traditional interface elements, such as the pop up map, most of the interface elements convey information through visual elements, ranging from superimposed images to map elements. Superimposed images are one of the game's most reliable feedback elements. Rather than directly telling the player an object or location is interactive, the game implies it is significant by superimposing an image of it on screen. This not only draws the player's attention but also encourages them to attempt to interact with the object or location to discover why it is significant. In some instances, this is straightforward, such as highlighting a bench to inform the player the bench can be sat on, while other instances help the player differentiate between multiple objects. For example, the player can find a small wall and a spray can together. Though the player can interact with other structures and the wall is easier to see, the interface instead draws the player's attention to the interactive spray can while the wall remains non-interactive. The

same feedback helps the player understand if the current playable girl can even interact with the object or location in the first place: if the player can, the girl will simply complete the interaction; if not, the interface shows an image of a girl who can.

By default, the mapping system hides some information but allows the player to unlock more information. The player is required to remap elements whenever they start a level (unless the player has unlocked the map), as available objects and locations change, but once the player has mapped something it stays marked on the interface until the player leaves the level. Map markers appear at the edges of the screen and can be broken into four general categories: swirl markers, which represents the general direction of the Girl in White and unlock shortly after stepping off the path; object markers, which represent collectable objects and are unlocked if the player collects enough flowers; location markers, which represent areas significant to the six girls and unlock if the player encounters multiple times; and a wolf's paw, which represents the general direction of the wolf and appears depending on the current playable girl. For example, for Robin the flower field appears as a location marker but for another girl it will appear as a wolf's paw. Markers do not tell players how close or far away they are, let alone exact placement of an object or location, but they give players some sense of general direction and placement.

#### Interactions

While *The Path* has a wide range for interaction with objects and locations, the interaction between PCs and NPCs is fairly limited. Each girl can only interact with two NPCs and interactions are either fairly linear or limited to two or three possible interactions at most. However, each girl has a unique set of interaction with NPCs,

ranging between their shared relationship with the Girl in White and their individualized relationship with their wolf. As stated earlier, the Girl in White serves a purpose both as a mechanic and a character. On one hand, if the player chooses to follow her, the Girl in White can lead the player to collectables, locations, or the path. On the other, though the player cannot directly alter the Girl in White's behavior, interactions with her change from girl to girl. For example, when Ginger, the tomboy, interacts with the Girl in White they may hug, paralleling one of Ginger's potential interactions with her wolf.

Meanwhile, if Ruby interacts with the Girl in White, the Girl in White may hide behind the nearest tree or Ruby may giggle at her. In short, PC-to-NPC interactions with the Girl in White become significant for how different characters interact with the same character in alternative ways.

The wolves, however, have a much more limited range of interaction and each girl can only interact with her own wolf. Though some girls have more interactions with her wolf than others, the player is required to fulfill a specific interaction to complete the encounter. Ginger, for example, may interact with her wolf in multiple ways: she may approach her wolf and hug her; she can chase after her wolf, which causes the wolf to disappear and reappear; or she can turn her back on the wolf and wait for the wolf to approach her. However, the only required interaction is the last one. If the player attempts to only do the other interactions, the interactions become static and the player cannot go forward. As such, the game forces the player to encounter the wolf properly to complete both the level and the fairytale.

### Playable Character

The Path has six main playable characters and the player must playthrough all of them to complete the game. Though the girls share the same core gameplay mechanics and level progression, what they are defined by is not particular abilities but what each girl allows the player access to. An interesting exception, however, is with the Girl in White, who only becomes playable after the player completes the six girls' stories and offers a slightly different set of gameplay attributes.

Each of the six girls is a distinct character distinguished by her appearance, general personality, and significant narrative elements. Each girl has her own wolf, her own special rooms, set of specific objects, and way of interacting with objects, locations, and characters. Though player cannot directly alter the girls' characters, they can infer what themes or objects are significant through how each girl interacts with the game world. Even if the player encounters a collectable object with which he or she may interact with, the current girl may be unable to collect it, as the object does not hold significance for her. Robin, for example, can interact with the TV but she will only sit down to watch it, rather than collect it. However, if the player controls Scarlet, the oldest, she will reference chaos and order before turning the TV off and collecting it. For Robin, the TV does not hold significance for the themes she represents, while for Scarlet it ties into her themes of treasuring beauty, art, and order over chaos and disorder. These themes extend to the wolf encounters, which provide the player with subtle hints of how to trigger encounter. Scarlet encounters her wolf after finding a theatre area and playing the piano. On a gameplay level, the player is simply interacting with an object to trigger the encounter. On a narrative level, the game provides hints through Scarlet's thoughts that she loves art and music, which cue the player to interact with the piano. This helps

integrate gameplay and narrative elements by defining gameplay actions through character.

By contrast, the Girl in White is the 'freest' character but has the fewest known narrative elements. Unlike the other girls, she does not have a wolf or any character-specific objects or locations. However, the Girl in White can access all the locations, objects, the map and map markers, and, above all, a means of leaving and returning to the path. On a narrative level, this calls back to how the Girl in White is capable of leading the other girls back to the path. On the gameplay level, it gives the player greater agency to explore the game world. The player is not punished for going to grandmother's house or for taking their time to explore the woods, instead giving free range to explore and play with the space however they like. The player may explore as long they wish or to simply end the level by going to grandmother's house.

### Game Space

Though *The Path*'s narrative is extremely closed in some ways, the overall game space and narrative shape is open. On one hand, the player must fulfill the Red Riding Hood story to progress through the game. The player may delay completing the girls' stories but they are, ultimately, restricted. On the other, while other games usually allow for 'deviations' or 'side quests' that eventually funnel back into a driving core narrative, *The Path*'s deviations are the driving force.

Rather than forcing the player through a series of set objectives and guidelines, the game provides a situation for the player to explore and relative control over multiple narrative elements. The player may not be able to control the general shape of the forest or which objects and landmarks will be generated, but many other elements are

dependent on the choices players make. From the get go, the player has control over what order of the girls does the player playthrough whether they immediately leave the path or on the path and go to grandmother's, and even what time of day it is, which is based by where the player is on the path. Though these may seem small, these choices affect what sort of objects the player may encounter, what narrative themes they have access to, and the time and mood of their explorations, which helps make every playthrough unique. For example, some players may choose to immediately step off the path, only seek out the wolf, and focus on completing the journey while other players may choose to take their time, attempt to find all collectables and optional interactions, and find the journey extended. Likewise, a player may choose to explore the woods at 'day' for the first half of the girls but later only explore the woods at 'night'. Of course, a difference in play styles is nothing new. However, what makes *The Path* 's unique in this regard is that most of the player's interactions with the game world are not dictated by the game or a series of micro objectives but driven by the player's choice to interact with as little or as much as they would like. The only aspect the player does not have any power over is the overall narrative.

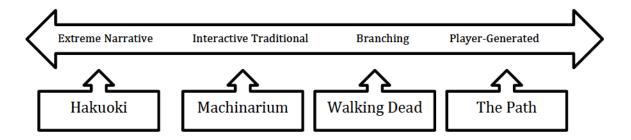
Ultimately, the player is still limited by the end of the fairytale and the death of Red Riding Hood. However, the difference in player agency before and after encountering the wolf not only guides player actions back into the overarching plot but also enhances immersion. Before the player interacts with the wolf, the player has a large amount of agency to explore the game space. After the player encounters the wolf, the game takes control away from the player. The player is only allowed to go to grandmother's house, only allowed to go forward, and, while they may briefly deviate to

visit special rooms, they must enter grandmother's room and die. On a narrative and gameplay level, this integrates player action with the game space by making the player make the final choice that dooms their girl. While the player is free to customize the tone, length, and order of the story and deviate from the overall plot, to complete the game they are forced to complete the story of *Red Riding Hood*.

## 4.2 Narrative Spectrum and Comparison Analysis

While the rubric of interactive elements was conceived as a means of breaking down videogames to their most basic elements, the narrative spectrum was intended to help articulate the overall narrative 'shape' of a game through the freedom players have to directly interact with narrative content and the impact of their actions. Though the rubric and spectrum can be used separately, they compliment each other by providing supplementary data and a base for comparison analysis across different kinds of narrative driven videogames.

For my initial purposes, I linked each case study game to a part of the spectrum to articulate four general categories for overall narrative shape, running from videogame narratives with limited player-to-content interactivity to greater player-to-content interactivity:



Looking at the overall narrative structures alone, this is a fairly straightforward means of linking and categorizing each game:

**Extreme narrative:** *Hakuoki* an extreme narrative game due to its heavy emphasis narrative with very little overt gameplay mechanics.

**Interactive Traditional:** *Machinarium* is an interactive traditional game due to being a linear experience with a set beginning, middle, and end with some interactivity in-between.

**Branching:** Walking Dead is primarily a branching narrative game due to its emphasis on player choice via branching story paths, character relationships, and dialogue options, with some overlap with interactive traditional (hence its unique placing on the spectrum).

**Player-Generated:** *The Path* is a player-generated game due to most of its narrative being generated based on player interaction with the game world.

When analyzing the individual elements in each game, however, categorization becomes tricky. For example, each of the games includes some form of branching or degree of player choice. In *Walking Dead*, player choice is outright stated to have an impact on the overall narrative from the get go and is supported through branching character relationships and gameplay opportunities. However, *The Path* not only allows the player to decide the order in which they experience the narrative but also allows them to decide which parts of the narrative to unlock over others. Arguably, they can both be said to have branching game elements but it would be a mistake to say they share the same type of narrative shape, let alone share the same meaning. The shared elements do, however, provide a point of comparison and contrast when looking at the two games. In this instance, it is possible to conclude that *Walking Dead*'s branching mechanics are centered around morality and character relationships while *The Path*'s branching

mechanics based more in providing the player with additional freedom to explore the same scenarios from different perspectives. In short, how each game approaches the idea of branching reflects how they approach other elements or if branching is even significant to the overall narrative and player agency in the first place.

What the rubric and spectrum do together, then, is not only articulate what interactive elements exist but also their impact. This helps identify where different videogames overlap, the differences behind how they use similar elements, and how player control over the narrative manifests. For the purposes of my thesis, I have done three comparative analyses based on games that share significant overlap in narrative structure and/or interactive elements. Though the following analyses do not cover all potential points of comparison, it provides examples of practical usage of the framework.

4.2.1 -Narrative Shape Overlap - Machinarium and Walking Dead: Season One

In terms of overall narrative shape, *Machinarium* and *Walking Dead* are similar. Though the player is allowed some freedom to interact with the game space and core narrative, the player is ultimately bound by a mostly linear plot progression with a set beginning and ending. However, while the games share similar core mechanics, like point-and-click and using objects to solve puzzles or initiate interactions, how they use these elements impacts the narrative shape in different ways.

Both games use point-and-click as the primary means of interacting with the game world. Typically, the games provide a mostly linear path and limited access to areas at a time but the sheer number of object, character, and environment interaction points encourages exploration. On one level, this is partially tied to the narrative presenting a scenario such as 'Josef needs an object that will let him pass through falling water' or

'Lee needs keys to get behind the locked counter'. On another, this provides players with a clear objective and an idea of where to focus their exploration. In the case of Josef, when players find they cannot go under the falling water, seeing an NPC with an umbrella allows them to infer they need to obtain it from her somehow. Players interact with the NPC and learn through her thought bubble that they need to give her the robotdog, which appears on the previous screen, which leads players to think of the necessary steps to retrieve the robot-dog. In Lee's case, Lee retrieving the keys does not require as much logic and problem solving but instead forces the player to clear a certain level of exploration and narrative progression before they are allowed to retrieve the keys. First, the player must explore the drug store until they find necessary narrative information and objects. Then the game produces a narrative reason for Lee to have to leave the drug store and complete the next level, which gives the player the last objects needed retrieve the key when they return to the drug stores. Finally, Lee is able to use objects with the initial area to solve the problem. Basically, through integrating gameplay progression to narrative, it guides players through the expected plot progression.

What distinguishes the games' narrative shapes from each other, however, is the range of potential player agency on game space. Though *Walking Dead* and *Machinarium* both limit access to certain objects and areas at a time, partially to streamline action and partially to keep players from blindly clicking everything, *Machinarium* keeps tight control over player's actions. Whenever the player progresses to the next area, players typically have a problem to solve, a pre-problem solved state for objects, NPCs, and environments, and a post-problem solved state for the same. Before the problem is solved, players can freely interact with interaction points for visual clues,

object collection and usage, and chaining together mini-puzzles to solve the area's overall problem. After the player solves the problem, however, interaction points often disappear entirely or become static, which signifies to the player that these points are no longer significant and discourages players from returning to them. By contrast, *Walking Dead* uses similar restrictions for limiting areas or removing potential interaction points but allows for alternate interactions. While environment or object interaction points may be limited, such as only allowing the player to look at and collect an object, players may also be allowed to use an object to unlock optional interactions with other characters.

What leaves a bigger impact on potential interactions is that *Walking Dead* carries over player choices across the game and reflects the consequences on the game space through branches narratives. In *Machinarium*, each segment can technically exist in a largely self-contained space, as the player only needs to complete the previous area to progress and deviations from the core narrative are not tracked. In Walking Dead, the next segment plays regardless of what choices the player makes and the tone of scenes and general narrative elements can vastly differ from playthrough to playthrough. Each branch typically has two to three main possible differences with room for additional branches to affect the scenes in subtle ways. This includes what dialogue options the player chooses, what their relationship with other characters is like, and what their previous actions were. For example, the start of episode three has 'Lee and Kenny go on a salvage trip but spot a woman being torn apart by zombies some distance away' as the core narrative. The branching options for the scene includes: Kenny is either angry with Lee for siding with Lily in the previous episode or treats him amiably for siding with him instead; Lee either mercy kills the woman but attracts the zombies and gives them less

time to find supplies or Lee leaves the woman to a painful death but has more time to collect supplies; and, in the subsequent segment, Lily is either angry with Kenny and Lee for not getting much supplies or Lily is satisfied with the haul.

Though the core narrative and progression remains constant in both games, it is not quite right to put them on the same place of the narrative spectrum. While *Machinarium*'s reinforces the interactive traditional shape, *Walking Dead*'s deviates from it, causing the game to crossover into a branching narrative shape.

# 4.2.2. Emphasized Element Overlap – Walking Dead and Hakuoki

On a whole, *Hakuoki* and *Walking Dead* provide a vastly different range for potential player agency. In the former, players only have access to one means of directly interacting with the game world. In the latter, players have access to object collection and usage, point-and-click and quick time event core mechanics, and relatively free exploration of areas. Despite this, they both emphasize similar interactive elements — chiefly, character and interactions— to prioritize the impact of player choice.

At their core, *Walking Dead* and *Hakuoki* emphasize how the player's choices affect the core narrative and characters. In the former, part of the creators' intent was to focus on the morality of the player's choices and how it affected their relationship with characters. While some of the choices are tied to a specific character, shifts in character relations often occur as a consequence of the player's actions and values rather than simply liking one character over another or picking a 'good' choice over a 'bad' one. For example, the choice of whether to try and save someone who might turning into a zombie or might be revivable relies on the player deciding if it is better to ensure their safety or try to save the person anyway. Though Kenny will always kill the character, the choice

has a drastic impact on the player's relationships with Kenny and Lily and frames the sort of morals Lee and, by extension, the player has. In the latter, player choices are framed more by the different parts of the overall narrative the player can unlock and if they bring the player closer to one of the potential love interests. Unlike *Walking Dead*, where scenes largely play out the same but with different tones, character relationships, and circumstances, *Hakuoki* links different parts of the narrative to a specific character and the player must get closer to that character to experience that branch. For example, if player wants to follow the complete rise and fall of the Shinsengumi they must follow Hijitaka's route while if they want to find out more about Chizuru's family they have to do Okita's.

Arguably, by linking characters to specific parts of the narrative, *Hakuoki* allows the players more drastic, impactful alterations on the core narrative and game space. While the first half of the game follows the same timeline for players, there are not only several branches that unlock different scenes but also the second half of the game is entirely unique to the character route the player chooses to follow. Though there is a sort of core narrative, players still have the freedom to decide the point-of-view and means they experience events, such as deciding whether the player participates in a raid, if the player is a messenger during the raid, or if they are on standby during the raid. This gives player significant control over the game's micro narratives and ensures players have to replay the game multiple times with different choices to experience all of the overall narrative. The downside, however, is that this gives players more control over the game space but limits nuances behind character relationships. While the player can choose the events they experience, the game does not track which events the player experienced

across the game, unless an event is required to unlocking a character's route. For example, while the player can decide what role they played in the raid, other characters will reference that a raid itself but not the player's role. In the long term, the only thing that does carry over is whether the player got an affection point with a character or not, which is reflected more by the interface than by the narrative itself.

While *Hakuoki* allows players to drastically affect the core narrative, *Walking* Dead allows for variance and nuance in characters and their relationships. Unlike Chizuru, who becomes more of a vehicle for different choices than a distinct character, Lee is distinct while allowing players to define the nuances of his personality. Rather than simply performing actions, Lee reflects player-determined attitudes, opinions, and justifications and the game tracks these differences through the characters. On one level, this includes short-term consequences, such as the player choosing a kind or harsh dialogue option and another character 'remembering' it and reacting accordingly. For example, if the player called Lily a bitch during an argument, she will promptly reference it in the following conversation and act more antagonistic than if the player sided with her. On another level, this has long-term consequences, both on relationships and the core narrative, which makes the game space feel more responsive. For example, in episode 4, based on the accumulation of the player's choices all or none of the group may go with Lee to save Clem. What makes the branching more meaningful is the various potential reasons the characters have for coming or not coming along or how willing they are. For example, Christa and Omid will go if the player is honest about Lee dying or if the player left Clem with them, allowing them time to bond with her. Kenny will willingly go if the player has stood by him or, if he is reluctant to help, the player has been kind to his

family and brings up Clem's importance. Ben, provided he has lived to that point, will go if asked but will willingly volunteer if the player supported him or cites Clem's support.

Though both games have different interaction opportunities and means of experimenting with game space, it would be inaccurate to say one is necessarily a stronger use of the same interactive elements over the other. While <code>Hakuoki</code> is an extreme narrative due to its limited interactivity, it still offers the player to drastically alter the core narrative in a way many games cannot. <code>Walking Dead</code>, however, allows more nuanced and long-term consequences through focusing branching through the characters. Ultimately, this allows both games to provide entirely different narrative experiences across playthroughs through alternative focuses.

## 4.2.3. Atypical Gameplay Overlap – Hakuoki and The Path

Hakuoki and The Path, despite being at opposite ends of the narrative spectrum, are unique in their emphasis of narrative and lack of traditional gameplay mechanics. In the former, Hakuoki is mostly reading and relies on one direct means of interacting with the game world. In the latter, though the player has access to some traditional gameplay mechanics, The Path makes many overt gameplay mechanics optional. However, both games take advantage of their emphasis on narrative to integrate ludic and narrative goals in the narrative and to subtly guide the player.

Though *Hakuoki* is known for its romance elements and *The Path* is known for being based on *Red Riding Hood*, neither game explicitly tells the player these are necessary to completing the game. In *Hakuoki*, the game explicitly tells the player about the status menu when they unlock it, which allows players to find the affection meter, but it does not tell players to focus on raising points. Instead, the game presents players with

a series of set decision points and relies on the player to infer knowledge based on narrative feedback. Players are quickly introduced to the formula of making a choice, seeing a scene where they get a little closer to a character in some way, and watching a cherry blossom appear on screen (if enabled) to signify gaining an affection point, which is reflected in the affection meter. If the player makes a choice and does not see a change, it is easy for them to infer they did not make the correct choice or the choice was not a meaningful one. Likewise, the corruption meter and system is not directly told to the player but through the narrative. The narrative informs the player when a character has become a bloodthirsty demon and emphasizes through dialogue both the means of controlling corruption and consequences of failing. If the player pays attention to the narrative, they have a hint of what actions are needed to progress through the game. Otherwise, the player can receive a bad ending – either from the romance meter being too low or the corruption meter being too high – and the player is left to infer what choices are needed next time. Namely, they need to prioritize getting close to one of their love interests while keeping them from going insane. Though *The Path* is somewhat blunter than Hakuoki in its objectives, The Path still relies on player paying attention to the narrative and knowing the story of *Red Riding Hood* to understand what they need to do to complete the game. The Path explicitly tells the player to stay on the path but doing so results in the game telling the player they failed and that they know where the wolf is. Players, then, are left to infer that they have to break the rule about the path and find the wolf, as per the fairytale, or they will continue to fail. Even if the player fails to fulfill any other objective, players will still successfully complete the level if they meet the wolf because they have fulfilled the objective 'tell the story of *Red Riding Hood*'.

Interestingly, though *Hakuoki* keeps tight control on player actions through set decision points, its chief restrictions are not only based on when the game allows the player to make choices but also what choices are available to the player in the first place. Rather than providing players with a consistent set of actions, *Hakuoki*'s available actions are based on the narrative context. For example, if an enemy is threatening Chizuru, in one situation she may be able to use her sword, struggle, or stay still and trust Shinsengumi to help her. In another situation where she is being threatened, she is only allowed to run or to avenge a fallen comrade. At its core, the choice of whether to attack or not is technically the same situation but within the narrative it is the difference between 'Chizuru is being held by an enemy needs to get free' and 'Chizuru is being threatened by an enemy who murdered someone in front of her and will do worse to her if she stays'. By linking potential choices to the narrative context, it not only allows more variety in possible actions across the game but also presents what actions work within the logic of the scene, which makes it easier for players to infer which choices will lead them to the narrative-integrated objectives.

Similarly, *The Path* integrates the objective 'the player must encounter the girl's wolf' into the restrictions. In order to fulfill the fairytale, players must encounter their wolf and die, otherwise they will fail regardless of how many other objectives they have fulfilled. Less obvious, however, are the restrictions in which girls are allowed to interact with particular locations or objects. Aside from the location a particular girl encounters her wolf, each girl has access to two other locations and a set of randomized objects scattered throughout the forest. Locations are easier for players to infer importance, as non-wolf locations will simply draw a comment from the girl while wolf locations will

show a cutscene with the girl's wolf. Objects are trickier because player may be able to find an object but the girl they are playing as may not be able to interact with it, let alone collect it. The game provides visual feedback for when a girl can interact with an object by either allowing the girl to interact with it or by showing an image of a girl who can collect the object. However, why only certain girls can interact with objects is tied to the themes associated with the girl. Each girl has a set of themes, which is expressed through her appearance, wolf, hidden rooms, and collectable objects. For a girl like Robin, who is associated with themes of innocence and inability to understand death, it is relatively easy to infer why Robin is needed to collect a skull or gravesite. For other characters, though they may be able to interact with a shared object, how they interact with the object and what themes are associated with the object differ depending on the girl.

Though *Hakuoki* and *The Path* lack many overt gameplay mechanics, this allows them to find alternative means of integrating narrative through unique, alternative means. *Hakuoki* uses its limited interactive opportunities to explore a variety of possible actions and leads players to infer information based on the narrative, thus increasing immersion. Meanwhile, *The Path* allows players lots of freedom to explore while still providing players with simple restrictions that increases their understanding of the characters and why certain objectives exist without explicitly telling them so.

#### 5. Reflection

This thesis began with the point that studying narrative in videogames is not about analyzing whether videogames are narrative but how videogames produce narrative.

There is no doubt that many videogames use traditional narrative elements – whether character, setting, general narrative arc, or evocative language – but the explicitly interactive nature of videogames resists typical narrative approaches. As such, it becomes tricky to balance the idea of studying videogame narrative as both a storytelling medium and as its own unique and distinct medium.

As I established in chapters one and two, there are various arguments regarding how to approach videogame narrative. From an extreme standpoint, some scholars eschew narrative in videogames altogether<sup>80</sup> while many other ludic-based approaches touch on narrative in some way. Ludic-based approaches may emphasize 'play' or more traditional gameplay elements but they still acknowledge the existence of narrative elements and their potential to impact the player's experience. Other scholars have argued for the importance of incorporating narrative elements as a basis of study, particularly as the videogame industry shifts towards closing the gap between ludic and narrative elements. Ensslin, notably, builds her framework around how videogames draw from literary techniques to stretch and explore the limitations of the traditional videogame experience<sup>81</sup> while Bizzocchi and Tanenbaum's framework attempt to look at how narrative elements are integrated into the design of the game<sup>82</sup>. Generally, however,

<sup>&</sup>lt;sup>80</sup> Eskelinen. "The Gaming Situation".

<sup>81</sup> Ensslin. Literary Gaming.

<sup>82</sup> Bizzocchi and Tanenbaum "Mass Effect 2: A Case Study in the Design of Game Narrative".

most approaches I reviewed address the importance of interactivity, either through the concept of 'play' or to address the means in which players manipulate the game content.

Rather than attempting to take an all-encompassing view of videogame narrative, let alone of videogames in general, I chose to center my approach on interactivity, as the most basic, unique definer of gameliness, and how narrative is expressed through interactive game elements, particularly due to the growing overlap between narrativeludic elements in the game industry. Though the ludic elements are often associated with being the 'active' or 'interactive' parts of videogames, game developers are attempting new ways of integrating ludic elements with narrative ones to create greater potential for player agency, immersion, and meaningful forms of gameplay. Rather than players simply transitioning from gameplay sequence to cutscene to gameplay sequence, ludic elements are tied directly to narrative elements, allowing player interactions affect the game on both on a narrative and gameplay level. As such, I built my framework and analysis around how different videogames integrated narrative-ludic elements and the impact of player interactivity on narrative content and overall narrative shape. Through understanding how narrative is produced, my aims were to identify which interactive elements were the most significant, what sorts of opportunities interactive elements allowed the player to interact with the narrative content, and what meaning occurs through player-to-content interactions.

For the purposes of this thesis, the approach I took was a mix of practical testing, analysis, and refinement – both of the framework and the data I drew with it. I started by creating a draft framework of different interactive elements in videogames to help give myself some guidelines for what sorts of questions I wanted to ask and to narrow my

scope of analysis to something more manageable. My initial draft included elements such as rewards, status, objects, obstacles, objectives, interactions, interface, and end-state. While these are all still interactive elements, when I did an initial case study test by writing a paragraph-long analysis of different kinds of games using specific parts of the framework, I found some elements were superfluous or failed to accurately answer my research questions. 'Rewards', for example, felt like it folded into objectives or objects most of the time. Likewise, 'status' had information that was usually accounted for by the interface but using interface instead of status offered more nuanced and interesting data. This led to the framework's current version, which I used for my case studies.

As a means of narrowing my scope and guiding my analysis, the framework fulfilled its purpose. It not only provided me with a base for testing but also gave me a set of consistent questions and definitions to use across four different kinds videogames. Instead of simply defaulting to conclusions like 'Walking Dead and Machinarium are the most gamely because they allow the most interactive opportunities', it is possible to break each game down to their most significant, base elements for a more nuanced analysis. Hakuoki may not have Walking Dead's sheer amount of interactive opportunities, for example, but the difference between how the two games approach branching narrative elements makes it possible to draw comparisons regarding how the two approach interactivity, despite Walking Dead having more interactive opportunities. With this in mind, it becomes easier to determine which elements are most significant to the overall game and how much agency the player truly has over the game space.

In terms of its flexibility and practical use, the framework would benefit from further refinement. Though the framework was not intended to be all encompassing or to

answer all questions regarding videogame narrative and interactivity, let alone be suitable for all kinds of games, the following concerns should be kept in mind. In regards to the rubric, though I generated large amounts of data for each case study, the rubric is likely to become much more difficult to use on large, complex games such as Skyrim or Dragon Age: Inquisition. It not only takes a lot of time to note and analyze each individual interactive element but also becomes easy to get lost in details by trying to account for every possible interactive opportunity than focusing on the most significant ones. Additionally, while many interactive elements work well for games with typical gameplay elements, analyzing interactive elements in games with atypical gameplay analysis becomes trickier. Not only does it become more difficult to decide where to draw categorical lines but also not all parts of the framework may be applicable to a game, let alone be significant to the overall game or analysis. In regards to the narrative spectrum, use of the narrative spectrum fell under a lot of subjectivity, as elements from the games caused games to bleed over across categories less neatly (i.e. Walking Dead straddling a branching and a traditional interactive narrative game). This, in part, is due to the hard categorization that arose from use of a spectrum and lack of flexibility for accounting overlapping types of narrative shapes and significant element bleed over, resulting in games being squeezed into binaries and a more limited analysis. As such, the narrative spectrum would benefit from either a more nuanced revision or a different mode of analysis to avoid being trapped in binaries.

Despite these faults, however, my framework serves to not only present an alternative approach to understanding videogame narrative but also groundwork for further refinement and analysis. Though many frameworks offer their own set of essential

elements, mine seeks to emphasize the reciprocal relationship between the player and the game's content. It is not enough to look at solely the narrative or ludic elements in themselves to understand meaning, as these elements are not significant on their own.

Instead, game elements and, by extension, the overall game experience is made significant through how the player interacts with and understands them.

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