

Storytelling Through Games Mechanics:
A Study on Dark Souls, Gorogoa and What Remains of
Edith Finch

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Abstract

The theme of this article is to explore how game mechanics can be used to narrate. As an emerging interactive medium, video games have evolved into a new media of story from a complete lack of narrative in their early days. The narrative approach of games is heavily influenced by previous art forms, such as the use of text, audio, and video to tell stories, which, while direct, are not native to the game itself. Text, audio and video, as non-interactive art forms of literary and cinematic expression, focus more on presenting some pre-determined plots to the audience. Video games, on the other hand, are media that emphasize player interaction from the time they emerge. When players are placed in the game world, they become part of the virtual world, and their actions have an impact on the game world, and a narrative form that lacks interaction can destroy the player's immersion and even break the continuity of gameplay. To avoid this, the game narrative needs to be combined with its mechanics. Therefore, through an analysis of three games that use game mechanics for narrative in the current market, this article aims to find a direction of game narrative development.

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List of Abbreviations

RPG Role-Playing Game

NPC Non-Player Character

QTE Quick Time Event

MMORPG Massively Multiplayer Online Role-playing Game

PvP Player versus Player

Chapter 1 – Introduction

1.1 Introduction to Game Narrative Methods

Before discussing ways of storytelling using mechanics, firstly the article will introduce the development of game narratives and the common game narrative techniques used today. In early days, story was not an important part of video games. They were usually just a veneer of art over game mechanics, with some simple basic background for decoration, such as Space Invaders, which had a basic background of attacking aliens, but the game itself had little "narrative" to speak of. The emergence of game narrative was accompanied by the rise of RPG in the 1980s, and as a newly developed medium, the first thing that came to mind was to borrow narrative techniques from literature and film, two disciplines that were mature enough in theory.

1.1.1 Imitation of literary narrative techniques

Imitation of literary narrative techniques refers to the transfer of textual narratives into games. Due to the limitations of technological development, this narrative technique was quite common in early games. Usually, game designers will adopt different presentation techniques, the common ways are as follows.

(i) Non-interactive text box

This type usually consists of the player manipulating the character to find a specific NPC, clicking a button and popping up a text box full of words. The player needs to read all the text to understand the background story or subsequent mission information. Famous examples of this category are *Diablo*, *World of Warcraft* (see *Figure 1*).



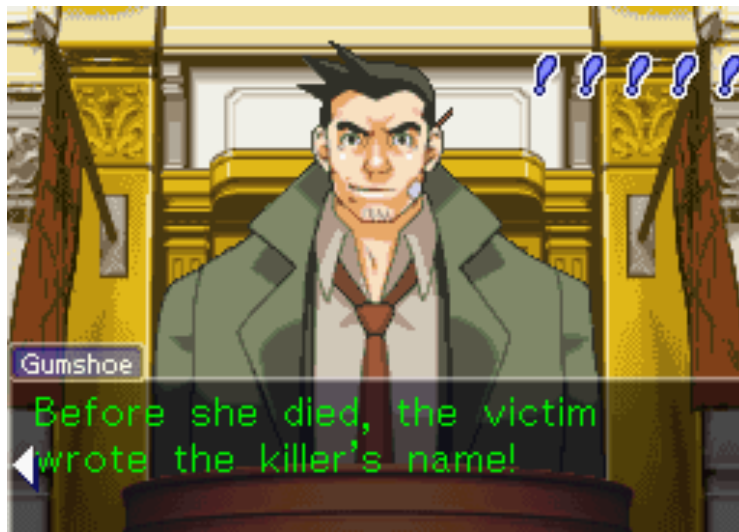
(Figure 1: World of Warcraft Screenshot. Source: [WoW Rogue Legendary Chain Part 4 \(Lore, Quest reading and npc Dialogue\) - YouTube](#))

This approach is the most convenient from a design perspective, but it is extremely lacking in interactivity and it is extremely common for players to skip text.

For players who do not care about the plot, such a narrative becomes a burden and even destroys the continuous game experience.

(ii) Interactive text box

In order to improve gameplay, interactive text boxes were created. In the early days, interactive text boxes broke up large paragraphs of text into short sentences, increasing interactivity and allowing the player to focus more, which was most common in Japan text adventure games (see **Figure 2**). With continuous development, the birth of dialogue tree brought the text narrative into a new field.



(Figure 2: Ace Attorney Screenshot. Source: [Ace Attorney - Wikipedia](#))

Dialogue tree means that when interacting with an NPC, the player can choose what to say and make subsequent choices until the conversation ends. This design gives the player a way to determine the course of the game, and usually different options will follow branching storylines, meaning the player makes different choices and gets different results. This makes the narrative itself full of playability, reducing the number of cases where players ignore the text and go directly to the next step in the process, and allowing players to pay attention to the story itself. Such as *Mass Effect's* hexagonal wheel (see **Figure 3**), and *The Walking Dead's* time-limited response dialog box (see **Figure 4**). The former method divides dialogue options into two types and places them on the left and right sides of the wheel, such as small talk and plot advancement options, aggressive and friendly options, so that players can effectively make clear what result the dialogue options will bring. The latter method requires players to respond within a limited time. If time runs out, the game will automatically select the default option. This approach is closer to the feeling of real-life dialogue.

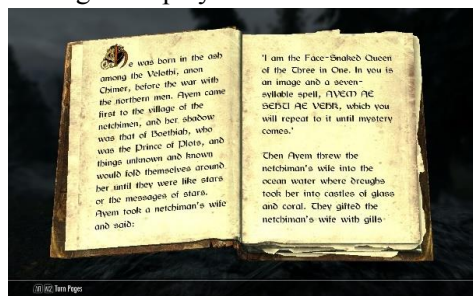


(Figure 3: Mass Effect Dialogue Wheel. Source: [Video Game Simulation and Christian Imagination \(Part 2\) | \(theologygaming.com\)](#))



(Figure 4: The Walking Dead Screenshot. Source: [Masterful storytelling returns in 'The Walking Dead: Season 2' | The Spokesman-Review](#))

In addition to this, for some long texts that cannot be broken up, items in the game can be used as a carrier to guide the player to read texts through using items. Typical examples are books and letters in *Skyrim* (see **Figure 5**), recordings and movies in *Bioshock*, and manuscripts in *Assassin's Creed 2*. Often these items are set up as collectibles, and by collecting them players can earn rewards.



(Figure 5: Skyrim Books. Source: [Books Books Books at Skyrim Nexus - Mods and Community \(nexusmods.com\)](#))

1.1.2 Imitation of film-like narrative techniques

With the development of graphic technology, games can gradually tell the story in a movie-like way. The common ways are as follows.

(i) Visual Design

As a kind of visual art, video games can use visual design to set the tone for the game. For example, neon-colored industrial cities will remind people of cyberpunk, while spaceships in a cosmic setting will remind people of sci-fi. These visual elements can convey to the player the background in which the story itself is set.

On the other hand, by building specific scenes in the game, it can also play the role of telling a story with scenes. For example, in *The Last Of Us*, the bodies of children covered by quilts in the abandoned base, and a text message "they didn't suffer" written on the ground next to them show the player a tragedy in an apocalyptic setting (see *Figure 6*).



(*Figure 6: The Last Of Us Screenshot. Source: The Last Of Us*)

(ii) Dialogue

A good characterization is essential to the story, and similar to movies, the game can show a character's personality through the way he speaks and the voice acting or motion capture actors' interpretation. And in addition to this traditional form of presentation, some games add dynamic dialogue responses to enhance the sense of feedback the game world gives to the player, thus enhancing the credibility of the setting world. For example, in *Detroit: Become Human*, according to the different decisions made by the player, there will be NPCs killing the main character or not, and the subsequent plot will be performed differently according to the previous result.

(iii) Cutscene

Cutscene is a non-interactive sequence in a video game that interrupts the player's control over the character. It has the effect of showing the dialogue between characters, setting the mood, rewarding the player, showing the consequences of the player's decisions, and foreshadowing the subsequent development.

(iv) Partial Avatar Agency

This approach is similar to cutscenes, both are triggered when the player reaches a specific location, but the biggest difference is that this approach still retains part of the player's manipulation. The most common ways are limited perspective and QTE.

(a) Limited Perspective

Whether it is a third-person game or a first-person game, the player is always given a point of view that determines exactly what the player is looking at right now. In the course of the narrative, in order to focus the player's attention, in some specific passages, the player's perspective can be forced to focus on something in order to achieve a better narrative effect. Limited perspective usually has two forms of expression, one is that the plot sets the player in a constrained situation, therefore can reasonably make the scope of the player limited. For example, in *The Evil Within*, the protagonist is roped down on the ceiling, and the player can only shake his body and turn his perspective slightly to look around (see **Figure 7**).



(**Figure 7**: *The Evil Within* Screenshot. Source: [The Evil Within Walkthrough Gameplay Part 1 - Psychobreak \(PS4\) - YouTube](#))

Another way is not to do whole restrictions on the player's movement. Forward, backward, crouching and jumping are allowed, but the player can move in a very narrow range of space, such as a narrow straight road, and they cannot turn back. The player's only route is along this narrow straight path forward. Without other distraction, the process will ensure that the player can see what the designer wants the player to see, or render a particular atmosphere. For example, also in *The Evil Within*, the player has to escape from a prison full of mechanisms, while the enemy is pursuing behind (see **Figure 8**).



(Figure 8: *The Evil Within* Screenshot. Source: [The Evil Within Walkthrough Gameplay Part 1 - Psychobreak \(PS4\) - YouTube](#))

(b) QTE

QTE means that in certain scenes, the player has to press an indicated button within a short period of time in order to continue the game. This approach has changed the situation that players can watch but not play when the game plays cutscenes. The most typical example is *Detroit: Become Human*, in which the vast majority of the game's plot is achieved through QTE (see *Figure 9*).



(Figure 9: *Detroit: Become Human* Screenshot. Source: [Detroit: Become Human- Markus vs Riot Epic Battle! Perfect QTEs. - YouTube](#))

1.2 The Uniqueness of Game Narrative

From the above narrative approaches, game narrative itself has many characteristics of traditional art forms, and the biggest difference from other art forms is the interactive nature of games. Because of this interactivity, game designers can shift more of the narrative process from the perspective of content design to the perspective of user experience. That is to say, in the process of the story, it is not necessary to create a good choice for the players, but can give more choices to the player, especially when the choice is crucial, so that the player has a better participation in the story, rather than just watching. Many current games are starting to open up the narrative choices to the players, and although the players will still find that the story itself is pre-determined and there is not even much room for choices after finishing the game, this freedom and active choice in experiencing the story process still brings the player a sense of participation which is hugely different from other art forms. In addition to giving the narrative choices to the players, the game will also construct different results according to the choice. From the diverse developments of the main storyline to the feedback of the NPC, this kind of responsiveness is also an important thing that sets the game apart from other art forms.

In addition to more diverse options, longer and deeper emotional involvement is also a more obvious difference between the game and traditional art forms of narrative. Traditional visual narrative presentations, such as stage plays and films, are most of the time presented in a short time frame. This leads to the fact that when displaying the story, these art forms need to mobilize the audiences' emotions by using plots in a short period of time, and each second of the duration serves an emotion mobilization purpose. This is not only due to time constraints, but also due to the audience's minimal involvement. Game narrative is different, as it can preset a more personal and loose process of emotional accumulation for the player. For the vast majority of games, players experience more of the game world and game mechanics and less of the plots throughout the experience. Since players need to manipulate their avatars in the game, players are more like actors than audiences, so the events experienced by avatars are easier for players to empathize with than the protagonists in novels and movies.

This involvement in the story allows the player to escape from the traditional perspective of being limited by the author or director, and to take on the role of the camera on their own, thus allowing them to explore more in the game world. For example, in the film, the audiences can do nothing but follow the director's camera to watch the plot, the audience can neither do further investigation at the crime scene, nor explore more in the castle. However, the game saves the player from this fixed perspective, so that in addition to the plot, the player can have more understanding of the virtual world and how it works. Of course, this approach can bring players a more immersive experience, but also a higher demand on the designer, because it means no matter good or bad, everything is exposed to the player, when a bug shows up or details of the design is not delicate enough is also easy to break the player's immersion.

The format of the game itself also allows it to use more diverse narrative

techniques, such as parallel narratives of main lines and branches, as well as intertwined narratives of multiple story lines. For film, theater, and literature, complex narrative techniques mean greater risk, and can easily confuse readers and viewers, resulting in unclear story line and meaning. The game is different, it is because the pace of storytelling is delegated to the player, so there is more space for the games when it comes to implement complex techniques. For example, the combination of the main storyline and branches in RPG not only avoids causing confusion in the player's understanding of the plot, but also enriches the game experience. Also, for example, in *Detroit: Become Human*, the multi-threaded, multi-protagonist, multi-choice, multi-structured narrative approach is difficult to do in other art genres.

In addition to the above-mentioned breakthroughs in narrative techniques in the game, due to the mechanics of the game, this allows it to complete the narrative through features that other art forms do not have. In early RPGs, game designers would often add elements such as mazes and large maps into the narrative process, while building a whole set of growth mechanics and collectibles for the players. The purpose of doing so was originally just to keep players stay longer in the game, but this approach also took care of the player's growth and became a motivation for the player to continue the challenge. In MMORPGs, for example, players can choose different classes and need to adopt different control styles and learn to think of different combat techniques when facing different enemies. Although it seems that these contents are not too directly related to the game narrative, but officially because of these mechanics, players can better integrate into the game and understand the rules of the virtual world.

At the same time, based on the richer and more profound interactive mechanics and virtual world display, the player can understand the designer's ideas much more intuitively and clearly than other art forms, so the designers have more opportunities to place their ideas in the game in a more diverse way and provoke more discussion among players. Take *Sekiro: Shadows Die Twice* for example, during the game, it has been conveying the concept of "Hesitation is Defeat" to the players through the mouths of the characters, which is not only one of the concepts of the game's plot, but also a summary of the game mechanics. In order to encourage the players to be more aggressive in the battle, the game has designed a lot of mechanisms to reward attack behavior. Such as interrupting enemy's attacks and adding enemy's Posture points. In addition, there are also penalties for avoidance behavior, such as not being able to block the attack when the back is turned to the enemy, as well as setting up a way of action for the enemy to trigger a long-range or surprise attack if the player flees a certain distance. With the repeated presentation of the game's narrative techniques, the players can truly recognize the "Hesitation is Defeat" design concept.

Of course, in general, game narrative is not very different from other art forms in terms of some basic techniques and fundamental ways, like the reuse of famous stereotype, the skill of creating special effects, the emotional conflict between characters. These commonalities shows that most of the narrative techniques in the field of film and literature are actually common in games. However, because of the game mechanics, as well as the emphasis on the interactive features, video games bring the player a more intuitive, immersive feeling. And this is the game narrative uniqueness.

Chapter 2 – A Study Case on *Dark Souls*

2.1 Introduction

Dark Souls is a third-person action RPG that is a trilogy series developed under the direction of Hidetaka Miyazaki, the designer of From Software, a leading Japanese video game company. Its first game was released in September 2011 and the last game was released in April 2016. The story takes place in a world that is about to be destroyed, which is plagued by the curse of immortality, and as an undead the player needs to save the world by defeating the old gods as well as the powerful warriors, then using their souls to link the fire and restore the world.

Unlike traditional RPGs, especially Japanese RPGs, *Dark Souls* lacks a clear narrative description. Apart from a few minutes of opening cutscene, the game has almost no storytelling. The system design is also extremely unfriendly to players. There is no traditional quest interface, no NPCs to guide players, and even the map system is lacking, so new players often don't know where they should go to advance the game. On top of that, *Dark Souls* does not use driving the plot to unlock maps, but opens up almost all the maps as soon as the player enters the game, which means the player may enter a late map by wandering around in disarray. This series of settings makes *Dark Souls* a very difficult game, thus leading to its high entry barrier for players.

This obscure narrative design cannot be separated from its creator, Hidetaka Miyazaki's philosophy of game design. He said in an interview that for the story construction they only need to set up a good framework and setting, these elements will be reflected through the map, architectural style and character clothing items. They are all for the service of gameplay. As the creator himself said:

“Basically, we worked on the story afterwards. We started with the layout of the game itself with minimum story around it. It's ‘story for the game’ before ‘game for the story’ for me, so as long as it meets the game's requirements in order to create immersion for the player, it's all good. I wanted the player to experience the story, so we did not focus on making a linear storyline. I don't want to tell the story: I prefer the players to unravel it by using their imagination and our hints. I don't want to make a game that chases the story, so we refrained from putting in too much information and the hints were made vague in order to make the player ‘become one with the story’. We just provided information in certain areas to help stimulate the player's imagination. So... for those who want to know the story, there are lots of hints. The question is, where to find them? A lot of information

is written here and there in item descriptions. If they want to know more, I would like the players to read them.”

It is different from other games that focus on the story, such as Final Fantasy Series, the game making process of such type is let the writers firstly create a complete game script, then start the game development work. And in the game, the player's experience of the story is the most important part of the game. The background setting of the game is mostly told through NPCs, while it has a clear main line, which makes the quality of its story account for a large part of the overall game evaluation.

Dark Souls' distinctive focus contributes to their unique narrative model. The game script relies heavily on the outline. After determining the general story, the designers will start creating various elements and terms, then setting the background for the characters and descriptions for the items and other details. For example, for the NPCs, often a character represents a country, such as Siegmeyer represents the sincere, honor-oriented Catarina, Knight Lautrec represents the sinister Carim, Dusk represents Oolacile, through these characters, players can have a general understanding of the game's power distribution (see **Figure 10**).



(**Figure 10**: *Dark Souls* Characters. Source: [You Cried: The 10 Most Tragic Dark Souls Characters, Officially Ranked \(thegamer.com\)](#))

Dark Souls encourages players to use their imagination to understand the whole story, based on which the design team will ensure the game mechanics is reasonable. *Dark Souls'* narrative is very audacious and innovative, it can be divided into three ways, the first is "narrative by player's behavior", the second is "narrative by game mechanics". The third is "narrative by settings". These three narrative techniques will be explained later in the article.

2.2 Narrative by Player's Behavior

As mentioned in the previous article, the game will increase players' involvement in the story by delegating some of the choices to the players, the most common way is to choose different dialogue options. In *Dark Souls*, in addition to the

above, the game also gives players a more crucial option to achieve this level of participation in the story, that is, players are allowed to kill NPCs.

NPCs in *Dark Souls* can be divided into four categories. The first is functional NPCs, they can provide players with services such as repairing equipment, upgrading, and buying items. The second is neutral NPCs, these characters themselves may have certain functional NPC abilities, and some of them can also be summoned by players to assist in combat. But when players attack them, they will become hostile. The third is hostile NPC, this kind of character will invade and attack the player in a specific position to interfere the game process. The fourth category is the plot-related NPC, this kind of character is the least in the game, they usually cannot provide any items for the player, but will tell the game secrets or important clues to the player.

The above four types of characters are all attackable objects, and along with the player's attack on them will trigger different subsequent results. Killing the first type of NPC will cause the player to lose a service, such as killing a blacksmith will cause the player to lose the opportunity to buy weapons. Killing the second and third types of NPCs will even give the player some special rewards. The game designers have placed kill rewards on almost all of the NPCs in this category, and killing them will most likely result in exclusive equipment in addition to a large amount of souls (in-game money). The fourth type of character usually does not have the ability to attack nor fight back when the player attacks them, but the game usually sets up some NPC internal relationship for this kind of NPCs, that is, killing this type of NPC will trigger another NPC to kill the player. For example, in *Dark Souls I*, if the player chooses to kill Gwynevere in Anor Londo, then the Firekeeper of the map will hunt the player down. Next for the disposal of the Firekeeper will lead to a new round of plot decisions. By choosing not to kill the NPC, each time the players teleport to the map will be immediately attacked by the Firekeeper. By choosing to kill the NPC will lead to the map of the transfer point dysfunctional, so if the player still wants to come here later to explore, they need to cross most part of a dangerous map.

This decision-making power in addition to increasing gameplay, but also let players struggle with the choice of items or morality. This design approach appeals to both hardcore players and emotional players, bringing the overall game atmosphere to a higher level.

The game also has a message system, which allows players to leave messages on the map, usually about the player's feelings or pointing out hidden items or hidden pathways, which are randomly seen by other users who are playing the game. Players can choose whether or not to approve the message after reading it, and if the person to whom the message belongs is online when it is approved, it will give them a heal, which may save their life at a critical moment in the battle.

In addition to the operation of the message itself, players can also choose whether to believe the content of the message to take action. For example, the player will leave a message on the cliff saying "jumping off the cliff will lead to a hidden pathway", which may be true or may be a prank. This uncertainty also really adds a lot of fun to the player experience (see *Figure 11*).



(Figure 11: Dark Souls Message. Source: [How did Dark Souls II's in-game message system affect player behavior? | VentureBeat](#))

2.3 Narrative by Game Mechanics

2.3.1 Death Mechanics in Narratives

Hidetaka Miyazaki's design for the death mechanism is very unique, from its early works *Demon Souls* to the latest *Sekiro: Shadows Die Twice*, the death mechanism is always an important part in the gameplay and storytelling. In common death mechanics, when a player dies in a battle, the game will read the data from the last check point, and usually there will be no loss other than process. But none of Hidetaka Miyazaki's games have this feature. Instead of the former mentioned method is the bonfire system, which acts as a checkpoint for each level and is scattered throughout the world. By resting by the bonfire, the avatar will get fully healed and regains all of his healing items. Players can also level up at the bonfire as well as other functions such as adjusting magic abilities, repairing and upgrading equipment. Also resting by the bonfire will reset all enemies in the world except for bosses and NPCs. When the player dies, he or she will respawn at the last bonfire point he or she sat at. This mechanism allows the progress of the story not being interrupted. For example, if a player is killed multiple times by an NPC in the game, that NPC will taunt the player, much like the battles between players in online games. In addition to this mechanics, the game also has a very harsh punishment mechanism for player deaths. *Dark Souls* has designed the enemies to be very strong, not to mention the complex maps that will occasionally harm the player, which makes every action of the player need to be cautious.

This extremely unfriendly death mechanism will dissuade many players, but it is perfectly blending with the concept of the game's story. The story sets the player to control just a tiny undead, and they need to face powerful enemies such as old gods and legendary heroes. It is because the protagonist has the characteristic of immortality that they can keep trying to defeat the enemy. And this growth is not only limited to the avatar data panel or a few cutscenes of the story, but also the results of the growth of the player itself.

In addition, the game also randomly reads the actions and deaths of other

players in the same area, leaving a lot of bloodstains and shadows, and by investigating the bloodstains the players can see what caused the deaths of other players - this way of "using network elements to shape the atmosphere of the single player narrative" builds the game's atmosphere quite well, and a dark fantasy world full of bizarre souls jumps out at the players.

2.3.2 Covenant Mechanics in Narratives

The game's team up and PvP battles are also quite interesting in design, and these traditional MMO elements actually produce a completely different experience after careful design. Players can use different items to join diverse covenants and then wait for friendly players to collaborate, or hostile players to invade.

This mechanic, in addition to providing playability, is also a concrete manifestation of the covenant settings in the game's story. For example, in *Dark Souls I*, there are a total of nine covenants, and each requires players to complete different tasks to increase their rank. Such as Warrior of Sunlight, which turns players into golden phantoms and can be summoned by other players, by helping other players kill bosses they can get rewards. This is in line with the covenant setting which is following the justice Great Lord Gwyn. Another example is Blade of the Dark Moon, which requires players to invade the players who have sinned, and the only way to get a reward is to kill that player. This is in line with the covenant believing in Gwyndolin, who is the guardian of Anor Londo. In addition to the player's own behavior, the game also has a design. In certain boss fight, the boss can summon players of a particular covenant to make the game more difficult (see *Figure 12*).



(*Figure 12: Dark Souls II Mirror Knight. Source: [Dark Souls 2 PvP: Mirror Knight Summons - YouTube](#)*)

2.4 Narrative by Settings

This narrative approach of *Dark Souls* is not directly told to the player, but requires the player to use their own observation skills and reasoning ability to indirectly understand the backstory of the game. This alternative design cannot be separated from its game design order. When making *Dark Souls I*, the design revolved around the map. The map design determines everything else. After settling what needs to happen in each

area, the design team immediately drew a rough map, and then once the basic layout of the area is decided, it followed by other detailed work. As the creator Hidetaka Miyazaki himself said:

“This is actually how most of the areas were constructed. The map design was really what dictated everything else, once we determined what needed to happen in each area we would immediately draw up a rough map, then once the basic layout of the area was decided, we'd work on the finer details. Through the rough map I was able to communicate the requirements, structure and appearance of an area to the artists, and have them develop those ideas through collaborating with one another. I'm never satisfied with design works that simply follows the design brief so I often requested that the artists and designers add some of their own ideas. I believe that these ideas can enrich the area, if not the entire game, although this can lead to more work of course.”

Dark Souls Series is designed around the theme of "souls". Players need to collect the souls of the bosses to advance the story, and the souls held by the players themselves will make them the prey for other players. In addition, the designers cleverly designed the soul as an item to achieve a narrative goal. In the crisis-ridden land where the story takes place, souls are scattered everywhere, the soul of a brave warrior can be picked up at the door of the final boss room, and the souls piled up at the end of the alleyway may foretell a terrible trap, the location of these souls gives a hint of the history of what once happened, attracting players to find the story behind it. This approach can even be applied to the portrayal of character relationships. *Dark Souls I* has a pair of NPCs who are in an ambiguous relationship, however they appear in the game alive only once, and it is difficult for players to speculate on their relationship through this brief communication. And after the death of the man, the player can pick up the woman's soul in front of the man's tombstone, with only this short item collection process, it describes a profound relationship between these two characters (see *Figure 13*).



(Figure 13: *Dark Souls I Ciaran*. Source: [Lord's Blade Ciaran - Dark Souls Wiki \(wikidot.com\)](http://Lord's Blade Ciaran - Dark Souls Wiki (wikidot.com)))

Then, there are a large number of text on the game items. These information is often the easiest for players to ignore, but if players are willing to spend time reading this information, they will dig out the game's hidden plot. Here will use Miyazaki Hidetaka another Souls-like game *bloodborne* as an example. The game has an item called *Sedative*, can be used to clear frenzy status, the item's description reads:

"Liquid medicine Calms the nerves. Those who delve into the arcane fall all-too-easily to madness, and thick human blood Naturally, this often leads to a reliance on blood ministration. Naturally, this often leads to a reliance on blood ministration. "

And the game has an old lady who will constantly provide the player with a *sedative*. By linking her action to this text, players can form an ambiguous narrative chain.

In summary, *Dark Souls* uses its mechanics and settings as well as the player's participation to combine into a very unique narrative approach. This approach makes the player more like discovering the story than experiencing it.

Chapter 3 – A Study Case on *Gorogoa*

3.1 Introduction

Gorogoa is a puzzle video game developed by Jason Roberts and published by Annapurna Interactive. It released on December 2017. The story is divided into 6 chapters, and the difficulty of the game and the rhythm of the plot also increase through gameplay. The overall duration of the game is around 90 minutes, the game does not have any narration and dialogue, and there are no cutscenes, the storytelling all relies on graphics and music to show.

At the beginning of the story, a mysterious creature swings its splendid body and slowly walks through the city. Then with the camera pulling away, it reveals the real protagonist of the game. *Gorogoa* uses a non-linear narrative structure to show the player a magnificent journey across time and space. The story line can be described as a microcosm of the modern world, and players can find traces of the protagonist's life journey in scenes, buildings, and photos: a brief period of peace followed by years of constant war, then it comes a long period of post-war reconstruction.

The game interface is divided into four panels, and players need to click and drag the panels to combine different effects in order to solve the puzzle (see **Figure 14**). At times, the objects in the scenes break the boundaries of time and space, allowing the player to travel through the past or the future, and at other times it also connects two locations that are at opposite ends of the spectrum.



(**Figure 14:** *Gorogoa* Screenshot. Source: [Gorogoa - GOG Database \(gogdb.org\)](http://gogdb.org))

Jason avoids using existing language and words as much as possible in the game, even the title *Gorogoa* has no meaning in any language, it is a completely fictional word. The narrative technique used by *Gorogoa* is quite brilliant: it circumvents all textual distractions and uses the most primitive graphic narrative to build Babel in the game.

3.2 Narrative Puzzles

Before explaining the narrative of *Gorogoa* itself, it is important to first define narrative puzzles. According to Fernández-Vara who summarized, "puzzle design means providing the player with a challenge that has one solution, and requires thinking rather than skills", all puzzles contain both a problem and a solution, and can be either a coded door or a mathematical puzzle. They usually have a role in advancing the process of the game, as the player needs to crack a specific puzzle in order to move on to the next level. And the narrative puzzles are those that have a narrative function.

Most of the normal puzzles require the player to successfully trigger a mechanism to obtain a new item, or to use a special ability to find a special item. A typical example of the former is *Silent Hill 2*. In the game, there is a box locked by many chains, to open it the player needs to explore the map (see **Figure 15**). A typical example of the latter is *Bioshock*, where the player can melt the frozen door to reach a

new scene after acquiring the incineration ability (see **Figure 16**). These puzzles are mainly used to increase the playability of the game, usually without a narrative function.



(**Figure 15:** *Silent Hill* Screenshot. Source: [Louise Puzzle | Silent Hill Wiki | Fandom](#))



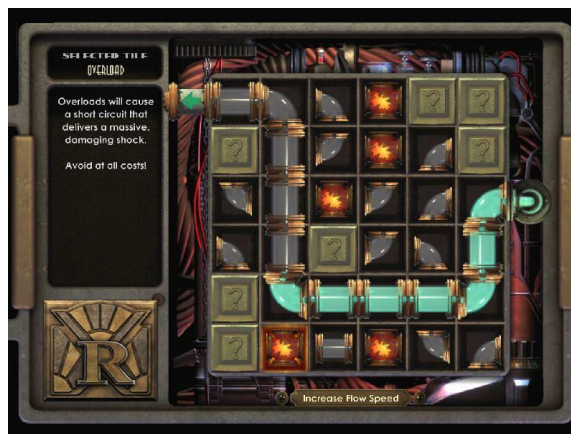
(**Figure 16:** *Bioshock* Screenshot. Source: [Medical Pavilion - BioShock Guide and Walkthrough \(supercheats.com\)](#))

In this way, the player needs to focus more on the act of "finding" the solutions, whether it's the items needed to be found or the rules of solving them, so the goal is clear from the beginning. After finding the key items or solution ideas, the problem will be solved. In the game, there is a very common scenario, which is that the player's way is blocked by an obstacle, and in the room there is another moving object which have the same shape with the obstacle. Therefore, through observation, the player can find out that to make the obstacle move they need an item, then find this item becomes a necessary decision. *Dark souls 2*'s puzzle is this form (see **Figure 17**).



(Figure 17: Dark Souls 2 Screenshot. Source: [Dark Souls 2 - How To Unpetrify Statues - YouTube](#))

Another example is the hacking puzzles of *Bioshock I* (see **Figure 18**), where the player needs to connect the start and the end of the current route in a limited time, in order to crack the store or surveillances. The mechanics of the puzzles themselves are easy to understand, yet highly replayable. These puzzles are fun to solve, but this sense of fun is more dependent on the mechanics of the puzzle than on the story being driven by the puzzles. Thus, in essence, it is still the same construction idea as above.



(Figure 18: Bioshock Screenshot. Source: [On The Monney | Ramblings and Rants from a PR Student and Gamer \(wordpress.com\)](#))

When encountering such puzzles, the players can think from the puzzles themselves, and do not need to know much about the story of the game, even if they have no knowledge of the game story, the puzzles can still be easily cracked. Players see the puzzle A, B, C, very intuitively know the next move is to find solution A, B, C. The focus of the solution is often where these items are and how to get them. This deduction of solution is more linear, although the process of implementation is still unclear, the solution is already predictable. Such puzzles are often designed to be obstacles that block the player's progress, and the player is pushed to solve these

problems, in a passive acceptance of the project.

Narrative puzzles are very different from the above-mentioned puzzles. Narrative puzzles are usually not independent by themselves, and once they are separated from the game itself, their playability is greatly reduced. For example, the flower puzzle in *Rusty Lake* (see **Figure 19**) requires the player to synthesize different colored flowers according to the game's hints, which ultimately allows the character to complete conception. It's hard to say whether this puzzle is still engaging after being stripped out of the game; even the solution to the puzzle itself serves the plot, which is totally different from the purpose of clearing obstacles as in the puzzles mentioned above. This brings us to the important characteristic of narrative puzzles, which is to serve the storytelling of the game, even at the expense of mechanics if the complexity conflicts with the purpose of the storytelling. And during developing process of *Gorogoa*, Jason Roberts cut out many scenes to better explain the story.



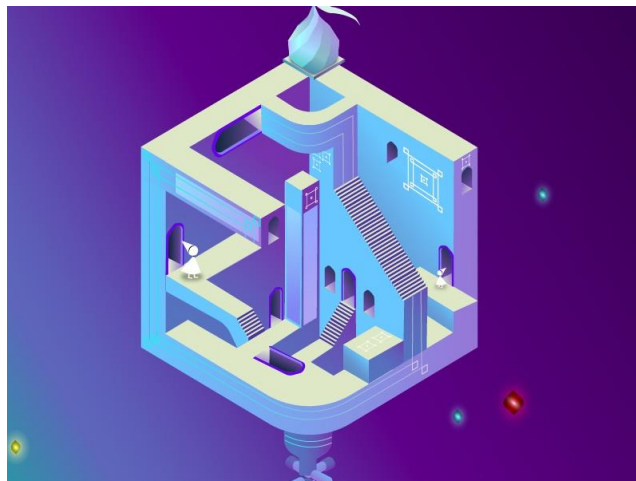
(**Figure 19:** *Rusty Lake* Screenshot. Source: [Rusty Lake Roots: Complete Walkthrough Guide | Page 4 of 12 | AppUnwrapper](#))

Narrative puzzles methods help the player get free from the situations where the story is stuck by the puzzles. More than that, it acts as carrying out the story. Therefore, when the players face them, they will have a more active attitude rather than a passive one. In *Gorogoa*'s exploration process, the most important thing is to discover "connections" through the game. To discover the connections between the different elements in front of the player, they need to find a clue then reveal answers through the connections. And since *Gorogoa* does not have any textual hints, even the existence of the puzzle itself requires the player to pay more attention. The first two levels of *Gorogoa* are less difficult and do not require much thought. The main purpose of the first two levels is to teach players how to play the game, and how to identify the puzzles in the game. Starting from the third level, players will find clues hidden deeper and deeper, and this is the moment when the designers present the whole game to the players. If you strip away the story and look at the decryption mechanism of the game itself, it is actually done by moving different layers of the screen to complete the decryption, which is very much like the process of using Photo Shop, the designers are actually shaping the player's non-flat way of thinking (see **Figure 20**).



(Figure 20: Gorogoa Screenshot. Source: [Gorogoa Gameplay 2 - YouTube](#))

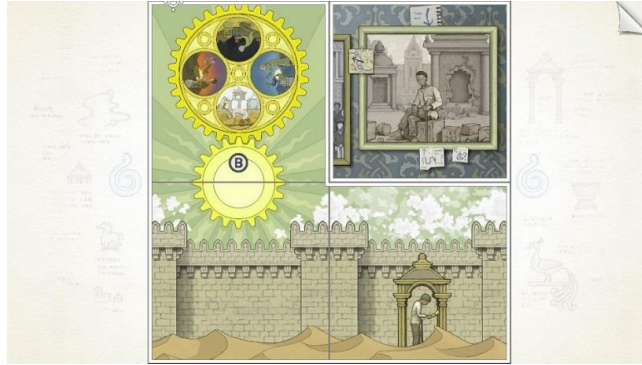
Gorogoa is very "three-dimensional" in terms of the design of the puzzles. By three-dimensional, it does not only refer to the spatial structure of the game, but also that the designer wants to guide the player to consider the elements of the game in a three-dimensional way. Similar design is *Monument Valley* (see **Figure 21**), the game's most distinctive feature is the wonderful space rules, the game is inspired by Escher's paradox space. By using visual deception, the protagonist can smoothly pass through different places, and finally get out of the maze. The designers created a series of rules in the game, and only need the player to learn these rules, as for how to use them, the choice is entirely left to the player. The players can have completely different solutions to the same levels and puzzles, and the designers don't interfere or limit the possibilities the players come up with, and the players are happy to investigate and explore them.



(Figure 21: Monument Valley Screenshot. Source: [2.5D by Tfouconzz on Dribbble](#))

It is also *Gorogoa*'s three-dimensional design that gives it a very unique and completely self-consistent way of advancing the story. The whole game is trapped in a four-panel grid, the player can freely disassemble the layers, and when two layers from different panels have the same color or items meet together, they can be connected, and the distance of the camera will change accordingly. A picture focused to the back of the

main character can be easily pulled to a distant view by moving the layers (see *Figure 22*). A puzzle that traps the player in the future may have its solution in the past (see *Figure 23*).



(*Figure 22: Gorogoa Screenshot. Source: [Buy Gorogoa Switch Nintendo \(instant-gaming.com\)](http://BuyGorogoaSwitchNintendo.com)*)



(*Figure 23: Gorogoa Screenshot. Source: [Download & Play Gorogoa on PC & Mac \(Emulator\) \(bluestacks.com\)](http://DownloadPlayGorogoaonPCMac.com)*)

Gorogoa's narrative puzzles mechanics are unique not only in the way the story is presented, but also in reflecting the idea of "connection" which is the theme of the game. And the story is also linked by the main character's choice and his action. If we look at the story in the order of its development, we can probably understand the story is that a young boy embarks on a journey to find a strange creature because he saw it when he was young. During the journey, he experienced war and also developed a strong faith, and finally got a glimpse of the truth and completed the journey. *Gorogoa* breaks the continuity of the story into pieces and attach them together with similarities in the scene. This storytelling method gives the player a space to explore and leads the player to explore actively.

Gorogoa's story is designed more like an interactive storybook than a traditional narrative game. The designer has packaged all the puzzles and story and hand over completely to the player, who can disassemble the story at will under the rules and complete the story by piecing together different clues. When the players intervene in the game world according to the rules, in turn the game world will respond

to the player's actions. This sense of interaction gives *Gorogoa* a charm unlike any other game.

Chapter 4 – A Study Case on *What Remains of Edith Finch*

4.1 Introduction

What Remains of Edith Finch is a 2017 adventure game developed by Giant Sparrow and published by Annapurna Interactive. The game generally takes the form of putting together multiple short stories to tell the story of an ancient family from Norway whose members have died over the centuries because of a possible family curse. But what is clear is that it is not just a "Finch's Strange Death Collection". The main narrative perspective of the game comes from the diary that Edith Finch left for her child and tells the story of her experiences as the last member of the family who return to the old house to find out the secrets of the family's past. In the maze-like mansion, the entrances and exits of the hidden passages are often hidden in book piles. This method makes the exploration itself similar to reading a mysterious and obscure book. The meaning of the book is not fixed at the moment the text is formed, rather, it always remains open, waiting to be interpreted and explained. From this perspective, what really matters is not even the family history itself, but Edith's testimony to it.

In the game, most of the family members' stories are recorded in a specific text, so it seems that the diary left by Edith is the same as others' existence, and although it preserves many tragedies of the relatives, it is still essentially Edith's personal story. The existence of this character is obviously not only to provide a perspective for the storytelling, for it is in Edith's narrative that we see how those stories, which were originally parallel in time sequence, are placed in a common space and time. Therefore, it is necessary for the player to pay more attention to Edith herself and try to appreciate the feelings of the character who steps into the unoccupied house and discovers the moment of death of each of her loved ones. From the stories she tells and the way she tells them, the players can get a clue of what these stories mean to her. After all, the process of narration is also a process of someone speaking about themselves.

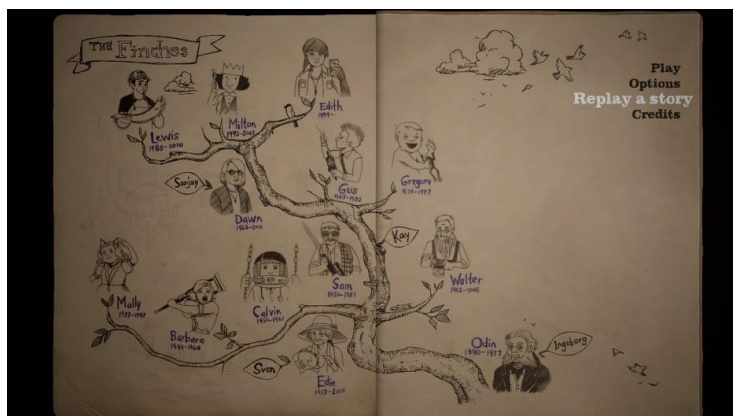
In addition to the common sense of absurdity, the stories in the game vary in styles, and the meaning of each character's death is very different, yet its true meaning is very obscure. In these stories, the design team is constantly experimenting with new interactive narratives. The game implement both literature and visual way to show the players the infinite possibilities of the interactive medium in narrative.

4.2 Immersive Storytelling

Before exploring the use of immersive storytelling techniques in *What Remains of Edith Finch*, first this article will make a statement about its concept. The so-called immersive storytelling is to mobilize the audience's psychological and physical feelings, so that the player can be fully immersed in the virtual world.

Immersive storytelling is arguably the ultimate goal of every storyteller, but there are enormous difficulties in achieving it. In traditional art forms such as fiction and film, the audience participates only as a spectator, which instinctively disconnects the audience and the story. Video games, on the other hand, are relatively easier to immerse players in a fictional world because of their interactive nature. Of course, with the development of technology, VR technology has also been applied to a variety of art forms, including games and movies, allowing the audience and players to further immerse themselves in the virtual world in objective terms.

What Remains of Edith Finch, as a story-driven game, still uses a lot of narrative puzzles to advance the game, but unlike the *Gorogoa* which separates the players and the avatar, this game combines the player's actions with the specific behavior of the character, and because the game itself adopts a first-person perspective, it achieves a high degree of overlap between the player's behavior and that of the character. This high degree of overlap between the player and the character also makes this game retain the player's sense of involvement although it does not offer any choice to the player in the story development. The game is divided into a total of thirteen chapters (see **Figure 24**), each of which is designed with different interactions according to the story.



(**Figure 24:** *What Remains of Edith Finch* Screenshot. Source: [Everything Ends Trophy • What Remains of Edith Finch • PSNProfiles.com](https://www.psprofiles.com/achievements/what-remains-of-edith-finch))

The next step is to analyze how *What Remains of Edith Finch* achieves a high level of player engagement in a closed story by breaking down two typical chapters in the game.

Lewis' chapter can be seen as the game's most exciting stand-alone chapter, in which the player takes on the role of a mentally ill young man named Lewis, who has an extremely rich imagination and is often immersed in the fantasy world he creates in his head, especially during his daily work. In the fantasy world he is an adventurer, exploring caves and crossing straits, while in reality Lewis works in a gloomy cannery, and the job is chopping fish heads which is extremely boring, what he does every day is to stand in front of the machine chopping off fish heads and then throw them into the conveyor belt in front. In the narration of this part of the story, the game requires the

player's to use both of their hands to control Lewis' behavior between fantasy and reality, in this way, it achieves a natural balance between the two sets of narrative texts. The realistic fish cutting is repetitive and tedious, and the player needs to use the right hand to manipulate the mouse, thereby to simulate the action of the character's right hand of chopping the fish. Swipe right to chop the fish, and swipe forward to throw the fish. The fantasy world, however, is much richer, and the player has to control the character's movement by manipulating the keyboard with the left hand. It should be mentioned here that the two worlds take different perspectives, the real world is shown from a first-person perspective and the fantasy world is shown from a third-person perspective, which requires a certain level of player coordination since the two operations are different points of view. At the beginning, the player may appear to be unable to do both hands' work at the same time, but it only takes a few minutes to get used to this operation. As experienced by the character, the right hand operation is extremely simple and mechanical, and the player can soon focus on the left hand, which is the operation of the fantasy world, while the action of killing fish is non-stop.

In order to simulate the mental state that the character is in, by this it means getting more and more caught up in the fantasy world, the game screen changes as well. In the initial stage, the screen is dominated by the real world, with the fantasy world being only a small part of the upper left corner (see *Figure 25*), while as the character is immersed in the fantasy world, the fantasy world becomes more and more colorful and occupies more and more of the screen, eventually occupying the entire screen (see *Figure 26*). What the player hears and feels is also what the character hears and feels. The brilliant colors and cheerful music make the fantasy world even more realistic than the real factory, and after making choice of the sailing route, it makes the players gradually shift all their attention to the fantasy world. In Lewis's fantasy, after a long voyage, he finally arrives at a palace located at "east of the sun and west of the moon", but after opening the door, he steps into the gloomy canning factory where he works. At the moment Lewis opened the door, the fantasy world perspective completed the natural transition from third-person perspective to first-person perspective. In general, the core difference between first person perspective and third person perspective is that the former one provides a sense of immersion, and furthermore, the perspective also involves a certain moral tendency, in first person, the player sees the world from the perspective of the character, at this moment, "I" is "he/she". This actually creates more space for the character development and it makes it easier for the player to reach the same value with the character. Only in the process of personally cutting fish and exploring the fantasy world, the players are more likely to understand and identify with Lewis who is addicted to fantasy.



(Figure 25: *What Remains of Edith Finch* Screenshot. Source: [What Remains of Edith Finch : Lewis' story - YouTube](#))



(Figure 26: *What Remains of Edith Finch* Screenshot. Source: [What Remains of Edith Finch - WWGDB](#))

And in the chapter of Barbara, the game again utilizes multiple perspective switching to build a story which is difficult to distinguish. In this chapter, the only thing that can be confirmed is that Barbara is a has-been child star who disappeared from her home on a rainy night, and the police never found her trace except for one ear. The game's telling of Barbara's story does not begin with Barbara's own diary or photos, but through a horror comic based on Barbara's events. At the beginning of the story, the game is still displayed from the perspective of Edith reading the comic (see **Figure 27**). One rainy night, Barbara's father is injured accidentally, so her parents go to the hospital together and leave Barbara home alone with her brother Walter and her boyfriend Rick. As a has-been child star, Barbara has always wanted to return to her acting career, so she practices the scream that made her famous as a child in order to regain the public's favor at a movie convention in a few days. However, all this does not go smoothly, Barbara has never been able to recreate the style of the past, in order to let Barbara find the childhood performance of the state of panic, the boyfriend left Barbara alone to plan pranks. As the story progresses, part of the cartoon on the book turns from static to an operable interface (see **Figure 28**), which, in addition to increasing interactivity, also

shows that Edith is more immersed in the story at this point. In the next section of the narrative, the story is in a highly tense atmosphere, and this part is all told through manipulable images until the story proceeds to Rick's failed prank, which breaks the whole tense atmosphere, and the images are restored from dynamic to static. In the rest of the story, the home is really broken into by gangsters, they attacked Barbara and eventually killed her.



(Figure 27: *What Remains of Edith Finch* Screenshot. Source: [Review of What Remains of Edith Finch Video Game \(sweetyhigh.com\)](#))



(Figure 28: *What Remains of Edith Finch* Screenshot. Source: [What Remains of Edith Finch - Barbara's Story - YouTube](#))

Throughout Barbara's story, the player is never out of Edith's point of view, and Edith's hands as well as the desk are always visible on the screen. As mentioned above, the first person will make the player greatly empathize with the character and will be more inclined to believe what is happening in front of them. However, this chapter actually shows a comic adaptation of a real event, which is almost impossible to be the truth. In order to avoid players' misunderstanding of the story, the game did not use the same perspective as the other chapters. But even if the story is fictional, the

game designers still do not want the player's emotions completely out of the tension, so in the dangerous episode of the comic, the cosmic shows Barbara's first-person perspective and allow players to operate. On the one hand, the narrative tension is maintained, and on the other hand, it reflects Edith's possible view of the story.

What Remains of Edith Finch, as a single-line process narrative game, allows players to empathize with the character's experience and immerse themselves in the story through the use of player manipulation and perspective switching mentioned above.

Chapter 5 – Conclusion

As an interactive medium, games inherently surpass other art forms in terms of immersion. When the player enters the game, he or she is no longer a spectator, but a part of the fictional world. Almost all traditional narrative methods, such as text, video, and audio, can be used in games, but this does not mean that game narratives should be stuck in traditional narrative techniques. When building a grand science fiction story, if all the background settings are narrated by text or by NPCs to convey, but pay not much effort in the game's environmental design, it will not be a compelling game. The classic space horror game *Dead Space* uses dark lights and scattered corpses to create a claustrophobic spaceship full of danger. In addition to that, the sound effects play an important role in mobilizing the player's uneasy emotions. From time to time, the sound of pipes colliding in the enclosed spaceship, the eerie music that plays when riding in the elevator also increase the anxiety of the players, these elements together with the visual design construct the story of *Dead Space*.

And when the game relies too much on a certain narrative technique, it also needs to be wary. If all the storyline and character display are shown by cutscenes, and if there is no restriction for the players' behavior when the player controls the character, or too many and long lasting cutscenes, this will inevitably break the player's sense of immersion. In the game of restraining the players' behavior, *Assassin's Creed* is a good example. The protagonist is set to a role that will protect civilians, but the game itself allows players to attack civilians, in order to be able to restrain the player's behavior, the game will punish the player for killing civilians. And by killing more than a certain number of civilians, it will directly trigger the game failure to restore the data from the last check point. *Death Stranding* is a typical example of a game with too much cutscenes that interrupts the continuity of the game. Even though *Death Stranding* is a game of high quality, from the game mechanics to the game world setting, all complementing its "connection" theme, but the game's extensive use of cutscene severely disrupts the continuity of gameplay. In the game settings, if the players enter a dense enemy area, the game will automatically play a cutscene lasting for a dozen seconds. During the cutscene duration, the player is unable to perform any operation on the character. This may cause a negative experience for the players. For example, when the player is driving a vehicle in the viaduct, it is very likely to cause the player to fall off the bridge and fail the mission with a cutscene playing. And this failure itself is not caused by the player's mistakes, but due to the game's unreasonable design, such negative feedback to the player is no growth experience to speak of.

In the process of choosing the method of narrative, it should be integrated with the game mechanics and story themes to ensure that what the player sees and feels is consistent with what the creator wants to express. *Detroit: Become Human* has an excellent performance in terms of audio and visual presentation as well as the complexity of the game's story, but the cutscene is interspersed with a lot of QTE, which increases the player's sense of involvement but breaks the player's viewing of the cutscene. In response to the QTE, the player's visual focus will be on the button prompts rather than the current events, which will make the majority of the screen information wasted. Trying to convey information does not have to be conveyed in a direct way like through text or cutscene, if the player can be allowed to learn the story setting through the game mechanics, it can give the player a deeper understanding. For example, in *Bloodborne*, the designers aimed to create a crazy world similar to Cthulhu's mythology. In addition to working on enemy design and item descriptions, which are intuitive mediums, the game's design for regaining health points allows the concept of "crazy" to be better conveyed to the players. The game set when the player suffered an attack, if they can attack back at the enemy within a certain period of time, they will be able to restore health points. This design has created a phenomenon, that is after being attacked, the first reaction of some players is not to avoid the battle, but to launch an aggressive attack on the enemy. This strategy itself is very "crazy".

In conclusion, as a media that can carry a story, video games should be more comprehensive in the design of the narrative, Different from other media, the game designs a complete and interactive world. How to combine the game mechanics and other content in order to allow the player's understanding and the producer's expression to reach a common frequency, is the most important part of the narrative design.

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