Narrative agency in video games: a case study on how *NieR: Automata* embraces its medium

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Abstract

In this thesis I analyze video games as a narrative medium by focusing on the 2017 video game *NieR: Automata* by director Yoko Taro and development team PlatinumGames. The main argument of the thesis is that for video games should utilize narrative elements that are unique to video games, such as player interaction. Since video game studies is a relatively new field, it does not have an established theoretical framework similar to traditional media such as literature. Therefore, I present and critique historically relevant approaches related to game narratives like narratology and ludology. Ultimately, I will use neither approach since narratology ignores what differentiates video games from traditional media whereas the ludologists' viewpoint of games not being stories fundamentally goes against the premise of my argument.

      I will conduct the majority of the analysis by discussing the main story of *NieR: Automata* from the beginning to the end while highlighting and elaborating on events that provide narrative agency, which I define as moments of gameplay with narrative significance. In addition, I will analyze these events from the perspective of genre to highlight how the video game elements enhance the rhetoric of the story. Throughout the thirty-hour story of *NieR: Automata*, the player experiences narrative agency by numerous methods. I will argue that the repetition of in-game events without noticeable differences besides character change provides meaningful insight into how the characters are treated without specifically stating it. In addition, while *NieR: Automata* has few instances of traditional agency, which is characterized as providing the player with the freedom to do meaningful actions, the player can achieve similar feelings of meaningful interaction while telling a scripted narrative with little player influence. Finally, the final ending of *NieR: Automata* utilizes the game medium in a unique way as the player may sacrifice all their save data to assist other players complete the game. Other media are incapable of implementing similar narrative tools and highlights the influence of narrative agency as the player is willing to forfeit their invested time and saved progress for a narrative statement.

Tiivistelmä

Tässä tutkielmassa analysoin videopelejä narratiivisena mediana käsittelemällä vuonna 2017 julkaistua videopeliä *NieR: Automata*, jonka on ohjannut Yoko Taro ja kehittänyt pelistudio PlatinumGames. Keskeinen argumenttini on, että videopelien pitäisi hyödyntää niille ominaisia narratiivisia elementtejä, kuten pelaajan kanssa tapahtuvaa vuorovaikutusta. Videopelitutkimuksen ollessa suhteellisen uusi tutkimusala, sille ei ole luotuna samanlaista teoreettista taustaa kuin perinteisen median, kuten kirjallisuuden, tutkimukselle. Tämän vuoksi tuon esiin sekä kritisoin historiallisesti merkittäviä lähestymistapoja pelien narratiivien tutkimuksessa, joita ovat esimerkiksi narratologia ja ludologia. En kuitenkaan käytä kumpaakaan lähestymistapaa analyysissani, sillä narratologia jättää huomiotta sen, mikä erottaa videopelit mediana perinteisistä medioista. Ludologian näkökulman mukaan pelit puolestaan eivät ole tarinoita, mikä on perustavanlaatuisesti vastakkainen näkökulma suhteessa tässä tutkielmassa esittämääni argumenttiin.

Toteutan suuren osan analyysista keskittymällä *NieR:Automatan* päätarinaan korostaen ja tarkentaen tapahtumia, jotka tuottavat narratiivista toimijuutta, jonka määrittelen pelissä pelattuna toimintana, jolla on oleellinen merkitys narratiivin kannalta. Analysoin näitä tapahtumia lisäksi genren näkökulmasta korostaakseni sitä, miten videopelien ominaiset elementit tehostavat tarinan retoriikkaa. *NieR: Automatan* kolmekymmentätuntisen tarinan aikana pelaaja kokee narratiivista toimijuutta monien menetelmien myötä. Väitän, että pelissä toistuvat osuudet, joiden ainoa huomattava ero on pelattavan hahmon vaihtuminen, tarjoavat merkittävän näkökulman hahmojen kuvaamiseen ilman suoraa kuvailua. Vaikka *NieR: Automatassa* on vain harvoja perinteistä toimijuutta vaativia tilanteita, joille on tyypillistä tarjota pelaajalle vapaus valita narratiivin kannalta merkityksellinen toiminta, pelaaja voi saavuttaa tunteen merkityksellisestä vuorovaikutuksesta samalla kun peli kertoo käsikirjoitetun tarinan, johon pelaajalla on todellisuudessa vähän vaikutusta. Vielä lopuksi, *NieR: Automatan* lopetus hyödyntää pelimediaa uniikilla tavalla, sillä pelaaja voi uhrata kaiken tallennetun datansa auttaakseen muita pelaajia läpäisemään pelin. Muut mediat eivät ole kykeneviä käyttämään samanlaisia narratiivisia työkaluja, minkä lisäksi lopetus korostaa narratiivisen toimijuuden vaikutusta, jos pelaaja on halukas luopumaan pelaamiseen käyttämästään ajasta ja tallennetusta etenemisestä luodakseen syvemmän merkityksen tarinalle, vaikka se ei hyödytä häntä pelaajana.

Contents

1. Introduction

In this master's thesis I will analyze how video games can be a unique narrative medium. Naturally, media have characteristics that differentiate them from each other. Literature tells its stories by text, which enables it to describe events and objects in vivid detail which may be reduced to brief glimpses in cinematography. In contrast, cinema features both sound and visuals which presents the medium opportunities that literature simply cannot have such as body language, facial expressions and voice acting. Ultimately, the differences between literature and cinema as narrative media are relatively easy to identify. Thus, my focus will be on how video games can utilize features such as game mechanics and player participation to enhance their storytelling. To do so, I will analyze 2017's *NieR: Automata* developed by Japanese game studio PlatinumGames and directed by Yoko Taro. While academics have debated video games' status as a narrative medium, I have found little research about individual games and how they utilize gameplay or player participation as a storytelling tool. Hence, the main research question of this study is how *NieR: Automata* uses gameplay for narrative purposes. If so, the results should also prove that video games are indeed a narrative medium.

The debate whether video games are a narrative medium may be due to their origins as they initially gained popularity as a form of entertainment in the late 1970s. Due to technological limitations, the games in 1970s and the early 1980s focused on gameplay loops where the player was tasked with a relatively simple goal, such as shooting all the never-ending enemies until the player lost with little narrative context. Home consoles in particular had primitive technological capabilities by current standards. For instance, one of the first popular games, *Pong* (Namco), which was originally released in 1972, was an otherwise black screen with two white blocks that the players controlled and a white square that acted as a ball. The Atari 2600, one of the most popular consoles in the early 1980s, was even unable to display round shapes.

While the more powerful arcade machines could display cinematics in some games with *Dragon's Lair* (Advanced Microcomputer Systems, 1983) being the most notable example (Saltzman 2003), home consoles had limited capabilities to tell in-game narratives and instead relied on the game instruction manuals that came with the game to expand on the in-game universe. During the mid-to-late 80s, the Nintendo Entertainment System (NES) was powerful enough to display text in a limited capacity. Moreover, a few games even had a voice line or two, but they were notoriously poor quality, such as the introduction for the 1988 video game *The Adventures of Bayou Billy* (Konami).

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However, 1988's *Ninja Gaiden* (Tecmo) was a pioneer in video game storytelling, as it had over twenty minutes of cinematic cutscenes (McLaughlin 2009). Cutscenes are narrative sequences in video games that expand on the story of the game (Hancock 2002). The closest comparison to them is a movie scene. However, *Ninja Gaiden*'s cutscenes had limited resources. Instead of live-action videos with voice acting, it utilized text-based dialogue and animated pictures, using visual effects to indicate movement. These kinds of cutscenes stayed prevalent for the next decade in more polished forms until more realistic and cinematic cutscenes with moving pictures were popularized in 1998 with the release of *Metal Gear Solid* (Konami) for the Sony PlayStation (Shoemaker 2007). PlayStation had considerably more advanced hardware than the previous generations, which enabled its games to render in 3D and have high quality audio. This technological advancement was manifested fully in *Metal Gear Solid*, as it featured hours cutscenes and dialogue which was not possible with the previous home consoles. *Metal Gear Solid*'s influence is still prevalent in modern gaming. It set a new standard of cinematography and virtually every blockbuster video game since has used cinematic cutscenes. As a result, some games pride themselves in being as "cinematic" as possible, such as 2014's *The Order: 1886* (Ready at Dawn), whose goal according to developer Ru Weerasuriya (Makuch 2015) was to "create a cinematic experience the likes of which have never been seen in games before". While video games may be more embraced as a narrative medium in public discourse compared to academics, it could be because modern video games are reminiscent of movies in terms of storytelling.

However, despite the increased cinematography, video games are still usually designed with gameplay in mind first. For comparison, 1985's *Rambo: First Blood Part II* is a classic action movie about violently and gloriously killing as many enemies as possible and Rambo kills "only" dozens of people in it. For contrast, 2016 video game *Uncharted 4: A Thief's End* (Naughty Dog), tells a story about an over-enthusiastic treasure hunter Nathan Drake who has an internal struggle between his loved ones and his passion of treasure hunting. During non-interactive cutscenes and dialogues, Nathan Drake is presented as a lighthearted, witty and relatable average guy who discovers lost secrets for altruistic reasons but when the player controls him, Drake turns into a ruthless mass-murderer whose body count reaches hundreds. From a pure narrative perspective, this is a problem as Nathan Drake's player-driven actions contradict how the story portrays Drake. The contrast and inconsistency between Nathan Drake's cutscene and in-game behaviors is referred to as ludonarrative dissonance (Hockling 2007). Naughty Dog is aware of this, however, as one of the in-game challenges called "Ludonarrative Dissonance" requires the player to kill one thousand enemies. The Uncharted-series is often regarded as the *Indiana Jones* of video games, as both series feature charismatic protagonists that search for mythical artifacts and lost civilizations while defeating bad guys. If the

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player can ignore Nathan Drake's psychological immunity to the repercussions of slaughtering hundreds of people, his games have compelling and fun stories. However, from an analytical viewpoint it cannot be overlooked. While Naughty Dog acknowledges the existence of ludonarrative dissonance, their games are still focused on combat as it is proven to be financially expedient and they may believe that the average consumer does not notice or care about the inconsistency in Nathan Drake's behavior.

Thus, *Uncharted 4*'s necessity to include gameplay mechanics in the form of gun combat diminishes the narrative they are trying to tell with Nathan Drake. However, this proves that gameplay can affect storytelling and as such gameplay can be used to enhance the story as well. Video games are a unique medium and what makes it unique is the interactivity between the player and the game. Indeed, there have been games which have been praised for utilizing the medium. For instance, 2007's *BioShock* uses the fact that players tend to sheepishly follow the in-game instructions without ever questioning them as a major plot point. Alternatively, 2015's *Undertale* recognizes the player's ability to save and reload the game data as a superpower. For example, one character will condescend the player for restarting the entire game if they kill a major character and save her instead.

However, these games utilize the medium mainly by breaking the fourth wall regarding player behavior and gaming tropes such as saving. While *NieR: Automata* features some elements that rely on breaking the fourth wall or diverting player expectations, I will argue it also uses gameplay to boost its themes. Hence, I will argue that for video games to reach their potential as a narrative medium, they must embrace being video games and utilize their defining trait, the player's participation, in their storytelling. The analysis will be conducted by covering the main story of the game with additional examination of how the story is enhanced or even enabled by it being a video game. Additionally, I will discuss the topic of video games in academic studies by introducing renowned video game researchers and popular research methods such as narratology and ludology. However, I will argue why these methods are, in fact, inadequate for studying games in a meaningful way.

2. Theoretical background

In this section I will discuss the historical frameworks for narrative studies within video games. Subsection 2.1. will focus on defining what a video game is. This is important, as the study examines the video games as a medium and how it differs from other media. To define video games, different perspectives will be presented and analyzed with comparisons to real-life video games to see how applicable they are to games in general. In addition, sections 2.2–2.5 will discuss academic approaches to game studies. Finally, subsection 2.6. will discuss how media can be grouped into genres based on themes and the mechanics of the medium.

2.1. Definition of a game

Oxford Dictionary offers one of the more pragmatic definitions for a video game. It describes it as "a game played by electronically manipulating images produced by a computer program on a monitor or other display". Yet, Alvarez et al. (2008) offer a more concise definition. According to them, video games could be considered as "interactive applications" which interact with a player (Alvarez et al, 2008, p. 1). Both these definitions highlight the digital nature of video games and how players have some ability to influence what is occurring. However, it is possible to interpret that some other media such as interactive movies also fulfill them.

In terms of aesthetic value, Smuts (2005) states that video games can be argued to be art because they can fill the criteria set by "historical, aesthetic, institutional, representational and expressive theories of art" (p. 1—2) which other more traditional forms of art are judged by. Historically, video games' status as a form of art has been questioned or denied (Ebert 2010). Most notably, Ebert (2010) stated that "no one in or out of the field has ever been able to cite a game worthy of comparison with the great poets, filmmakers, novelists and poets" ("Video Games Can Never Be Art"). However, Ebert confesses there are numerous definitions of art so it is possible there may exist some that fit video games Most notably, he claims that "one obvious difference between art and games is that you can win a game" and "an immersive game without points or rules – ceases to be a game and becomes a representation of a story, a novel, a play, dance, a film" (Ebert 2010, "Video Games Can Never Be Art"). Whether games and stories are mutually exclusive will be discussed in more detail in the following subsections, but for now it is worth highlighting that similar to other media, different video game genres exist for different purposes. For instance, many arcade and mobile games are intended to be played for short timespans for joy while other video games such as *NieR: Automata* aim to evoke emotional or profound experiences. This presents a recurring pattern in this section

where authors attempt to analyze video games from a holistic and essentialist perspective where all games are either narratives or pure games.

Nevertheless, most games that have been academically studied tend to fit the traditional criteria of art that Smuts listed, resulting in some academic writers still associating artistic depth with objective quality. For instance, Gee has gone as far as to describe what a "good game" is. For disclosure, Gee is not a humanist but a cognitive scientist (2007) but his viewpoints are still valuable for this study because he discusses what game designs he deems "good" in general. Moreover, in this article Gee does not state that these games have pedagogical uses but that "good games" have features which would be beneficial in the real world, such as giving verbal information when the player needs them (2007).

Gee states that good video games are "good for your soul" (2007, p. 7). He expands on this by stating that games are good for one's soul if "the game is played with thought, reflection and engagement with the world around the player" (Gee 2007, p. 8). He also argues that "good games" let the player interact with the story and determine the outcome of it, whereas books and movies are predetermined (2007, p. 8). In essence, "good video games" challenge and invite the player to interact with the game and its world. However, Gee's requirements are quite restrictive. The biggest issue is that his definition of a good game is, in fact, a description of an already existing genre of games that emphasize interacting with the game-world called immersive sim, which existed before he introduced the term. Immersive sim genre was invented by Warren Spector, the director of 2000 video game *Deus Ex* (Spector 2000). When talking about *Deus Ex*, he called it part immersive simulation, part role-playing game, part first-person shooter, part adventure game. While he describes each element, the immersive sim description is the most relevant here.

> "It's an immersive simulation game in that you are made to feel you're actually in the game world with as little as possible getting in the way of the experience of "being there." Ideally, nothing reminds you that you're just playing a game -- not interface, not your character's back-story or capabilities, not game systems, nothing. It's all about how you interact with a relatively complex environment in ways that you find interesting (rather than in ways the developers think are interesting), and in ways that move you closer to accomplishing your goals (not the developers' goals). (Spector 2000)

Deus Ex was a pioneer in giving the player freedom in playstyles. While the player was given seemingly linear goals such as entering a guarded area, *Deus Ex* enabled the player to accomplish this with numerous different methods. For example, the player could sneak past guards, shoot them or hack a robot to defeat them. As such, the levels were also designed to be more open-ended to allow players to choose not only their method but also their route to the object. In contrast, *Doom* demands the player to shoot the enemies and thus the levels were also narrower and more condensed to support

the combat-emphasized gameplay loop. Initially, *Deus Ex's* variety may seem preferable to *Doom's* one-dimensionality. However, if the player wants a fast-paced action game then *Doom* will be the better experience since it is designed specifically for that. Yet, only *Deus Ex* would be "a good game" according to Gee, since it fits his idea of the player reflecting on the world and determining how to complete the mission. This showcases the fundamental problem with Gee's definition of "a good game" because his description is reminiscent of a specific genre while he is attempting to discuss games holistically.

Furthermore, Gee also stated that good games let the player interact with and influence the story, which limits the number of good games even more. As stated in section 1, video games had limited storytelling in the 1980s as the emphasis had been on the gameplay. For example, when starting 1991's Duke Nukem, the player is told "The president has been kidnapped by ninjas. Are you a bad enough dude to rescue the president" (Waters, 2014) and the player enters the first level. Other classic games such as *Tetris* and *Pacman* have no story whatsoever. What Gee's definition fails to notice is that in many games the story only exists to justify the in-game events. Mario wants to rescue the princess in most Super Mario games whereas the player wants to play a fun platformer. In addition, numerous narrative-focused video games do not allow the player to influence the story and I am doubtful those games would improve significantly if they let the player, for example, choose one of the two endings.

In any case, Gee's definitions have some applicable aspects. When Gee stated that good games demand to be played with thought, reflection and engagement, he meant that the player should be immersed in the world and behave accordingly. These aspects still apply to games like *Doom*, just not in the way that he intended. In *Doom*, skillful players know which enemies to prioritize and how to move across the levels, which are undoubtedly aspects of thought, reflection and engagement. Furthermore, thought, reflection and engagement are essential aspects of game narratives even if the player has no influence. When a video game protagonist kills someone during an interactive event, the player is not passively observing the character kill someone but rather partaking in the killing. This was utilized in the 2012 video game *Spec Ops: The Line* which begins as a seemingly generic story about American soldiers rescuing their comrade in Middle-East until it eventually turns into a commentary about modern military shooters such as *Call of Duty* (Activision) and *Battlefield* (Dice), critiquing both the game genre and the player for mindlessly slaughtering hundreds of people without ever questioning the morality of their actions. Ultimately, Tavinor (2009) provides a definition that is suitable for this topic.

> X is a videogame if it is an artefact in a digital visual medium, is intended primarily as an object of entertainment, and is intended to provide such entertainment through the

employment of one or both of the following modes of engagement: rule-bound gameplay or interactive fiction. (Tavinor 2009)

Yet, some features of his description could still be scrutinized. Firstly, Tavinor (2009) argues that games must be created for entertainment purposes so that other digital media products such as virtual museums and military simulators are excluded. While he admits simulators can be played for entertainment that is not their purpose and as such should not be considered games. However, he assumes simulators are created to "present in a fictive way an activity that in the real world would be either dangerous or costly, are valuable tools in learning and training" (Tavinor, 2009). His view fails to recognize simulators can be created for entertainment reasons too. For instance, driving games are based on real-life cars and racetracks so it makes sense there exists a demographic that wants to play realistic racing simulators such as *Asetto Corsa* (Kunos Simulazioni, 2014) or *BeamNG.drive* (BeamNG, 2015).

Also, the word entertainment refers to evoking feelings of pleasure or joy, whereas not all media intends to evoke those feelings. *This War of Mine* (11 bit studios, 2014) is a survival game in which the player must survive a war-torn dystopia and the player may have to rob resources from innocent people to survive and later cope with mental health problems for their actions. Thus, it would be inappropriate to say *This War of Mine* attempts to be entertaining. Instead, a word such as compelling is more sufficient as it not reliant on achieving specific emotion. Overall, this subsection has provided a few conclusions. Firstly, video games are a vast medium so terminology should avoid generalizations because there will always exist contradicting video games. Instead, when analyzing *NieR: Automata,* I will emphasize how the video game medium is used to engage the player to the story and ultimately enhance the narrative with gameplay mechanics.

2.2. Narratology

Narratology is commonly defined as the study of narrative as a genre (Fludernik 2009, p. 8). While every form of explanation technically qualifies as a narrative, the term should be narrowed down for clarity. To tell a narrative, there has to be a story. The way the story is told is analyzed by the concept of narrative discourse, which consists of narration as conducted by the narrator and the narrative as a text or utterance (Fludernik 2009, p. 13). The former refers to who tells the story and how. For example, two people will tell the same story differently. Narrative as a text may seem synonymous with story at first, but the difference is that the same story can be presented in different forms of text. Fludernik (2009) uses Snow White as an example of a story which has been narrated differently through the centuries. While it was meant to be a story about Snow White's evil stepmother, modern

versions and parodies of Snow White may imply she and the male dwarves are in a sexual relationship (Fludernik 2009). However, the story can also be changed by the narrative text. Fludernik (2009) highlights Snow White could be rewritten from a feminist viewpoint even though it keeps the premise of Snow White. Finally, Fludernik (2009) states that representations of a story in other media qualifies as a different narrative

For comparison, Chatman (1978) describes narrative theory's objective as "a grid of possibilities, through the establishment of the minimal narrative constitutive features" (p. 18-19). In other words, narrative theory can be used to analyze narratives in numerous different ways. Chatman (1978) provides an example by asking "what are the ways in which we recognize the presence or absence of a narrator?" (p. 19). Additionally, Chatman provides a structuralist view according to which a narrative text contains a story and a discourse. The story is divided into events and existents. Events consist of all the actions that occur in the story whereas existents are the characters and the setting that the story takes place in (Chatman 1978). Next, narrative text contains discourse which is how the story is told. To use Fludernik's example, Snow White's story about Snow White herself and the seven dwarves remains the same but the discourse can be adjusted to make it sexual instead.

Furthermore, Chatman argues that narratives are structures as they have wholeness, self-regulation and transformation (1978). According to Chatman, narratives are "clearly a whole" as they contain numerous events and existents that are aligned in a specific sequential order that creates the story (Chatman 1978, p. 21). In essence, the existents and events are related to each other and they are presented in a comprehensible order. While this is applicable to many media, such as traditional movies, there are also numerous examples that contradict this concept of wholeness, such as cybertexts presented in 2.4. However, the deviations in the order could be perceived as unique narratives. Alternatively, Chatman may be referring to how randomly generated events with randomly generated existents may result in incomprehensible gibberish.

Next, transformation refers to the process of expressing a narrative event and only certain kinds of transformation are possible at certain points (Chatman 1978). For example, the protagonist cannot be written off the story in a flashback from the protagonist's perspective. One example of video games doing this is in *Metal Gear Solid 3: Snake Eater* (Konami) which is first in *Metal Gear Solid*'s chronological order. In *Metal Gear Solid 3*, killing the character Revolver Ocelot, who appears in the other games that occur after *Metal Gear Solid 3*, will result in a game over due to creating a time paradox. Furthermore, transformation also rejects "events and other kinds of phenomena that do not 'belong to it and preserve its laws'" (Chatman 1978, p. 21), which essentially means excluding events or existents that contradict the established story for no reason. According to Chatman, the failure to do this means that narrative is "ill-informed" (1978, p. 22). For instance, flying cars would

be incredibly out-of-place in a high fantasy setting such as *The Lord of the Rings*. Admittedly, video games often sacrifice this aspect of transformation for gameplay-reasons. For instance, many classic platformers such as *Super Mario Bros.* include a mechanic called *lives* which is the amount of attempts the player has before losing the game. Narratively, there is no reason why a seemingly ordinary plumber such as Mario can revive himself. Naturally, there exist games where reviving is explained such as *NieR: Automata* where the characters' memories are saved on a server which can be retrieved and inserted into a new android body whenever the player dies.

This aspect of transformation may also be related to self-regulation demands that the structure of a narrative "maintains and closes itself" (Chatman 1978, p. 21). To illustrate this view, he refers to Piaget's statement

> Transformations inherent in a structure never lead beyond the system but always engender elements that belong to it and preserve its laws… In adding or subtracting any two whole numbers, another whole number is obtained, and one which satisfies the laws of the 'additive group' of the whole numbers. It is in this sense that a structure is 'closed' (Piaget as translated by Maschler, 1970).

Admittedly, I am uncertain what Chatman and Piaget refer to here. While Chatman claimed self-regulation and transformation are two separate features, he uses them quite interchangeably which highlights how similar they are. My interpretation of Piaget's quote is that events and existents must change accordingly to other events and existents. For instance, introducing a new character may affect other characters in some capacity. Furthermore, Chatman refers to transformation as "the process in which a narrative element is expressed" (1978, p. 21). As such, transformation is based on self-regulation which contains the internal laws and logic of the narrative. In other words, self-regulation is the "writing" of the story and includes characteristics such as the setting, whereas transformation is the expression of the story. Since this study focuses on how video games can use mechanics for narrative expression, I will emphasize the transformation aspect.

Initially, different branches of narratology seem suitable for game studies as they embrace all media, including video games, as forms of narrative. However, narratology's holistic view of what qualifies as a narrative ultimately becomes a detriment as it lacks the framework to study video games in particular. Since this study emphasizes gameplay as a storytelling tool, it requires concepts to highlight those aspects. Furthermore, the inclusion of narratology in game studies spawned a notorious debate about whether games are narratives at all (Koenitz 2018). Most notably, Aarseth declared that "games are not a kind of cinema, or literature, but colonizing attempts from both these fields have already happened— (2001) and questioned whether "theoretical concepts such as "story", "fiction", "character," "narration" or "rhetoric" remain meaningful when transposed to a new field,

or do they turn into empty, misleading catachreses, blinding us to the empirical differences and effectively puncturing our chances of producing theoretical innovation?" (2012, p. 129).

2.3. Agency

Despite narratology not being prevalent in game studies, narratologists have established some paramount concepts in game studies. The most important of these is the concept of agency which was originally defined as "the satisfying power to take meaningful action and see the results of our decisions and choices" (Murray 1997, p. 159). This concept was coined by Janet Murray who in her 1997's Hamlet on the Holodeck discussed how narratives can be told on new interactive media such as interactive movies and games which may explain the vagueness of the term as the book was intended to create discussion in a relatively unexplored field. Yet the concept in its vaguest form is still applicable to games as one could argue player influence is the easiest distinguishing attribute that separates games from other forms of media albeit not necessarily exclusive to video games. Furthermore, Murray highlights that the player activity has to be meaningful to count as agency, so simply being able to control a character is not sufficient (1997). For instance, the ability to make meaningful decision that influence the story is commonly considered a form of agency (Murray 1997).

In fact, many games allow the player to influence the story but upon further scrutinization it is not fundamentally unique to gaming. Choose Your Adventure books also let the reader influence the story which presents an intriguing question regarding medium identity. Choose Your Adventure books are relatively linear stories with key points in which the reader can choose how the story advances and skip to the corresponding page to continue the story. What if the reader was presented with more frequent options, such as letting them choose every reply a character makes? Due to its number of variables, this book would have to be digital as a physical book could not contain hundreds of different options and variables in a legible manner. Therefore, it could be argued that video games are the most suitable medium for stories with frequent agency. Regardless, the ability to make meaningful story decisions is not sufficient to describe games as a unique storytelling medium. In addition, it could be argued that limiting player choice to a few key points, in fact, highlights the lack of agency the player has. It implies that the player is forced to go alongside the developers' will for most of the game with a few exceptions where the player is allowed to make a choice that the developers have provided for them.

While Murray acknowledges that all games' parameters of agency are restricted by writing and programming (1997, p. 187), analysts should consider these parameters within the context of the

game. As discussed in section 1, 1980s video games had limited storytelling capabilities due to the limited hardware. As an example of a game with high level of freedom, *Crusader Kings II* (Paradox Development Studio 2012) is a strategy game in which the player controls the leader of a Medieval dynasty of their choosing, which varies from being the emperor of an empire to being a vassal as a local duke. The game has no preset goals and dying will result in continuing the story as the heir of the player's dynasty. Thus, the game is designed to be a system of rules and functions in which players can make decisions freely within the boundaries of the game. For example, the player will always play as the heir after dying with their current character no matter what. Usually, the heir will be the eldest son due to medieval succession laws. However, if the heir is undesirable, perhaps because of a chronic illness, the head of the dynasty may either attempt to change the laws or alternatively plot to assassinate the heir. Conversely, most contemporary mainstream games follow a structure of linear sequences of events with an occasional binary choice. *Crusader Kings II* showcases how games can be designed with agency as Murray defined it as the norm, whereas I would argue many games, including *NieR: Automata*, would fail Murray's definition as the player is forced to go alongside the developers' vision.

Thus, it could be argued that agency is instead about providing the players with as much freedom as possible. For example, ludologist Gonzalo Frasca (more on ludologists in 2.4.) argues that the more freedom the player has, the less personality their controllable characters will have (2001a s. 168). For instance, Joel from *The Last of Us* (Naughty Dog) is a hardened post-apocalyptic survivor that distrusts strangers. As such, the player confronts enemies by either killing them violently or avoiding them altogether and cannot, for example, negotiate peacefully. Additionally, the game feedback also supports this theme as Joel can decapitate enemies while Naughty Dog's other franchise, *Uncharted,* has less gruesome wounds. In contrast, Minecraft is designed to let players explore the world freely and as such the playable character has no intrinsic motivations or personality traits. Naturally, this juxtaposition is not always applicable because despite *Deus Ex* promoting player freedom, the protagonist J.C. Denton has a pre-defined personality with dialogue as opposed to *Doom's* mute protagonist.

Nevertheless, Frasca uses *The Sims* (Maxim), a life simulator, as an example of player agency where characters will behave similarly to each other depending on their mood. In other words, all the characters will act similarly when they are tired. As a solution, he suggests including mods (fan-made modifications to a published game) which allows the player to give characters behavioral traits, such as an alcoholic who drinks after work (Frasca 2001a). While Frasca could simply roleplay as the characters himself, he instead views agency as the ability to alter how the AI behaves. Conveniently, later *Sims* installments gave characters less morbid personality traits than an alcoholic which

influence their behavior but even in this instance the player is still limited by what the programming and the developers enable the player to do.

Still, even freedom must have some limits because a pure virtual sandbox with nothing in it needs a designer to provide meaningful content that encourages agency. On the other hand, whenever a designer adds a new feature, it limits player freedom in some capacity. For example, creating a handcrafted game world gives the player a place to explore but the player is also limited within the confides of the world. As such, focusing on narrative limits player freedom while focusing on player freedom limits the narrative. As mentioned, narratively driven games tend to have scripted characters with more defined personalities and the gameplay is also usually limited to reflect the story. If the player can kill story characters whenever they please, the story has to be written in a way that allows that. To reiterate Murray, even if one defined agency as freedom to impose their will in a game, their decisions will not be fulfilling if they do not feel meaningful. Admittedly, while games such as *Crusader Kings II* do not have scripted stories, they can generate dynamic narratives based on the game events, such as failed coup attempts.

Alternatively, Tanenbaum and Tanenbaum argue that players can feel agency by, in fact, limiting player freedom which they refer to as the illusion of agency (2009, p. 3). Initially, the concept seems counterintuitive as agency is supposed to make the player feel empowered. Yet, illusion of agency can be applied to evoke the feeling of empowerment even if the player has little control. Again, when Murray discussed agency, she was emphasizing the feeling of making meaningful decisions. As such, it could be argued that as long as the player is convinced their actions are meaningful, it is irrelevant whether they actually have an impact.

One common way of limiting player freedom to complete actions is with QTEs (quick-time events) (Tanenbaum & Tanenbaum 2009). QTEs are context-sensitive events where the game displays a button which the player must then press on their controller (Domsch 2013, p. 36). QTEs are usually reserved for cinematic scenes that the game cannot replicate with regular gameplay, such as a choreographed sword duel. In this scenario, the player will watch the action passively and occasionally press a button displayed in the game to succeed whereas a wrong or missed input will penalize the player in some capacity, such as by dying. While quick time events are often criticized for lacking agency (Domsch 2013, p. 37), they can be effective narrative tools. One of the most famous examples of this is in the microwave tunnel scene from *Metal Gear Solid 4: Guns of the Patriots* (Konami) (Tanenbaum & Tanenbaum 2009). *Metal Gear Solid 4* is the finale of the *Metal Gear Solid* series and in the end the protagonist Solid Snake is forced go through a scorching microwave tunnel to save the world. During this scene, the player does not control Solid Snake with the standard controls but instead repeatedly taps one of the buttons on the controller. During this

scene, the player's perspective is only shown on the bottom half of the screen whereas the upper half shows Snake's allies who are getting overwhelmed by the enemy forces.

Figure 1. Snake crawls through the microwave tunnel (Metalgearinformer.com)

As Figure 1 shows, Snake is barely crawling forward as his suit is damaged by the heat. The tunnel is relatively short and if the player could move with the conventional methods used in the rest of the game, the scene would last a fraction of its current form. This would ruin the narrative moment as then Snake would breeze through the tunnel before any of his allies got into trouble. Thus, it uses a QTE of repeated button prompts to prolong the scenario but additionally it becomes a narrative tool to make the player feel involved. Rapidly tapping a button repeatedly becomes tiring and eventually exhausting which encapsulates Snake's regression as he advances in the tunnel. Despite that, both Snake and the player are encouraged to endure to save everyone and both feel the sense of relief once Snake passes the tunnel. Actually succeeding in the mission does not require the player to be particularly fast since making the scene too hard and demanding the players to reattempt the scene would surely ruin the narrative significance, yet players are inclined to exert themselves to guarantee success regardless. In short, the players feel like their repeated button taps are meaningful even when they are not provided any alternative methods to finish the story.

However, as name implies, illusion of agency is effective only when the player believes their actions are important. This problem can be seen in the episodic adventure game *The Walking Dead* (TellTales 2012). In *The Walking Dead*, the player interacts with both the environment and other characters with future repercussions. As an illustration, if the player chooses to swear as the protagonist Lee, his child companion Clementine will also start to swear which may upset some characters. Moreover, sometimes Lee is forced to make important decisions such as which of two

characters to save from a zombie horde, resulting in the other one dying. However, adjusting the story to take all the different decisions into consideration would be difficult and instead games such as *The Walking Dead* rely on illusion of agency instead.
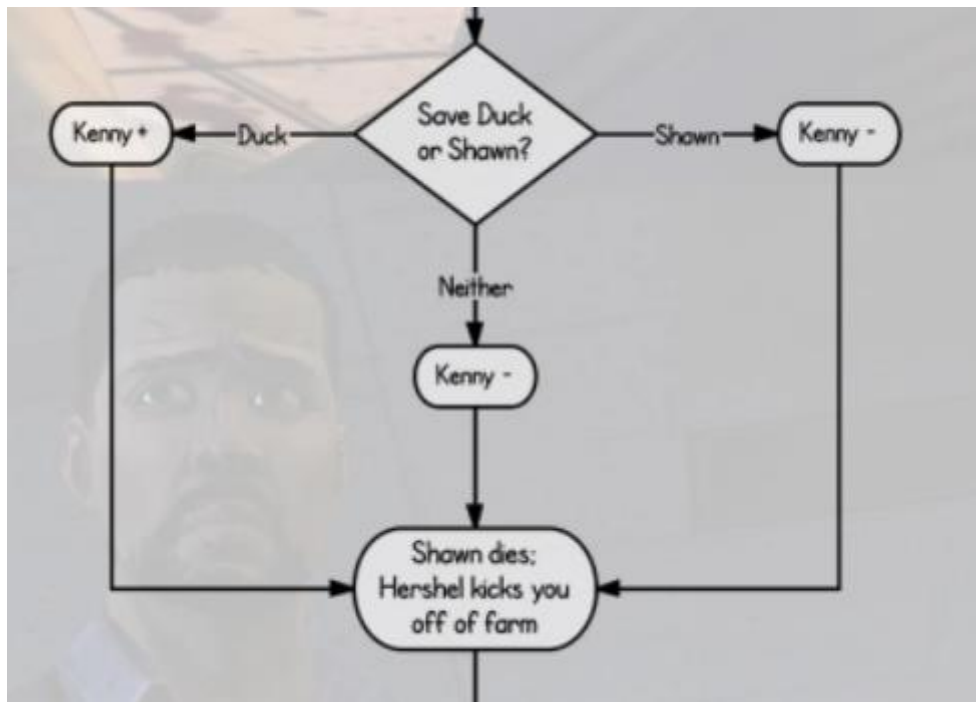

Figure 2. Shawn dies no matter (Venturebeat.com)

Figure 2 highlights a scenario in which characters Duck and Shawn are both trapped as zombies are arriving. Then, Lee is offered a timed decision to attempt to save one of the two. Since it is timed, Lee can also fail to rescue either one by not choosing fast enough. Regardless of Lee's choice, Duck gets saved by his father Kenny yet even if the player attempts to help Shawn he still dies. Initially, this is an interesting decisions. I would imagine most people are inclined to help Duck since he is a child, but on the other hand saving a healthy young adult would be more beneficial for surviving during a zombie epidemic. If the player saved Duck, they may believe their actions caused Shawn to die whereas replaying the game will reveal how little influence the player actually had.

Obviously, relying on illusion of agency is not sustainable. The microwave tunnel event would lose its narrative significance if it were repeated a second time. Similarly, replaying *The Walking Dead* and picking the alternative options exposes how little agency the player has. However, exploring the concept clarifies how players' actions can feel important even without a myriad of possibilities, particularly in a scripted story. In conclusion, video games with scripted stories such as *NieR: Automata* cannot provide agency comparable to a sandbox or a strategy game. Hence, while the traditional concept of agency is an effective narrative tool in video games, its applications are limited in scripted stories. Yet, scripted video games can evoke similar feelings of agency by convincing the player that their actions and participation are meaningful.

2.4. Ludology and Aarseth's Cybertext

In his guide for aspiring game scholars, Aarseth advises not to start a study by introducing the "the war" between narratologists and ludologists, calling it a

> … a trope used as a touchstone by beginners to prove they know their way around the field, but – without exception, the writer doesn't have a clue, and the paper is typically about something entirely unrelated to the issue of whether games are narratives or not. (2014a)

However, discussing ludology itself is impossible without considering the context from which it was created and I believe it is relevant to discussing games as a narrative medium. Prior to ludology, game stories were studied with narratology in mind, such as when Murray (1997) argued that Tetris could be analyzed as a commentary on contemporary working condition by explaining how the gameplay loop in *Tetris* is endless until the player makes enough mistakes and loses the game. This interpretation of *Tetris* was criticized as poor implementation of narratology by the academics now known as ludologists such as Aarseth, Frasca and Juul (Aarseth 2014b).

According to Aarseth (2014b), ludology does not oppose narratology itself but instead is a critique of "naïve and untheoretical applications of narratology to games" (no page). In fact, Aarseth (2014b) claims ludologists are the ones who actually use narratology. He also states that ludology is used as a term in many ways (2014b). Firstly, it is the general study of games (Aarseth 2014b). Secondly, it is a particular approach to game research and thirdly it may refer to a movement in the late 1990s that opposed the usage of narratology in game studies (Aarseth 2014b). Based on my research there is confusion regarding the origin of the term. While Aarseth (2014b) claims the term was invented by Frasca in 1999, Frasca (2001b) denies it by stating that the term had already been used in 1980s and he simply used it as a placeholder until there was an actual name. Similarly to Aarseth, Frasca (2001b) describes ludology as study of games and even stresses that there is no difference between "ludology" and "game studies" (p. 2).

Interestingly, Aarseth (2014b) seems somewhat reluctant about game studies as an academic discipline because it implies there is one singular way to study video games. Instead, game studies are often interdisciplinary. For instance, this thesis studies video games as a storytelling medium while Lofgren and Fefferman (2007) examined how the players in *World of Warcraft* reacted to an unintended in-game epidemic by creating virtual quarantine zones to limit the spread of the disease. Despite covering video games, Lofgren and Fefferman's study is based on sociology and epidemiology. Therefore, ludology itself is too vague to be the theoretical framework for a study.

Ludology itself is preceded by Aarseth's concept of cybertext. According to Aarseth (1997), cybertext "focuses on the mechanical organization of the text, by posting the intricacies of the

medium as an integral part of the literary exchange" (p. 1). In other words, cybertexts requires some sort of "nontrivial effort" to be consumed which Aarseth describes as ergodic (1997, p. 1). Traditional texts, such as books and films, are then considered nonergodic, as progressing them requires minimal effort such as eye moment or turning a page in a book (Aarseth 1997, p. 1-2). Video games, for instance, frequently demand the player to complete challenges such as puzzles, levels, encounters et cetera to access story content, whereas in a book nothing prevents the reader from skipping pages.

Additionally, since cybertexts highlight the mechanical organization of the text, they are also fundamentally nonlinear. Essentially, in nonergodic literature every reader consumes the text in the same structured order, while in cybertexts the reader has agency to determine the order. Many video games provide the player with freedom to choose which quests they want to complete first, even if the quests themselves are linear. Sometimes the order of events can also have narrative impact. For instance, some quests can provide the player with new companions which follow them on their journey and comment on the on-going events. As such, acquiring a certain companion early provides new narrative content unavailable to other play orders.

Next, Aarseth addresses the common critiques of his theory. Firstly, nonergodic literature can still argue to have active participants as different people will interpret things differently. Moreover, many stories require the reader to contemplate the text, which could be argued to be nontrivial effort. Also, I would add there exist books that are nontrivially difficult to read due to their writing style. Regardless, interpreting the story differently from others or even previous consumptions may result in a different experience, which means that people read stories differently. Conversely, it could be argued that all texts are linear as stories are progressed one line at a time (Aarseth 1997, p. 2). Aarseth claims these critiques come from literary critiques who "while well versed in literary theory, had no firsthand experience of the hypertexts, adventure games, or multi-user dungeons" (1997, p. 2) he was referring to.

While Aarseth admitted that he could not succinctly describe the differences between cybertexts and nonergodic texts to his peers, the difference has become much clearer since. Aarseth describes that while a reader of a nonergodic text may be engaged and speculative in the story, they have no say in the story. By contrast, in cybertexts the reader has "the pleasure of influence" (Aarseth 1997, p. 4) which comes with the possibility of failure and the possibility to miss certain aspects of the story due to the reader's decisions. This sounds very familiar to Murray's agency, which is somewhat ironic considering the two opposed each other in the ludology debate.

Generally, video games feature nontrivial traversing in the form of gameplay and many games permit the player to impact the story which suggests cybertexts could be an effective way to analyze them. Alas, games do not inherently feature either trait. However, some games offer little resistance

and may even have comparable effort levels to reading a book. An example of this is *Dear Esther* (The Chinese Room, 2012) in which the player walks through an island as the narrator explains what has transpired. There is no failure state and most of the gameplay is simplistic navigation so it could be argued that playing the game is not a challenge for a technologically literate person. In fact, there is discourse whether *Dear Esther* should even be considered a game (Bitmob 2012 & Fletcher 2012). Secondly, games vary greatly in how much agency they provide the player with which was already addressed when discussing agency. However, the concepts of ergodic and nonergodic consumption are relevant storytelling tools. For example, the beforementioned microwave tunnel scene in *Metal Gear Solid 4* utilized player exhaustion due to repeatedly tapping a button and it would not have worked as well without the ergodic element. This is also a feature that will be utilized in Ending E in *NieR: Automata* as I will discuss in 4.4.

2.5.   Juul's critical ludology

Despite their opposition to narratology in video game studies, the famous ludologists such as Aarseth, Frasca and Juul have differing views regarding video games as narratives. In his article titled "Ludologists love stories, too: notes from a debate that never took place" Frasca (2003) argues against the claims that ludologists oppose games having stories. First, he defends himself by explaining that when he initially defined ludology, he emphasized how it was not meant to "replace the narratologic (sic) approach, but to compliment it" (2003 p. 94). However, Frasca has also stated the following:

> Nobody really cares if Lara Croft has a kidney disease or if Mario is a bit paranoid. The monsters in Doom are simply mean: nobody is interested in knowing why they behave in that particular way. It may be genetic, or maybe they are just fed up with intergalactic imperialists who keep sending space marines to kill them all. "(Frasca 2001b, p. 167)

He follows this statement by asking "is it fair to analyze video game characters with rules that are designed for literary ones" (Frasca 2001b, p. 167). This dismissal of video game characters highlights that video games are in some way an inherently lesser narrative medium compared to books. Naturally, there are games where the enemies do not have nuanced motives, such as *Doom*'s demons from Hell, but this applies to other media such as *Star Wars'* Stormtroopers which are faceless and nameless soldiers. While Darth Vader was given a background, Darth Sidious was an evil lightning wizard. Of course, there exist movies with nuanced villains but Frasca denies that when it comes to games. Next, Frasca refers to Aarseth's quote when he states

> …to claim that there is no difference between games and narratives is to ignore essential qualities of both categories. And yet, as this study tries to show, the difference is not clear-cut, and there is significant overlap between the two. (Aarseth 1997, p. 5)

He later added that "games and stories seem to share a number of elements, namely a world, its agents, objects and events" (Aarseth 2012, p. 130). However, Aarseth's phrasing highlights he considers games and stories to be two isolated entities and then notes that games are complex programs which emulate numerous media, such as film and text before asking whether *Max Payne* (Remedy, 2001) is a story or a game (Aarseth 2012, p. 130). While Aarseth admits games contain stories, his statements imply that games themselves cannot be stories. The fallacy of this statement can be seen in the second and third installments of the *Phoenix Wright -- Ace Attorney-* series, *Justice for All* (Capcom 2002) and *Trials & Tribulations* (Capcom 2004). In both games you play as defense attorney Phoenix Wright who defends clients accused of murder by gathering information about the crime and cross-examining testimonies in court. While both games have different murder cases and some different characters, *Trials & Tribulations* had marginal gameplay improvements. Even so, *Trials & Tribulations* is generally considered superior to *Justice For All*. If Aarseth's claim that games and stories were two isolated entities was true then this discrepancy between the two *Ace Attorney* games should not exist because the core gameplay and the mechanics are so similar.

This separation of games and stories also limits Aarseth's viewpoint of game stories when he questions how a game adaptation of *Anna Karenina* could work because the player would not commit virtual suicide, presumably because it goes against their own gameplay-interests (Aarseth 2004). While there are not many games where the player can willingly commit suicide out of depression, there are numerous games where players can consciously perform actions that hinder them. As an example, in *Papers, Please* (3909 LLC 2013) you play as an immigration officer for a dystopian country and your job is to check incoming immigrants' legal documents, such as passports and work visas, and decide whether they can enter the country. The player gets paid for each legal immigrant allowed in which is used to support your family whereas either turning down legal immigrants or accepting immigrants with insufficient documentations, such as an outdated passport will result in a citation. Eventually, citations will result in pay decreases which puts your family at risk of dying. The player is forced to keep their family healthy because the death of a relative ends the game.

Figure 3. Gameplay of Papers Please (Steam)

However, the player is sometimes introduced with moral complexities. When the woman in Figure 3 enters your office, she gives the player an ad card to a local brothel. Furthermore, she states that a man named Dari Ludum traffics women and forces them work in the brothel and asks the player to deny his entry to protect the women. Later, Dari Ludum will attempt to enter with legal documents, meaning the player is supposed to let them enter the country. According to Aarseth's sentiment, players should always let Dari Ludum in because denying him hurts the player. Despite that, many players are inclined to deny his entry.

One sub-category of ludology is critical ludology which questions video games as a narrative medium (Aarseth 2014b). In fact, Juul (1999) has stated that "the computer game for all practicality cannot tell stories" and "the computer game is simply not a narrative medium". Juul originally gave reasonings for those statements in 1999, but this study will use his 2001 article as he has updated his arguments from the previous work. Juul (2001) outlines his arguments by presenting arguments in favor of games as narratives and then presenting his counter-arguments. Before discussing the arguments, it is worth noting that Juul uses individual video games as examples to argue against video games collectively. As mentioned, video games are a diverse medium and different games have different priorities regarding the narrative.

Firstly, he mentions that most games do come with some debriefing that contextualizes the in-game events. This would include the example of being a "bad enough dude" to rescue the president in *Duke Nukem* which was presented in the introduction to this thesis. While that example was used to highlight how narratives have matured over the decades, Juul (2001) genuinely uses 1977s *Space*

Invaders (Taito) to showcase how the player can never actually defeat the aliens as new hordes spawn infinitely until the player loses. In my interpretation, his argument is that *Space Invaders'* lack of an achievable narrative goal disqualifies it from being a story. The problem with this argument is that few people would consider *Space Invaders* a narrative experience to begin with as it was designed to be an arcade game that customers would repeatedly pay to play and improve their performance. In other words, he is arguing against a viewpoint that was not prevalent in 2001 not to mention in 2020s.

However, he admits that completable non-arcade games such as *Half-Life* (Valve Software 1998) exist. He tentatively confesses that the game can be completed in a way that "realizes the ideal sequence that *Half-Life* defines" (Juul 2001, p. 2) with the usage of saving and reloading saves. Once more, Juul is not explicit about the problem, but the argument seems to be that different players will experience games differently. For example, some players will explore their surroundings before proceeding to the next objective while others will not and only one of these playstyles fits the developers' vision for the story. This argument feels like a double-standard for games and other media. When describing a story, events often get condensed into short notes such as "John Wick kills all the assassins" without describing the choreography in great detail. Similarly, whether the player takes five seconds or five minutes to reach the next area is not necessarily relevant when describing the story. Furthermore, fellow ludologist Aarseth emphasized consumer agency and organization of narratives structures when defining cybertexts. However, there is a valid critique for video game narratives that even *NieR: Automata* fails regarding urgency. For example, many RPGs (role-playing games) have antagonists whose goal is to either conquer or destroy the world. While it may sound like an urgent threat, both the games and the antagonists will patiently wait for the player to explore the world until they decide to confront the antagonist.

Even so, there are games with timed events which guide the player towards a playstyle that matches the developers' vision. *Deus Ex: Human Revolution* (2011, Eidos Montreal) begins with the protagonist working as a security guard for a megacorporation and is assigned on a mission to rescue hostages. However, the player is also given the option to explore the corporation's headquarters before rescuing the hostages but taking too long will result in the hostages dying. The hostages' death may surprise experienced players who are used to video games that wait for the player. As such, this experience may incentivize players to treat missions with the same urgency that the game does. Similarly, *Heavy Rain* (2010, Quantic Dream) has timed events that the player can only attempt once. For instance, at one point one of the protagonists visits another character's home who gets killed during his visit so the player can attempt to hide all evidence of their visit, such as fingerprints, before the police arrive. However, leaving evidence behind does not result in a repeated attempt but instead the story will continue accordingly.

Next, Juul discusses adaptations based on games in subsection "Games to stories" (2001, p. 4). Firstly, the title of this section already exhibits Juul's disposition that games by themselves are not stories. By contrast, the previous subsection was titled "From movie to game: Star Wars" (2001, p. 3). Juul concludes his adaptation topic as such.

> In short, games based on movies tend to pick a few select action sequences, which are then simulated in game sequences - as we saw with *Star Wars*. Character description and development is either ignored or done in cut-scenes (since this is too hard to implement in game form). Working from game to movie, the game is no longer a game, but is rather presented as specific game sessions, played by specific characters, with specific outcomes. The characters also tend to become more developed: *Tomb Raider'*s heroine Lara Croft acquires much more of a past and personality in the *Tomb Raider* movie. (Juul 2001)

This quote highlights why I find ludology a poor theoretical framework for game studies. Juul claims that character description and development cannot be implemented in game form, but I would argue it is one of its stronger qualities. Typically, video game characters' personalities will reflect their mechanics or abilities. For example, in RPGs characters that heal their allies tend to be nurturing and caring, whereas fighters are brave and imposing. This is also displayed in *NieR: Automata* since the combat-androids can use weapons more effectively since they were designed to fight, whereas the scanner unit is comparatively weaker.

However, character development can be further enhanced with gameplay mechanics. For example, in *Mega Man X* (Capcom, 1993). The game starts with a tutorial level that is relatively easy until the protagonist Mega Man X is confronted by an overpowered enemy tank. As he is about to be killed, Mega Man X gets saved by his partner Zero who is significantly stronger than Mega Man X, as evidenced by his additional accessories the player does not have and how he forces the tank to retreat. Next, Zero tells Mega Man X how he can also achieve his level of strength, which he eventually will by gaining new abilities as the player progresses in the game and eventually saves Zero who was captured by the tank from the beginning. In this example, the player can experience the character's initial weakness compared to other major characters and eventually how he has surpassed them.

However, Juul raises a good point regards to the transition between media in a video game. Lara Craft has more personality in the modern *Tomb Raider* games, such as *Rise of the Tomb Raider* (Crystal Dynamics, 2015) which features almost three hours of cutscenes so from the perspective of cinematographic quantity it outdoes the films Juul regarded as more character-driven. This would seemingly support his viewpoint that the games did not reach the same level of character development as the movies until the games featured a movie's worth of cutscenes. However, it simply proves that

having some cinematography is better than having none as neither the games nor the movies are revered for their stories.

As a matter of fact, Frasca (2003) also defended Juul's position on games as narratives by referencing this article when Juul "clearly points out the connections between games and narrative (p. 95)

> I would like to repeat that I believe that: 1) The player can tell stories of a game session. 2) Many computer games contain narrative elements, and in many cases the player may play to see a cut-scene or realise a narrative sequence. 3) Games and narratives share some structural traits (Juul 2001, n.p.)

While Juul admits games can have narrative elements via non-ludic activities such as cutscenes or by retelling game stories to friends, he evidently denies games as a narrative medium which contradicts Frasca's claim that "the idea that ludologists want to discard narrative from game studies seems to be totally inaccurate (2003, p. 95)". This also contrasts Aarseth's view of games and story elements, such as cutscenes, as two separate entities. Regardless, Juul's arguments as to why "the computer game is simply not a narrative medium" are weak because he is not challenging the games that were praised for their stories, such as *Planescape: Torment* (Black Isle Studies, 1999) or *Silent Hill 2* (Konami 2001) but instead he cherry-picks outdated arcade style games which did not represent the prevalent gaming landscape in 2001. As discussed in section 1, video games had only recently matured as a narrative medium by the time of Juul's article was published and it could be possible that his views have developed over time as games have progressed. Alas, in my research it appears that both he and other ludologists have abandoned the narrative-debate and instead focus on other aspects of game studies, such as analyzing game difficulty (Juul 2009). While ludology itself did not provide any meaningful terminology for this study excluding cybertext's ergodic effort, it provided the opportunity to discuss games as a narrative medium further and also explain why game studies have focused less on stories.

2.6. Genre

Discussing genres is a worthwhile endeavor since *NieR: Automata* is a unique video game to categorize. However, genres are also a somewhat controversial topic since people perceive their purpose differently (Sinding 2002). The common criticism of genres is that genres reduce discourse into reductionism, rules and formalism (Miller 1984). My interpretation of this critique is that two relatively different media can somehow be categorized into the same genre because they have a few things in common. While this may be true in some instances, genre definitions are often quite vague. For instance, any medium that intends to cause dread can be labeled horror. In this case, the critique

seems trivial to me because describing a book as a horror novel for example says little about the book. Critics of genres claim that genre classifications are too strict as they allegedly often use one defining trait which is used to determine how an object is categorized (Sinding 2002). However, Sinding argues (2002) against this notion by stating that classifying things into a binary limited system with one defining characteristic is not common in humans. Instead, categories are typically viewed from the perspective that there exist prototypical members and other members that are compared to the prototypical members. He provides a practical example of how Westerners view flying birds such as sparrows as prototypical birds and chickens and penguins as non-prototypical.

Since genres themselves can be vague, genres are often categorized further into subgenres, such as Lovecraftian horror, psychological horror and slashers. As Sinding (2002) highlights, genres can be an effective tool to describe media and even make connections between multiple media that may have gone unnoticed without considering genres. Labeling different kinds of horror into subgenres is beneficial because they evoke dread in different ways. Furthermore, utilizing subgenres has similar communication benefits as any terminology in that we can describe something as Lovecraftian instead of having to provide a description of it each time. However, Sinding (2002) also mentions the problem of overcategorizing genres which can result in there being an excessive amount of subgenres for every little detail.

Conveniently, video game discourse has created a genre definition system of high and low values that I believe clarifies whenever a new subgenre is warranted. This system was created due to the game *Rogue* (1980, A.I. Design). *Rogue* is an ASCII-based computer game where the player's goal is to complete a dungeon. However, *Rogue* differed from other dungeon-crawlers with its randomly generated dungeon layouts and permanent death upon dying. Soon after, other games emulated *Rogue*'s design which caused a new subgenre of roguelikes. Next, Rogue's procedural generation and permadeath were implemented in all sorts of games such as the 2D sidescroller *Spelunky* (Mossmouth, LLC, 2012) and isometric hack-and-slash *Hades* (Supergiant Games, 2020). However, games like *Hades* also featured stories and meta-progression, meaning that the player character was stronger on subsequent playthroughs. Even though both games used procedural generation and permadeath, *Rogue* fans dismissed them as roguelikes because they were too different from *Rogue*. This dispute was then solved by the creation of roguelites, a genre of games that have the before-mentioned characteristics of *Rogue* but use them in other gameplay genres or utilize meta-progression.

To define roguelikes, a group of developers gathered at the International Roguelike Development Conference in 2008 and worked to define the genre as what is now known as the Berlin Interpretation ("Berlin Interpretation"). The developers grouped the characteristics of the genre into

high and low value factors. While I could not find a source which defines what the two values mean, my interpretation is that they refer to how important they are to the genre. In other words, high value factors are core principles of the genre and roguelikes should cover almost all of these, whereas low value factors refer to common characteristics that cannot be argued to be essential. Naturally, procedural generation and permadeath were considered high value factors but it also had some less obvious requirement such as the game being turn-based and the game-world consisting of grids, meaning that characters move similar to pieces on a chessboard ("Berlin Interpretation"). Low value factors included aspects such as using ASCII display and using numbers to describe characters. This system of value-based categorization works well for niche subgenres because it clarifies which elements are actually essential to the subgenre and which simply appear often.

However, categorizing video games is quite different from other media. Firstly, games are more commonly classified into genres based on their origins as discussed with roguelikes or their mechanics rather than themes. Naturally, other media have mechanical genres as well, such as letters, poems and novels but those media also utilize thematical genres, such as a sci-fi novel or a romantic comedy movie. Platinum Games themselves describe *NieR: Automata* as an open-world action RPG ("NieR: Automata"). To scrutinize that genre definition, open world refers to any game with open-ended levels where the player has some agency deciding where to go next. While this is technically true, *NieR: Automata* is very small by open-world standards since other open-world games' worlds can be dozens of square kilometers wide. Next, action refers to any game where the player controls a character in real-time and usually fights other enemies. Finally, RPG, short for role-playing game, in this instance means that the player can also boost their character performance with other elements such as improving their weapons. Simply put, this genre definition does not reveal much about the game. Moreover, *NieR* games feature numerous mechanics from other genres, such as shoot-em-ups and visual novels that are neglected in that definition. Thus, I created my own definition for director Yoko Taro's games utilizing the high and low values method. Currently it would be difficult to argue Taro's games to be their own genre but his games have so many unique characteristics that if other games mimicked them then I believe it would create a new subgenre, similar to how *Dark Souls* (FromSoftware) was also an action-adventure game but has since then created its own subgenre of soulslikes.

High value factors	Low value factors
Multiple endings	Deleting save data
Death as a theme	Sexualized women
Blend of gameplay genres	Insanity
Side quests	Bullet hell
Third-person action combat	Apocalyptic
RPG elements	Visual novel sections
Synchronizing music and gameplay	Cinematic cutscenes

Table 1. Definition of a Yoko Taro game

So far, Yoko Taro's games have had drastically different premises so categorizing it into a value is difficult. For instance, the original *NieR*'s premise is that the protagonist is trying to find a cure for a disease that is gradually eradicating humanity while *NieR: Automata* is about a conflict between two war forces representing their masters. However, there is a tentative pattern of humanity being on the brink of extinction. As such, the games have feature death as a major theme and are dark and grim in general. At the moment I classify third-person action combat and RPG elements as high value elements but that is only because so far, every game has fit those criteria. Thus, it is possible that in the future they may become low value factors if Yoko Taro releases a game that is comparable to his previous work but does not utilize those elements. In contrast, multiple endings and blend of gameplay genres seem crucial to a Yoko Taro game. Critics of genres could argue that even this categorization limits what features Yoko Taro games can or must have, but it is simply a reflection of the patterns in his games so far. If he were to release a game that we identified as comparable to likes of *NieR: Automata* with notable differences, the characteristics can be updated to fit the new view.

In addition, genres can be analyzed as a rhetorical tool. Miller (1984) defines genre as a "conventional category of discourse based in large-scale typification of rhetorical action" and adds that "as action it requires meaning from situation and from the social context in which that situation arose" (p. 164). In other words, genres can be viewed as different forms of communication which utilize different tools to accomplish their goals. Letters can be written in many forms such as a love letter, invoice or a letter to the editor and they have obvious differences. For instance, love letters are written to a particular person with an intent to express love whereas a letter to the editor is a public statement to about a wide variety of topics. Since they have different intents, they also use different methods to accomplish them. Love letters' affectionate adjectives and intimate details would be out-

of-place on a letter complaining about local bus drivers. However, the differences between game genres are less defined so I will discuss them next.

Firstly, Miller (1984) addresses similar criticism of genres as presented by Sinding regarding excessive classification, such as that "genre criticism invites reductionism, rules, formalism [sic]" (Miller 1984, p. 151). While I already explained why I disagree with this notion, it provides an opportunity to discuss genre as a rhetoric within video games. Video games genres are often defined based on their mechanics and gameplay loop which ignores the topical themes of games. However, it also neglects how video games tell their stories. As discussed in the introduction, video game storytelling is often an amalgamation of numerous different genres. While this is true for other media like literature, they often also have more defined categorizations such as novels, short stories, poems, haikus, essays, legends and so forth with further subgenres like the beforementioned letter types. In contrast, video games are fused into one collective entity of video games which results in arguments such as Juul's statement that *Space Invaders* disqualifies video games from being a narrative medium. While *Space Invaders, Rogue* and *NieR: Automata* all belong in the video game medium, discussing video games as a narrative medium would be more productive if they could be categorized based on their narrative structure or expression, such as whether they have a scripted story like *NieR: Automata* or an endless gameplay loop with a little story like *Space Invaders.* Video games have numerous genres depending on the gameplay mechanics, such as first-person shooter or puzzle-platformers, but most gameplay mechanics are not connected to the narrative expression the same way literature genres can be.

The closest example to this is the genre of visual novels which is characterized by its usage of text in an environment with some player participation, such as dialogue options or character movement. In fact, my analysis of *NieR: Automata* will have sections that I refer to as visual novels. Admittedly, my own Yoko Taro game definition is not really a genre but more of a description of one director's characteristics, but at least it provides a list of different intermedial methods that the games use in forms of visual novel element and cinematic cutscenes in addition to using the gameplay itself for narrative purposes. This distinction is worthwhile because the aim of this study is to analyze how *NieR: Automata*, a Yoko Taro game, uses its medium to enhance its story which is actualized by the gameplay-related rhetorical tools. Furthermore, there are informal terms that somewhat categorize different games. For instance, a playthrough of *NieR: Automata* could be called a "campaign" or "a story mode*"*, whereas a playthrough of *Rogue* is referred to as a "run". Moreover, scripted video game stories have a clear point of completion, usually in the form of credits, while *Rogue* is intended to be played repeatedly. Thus, there exists some precedence for how different kinds of video games can be perceived or categorized differently.

According to semiotic framework (Miller 1984), discourse consists of substance or semantics, form or syntactics and the rhetorical action that the discourse performs or pragmatics. Since in linguistics semantics refer to meaning-making by means of words and symbols, in video game terms it could be viewed as providing the player's actions meaning within the game (Tutenel et al, 2008). Practically speaking, shooting someone with a gun in a video game is really only the game checking whether the player's cursor aimed at the target as they pressed an input registered as firing a bullet. However, semantics can be utilized to make the mundane activity of pointing and clicking a cursor into something more meaningful. Tutenel et al (2008) categorized video game semantics into three tiers. The most basic level of object semantics simply refers to all the objects within the game and their properties. In case of *NieR: Automata*, this could be all the different enemies as some machines are cannon fodder whereas others are more threatening. For example, machines with fiery gleam explode if they get near the player, so the player is incentivized to be evasive and dispatch them with ranged weaponry. The next tier of semantics regards the relationship between different objects. The player may realize that they can lure the self-exploding machine into harming other machines if they explode near them (Tutenel et al, 2008). The third tier of global semantics is more difficult to apply to *NieR: Automata* as it refers to global semantics which affect the whole game world. In case of *NieR: Automata*, it be viewed as the game world changing due to story events. Naturally, semantics can also provide narrative-related meaning. Without semantics, killing any character is accomplished by pressing certain buttons, but these same actions may evoke emotions based on our feelings regarding the target.

While syntax is hard to convert into a video game term, I believe game mechanics is the best equivalent. While mechanics are ultimately dependent on the capabilities of the engine and the hardware, incomparably different types of games are developed with same game engines. Instead, I view syntax as the rules, systems and mechanics that exist in the game which direct how the player can solve scenarios. As discussed in 3.3, all games only provide agency within the game's allowance limits which varies from game to game. Different games provide the player with different tools to solving conflicts. In *Metal Gear Solid*, the player's relatively low health, difficulty aiming and the guards' transparent patrolling routes incentivize the player the solve the situation by identifying gaps in the patrol routes and sneaking past the guards. Conversely, in *Doom: Eternal's* (id Software) the player kills demons by charging forward which is encouraged by the Doomguy's durability and powerful weaponry. *Metal Gear Solid's* weak gunplay is not an engine deficiency or an oversight but an intentional choice so the player plays the game as designed. However, engine limitations can also influence mechanics. In 3.4. it was discussed how video games may use quick-time events to replicate

flashy choreographed action sequences which in reality are often used because the developers could not create that sequence with the normal game mechanics.

However, Miller (1984) argues that social action actually encompasses both semantics and syntax as they influence the context in which actions are committed. Furthermore, Miller (1984) states that contextual actions require situations and motives. Once more, love letters have a clear motive of expressing love and are usually sent in situations where the sender is unable to express their feelings in person for a reason. From a gaming perspective, it could be analyzed that different gameplay sections have different motives other than simply defeating the foes. The act of traversing via running, jumping and dashing can be used in multitudes of scenarios, such as travelling, chasing, racing, climbing and fleeing and these scenarios obviously happen in different contexts. For example, the player may flee when they are near death or attempt to climb a tall building simply to know whether it is possible. The original *NieR* also featured optional quests where the player was requested to deliver fragile cargo to another town which prevented the player from rolling, falling from heights or taking damage from enemies that attempted to attack the player during the journey. These different scenarios have clear goals such as survival or completing a quest which makes them proactive decisions.

However, Miller (1984) also explains that rhetorical situations are, in fact, "a complex of persons, events, objects and relations" (p. 152). Essentially, humans have had recurring social situations over time and through trial and error have realized which conventions work for these situations. For example, companies used to utilize social media in a rather risk-averse manner by focusing on marketing and professional customer interaction until American fast food restaurant *Wendy's* gained popularity due to their more humorous and jovial social media presence which other companies have since integrated (Dynel, 2020). Thus, practices such as roasting customers seemed infeasible due to traditional customer service situations but is now accepted. According to Dynel (2020), *Wendy's* Twitter account gained popularity in 2017 after ridiculing a Twitter user for "forgetting that refrigerators existed" (n.p.) when discussing whether their restaurants use frozen beef. It is possible that whoever was controlling the *Wendy's* account that day was annoyed at the other user and was prompted to ridicule them. Thus, the necessity to respond in a social situation is called an exigence (Miller 1984). As such, the exigence of a *Wendy's* Twitter user ridiculing customers eventually became the new norm and is now recognized as a regular form of social media interaction. Furthermore, Miller describes exigences as "a form of social knowledge-a mutual construing of objects, events, interests, and purposes that not only links them but also makes them what they are: an objectified social need." (1984, p. 157). In addition, she states that exigence "provides the rhetor

with a socially recognizable way to make his or her intentions known" (Miller, p. 158). Finally, Miller addresses how new genres can develop

> In other words, our stock of knowledge is useful only insofar as it can be brought to bear upon new experience: the new is made familiar through the recognition of relevant similarities; those similarities become constituted as a type. A new type is formed from typifications already on hand when they are not adequate to determine a new situation. If a new typification proves continually useful for mastering states of affairs, it enters the stock of knowledge and its application becomes routine. (Miller, 1984, p. 156-157)

Yet, since video game narratives are a relatively new phenomenon, their stock of knowledge is limited and therefore games such as *NieR: Automata* have exigences via experimentational narrative tools. When creating new media, the creator cannot know whether the audience will respond in the manner that they desire. Admittedly, this is applicable to all new media products, since they can feature new characters, plots, twists et cetera. Nevertheless, decades, centuries or even millennia of media have given formulas regarding how audiences will respond to certain elements. For example, while the contemporary three-act structure of exposition, confrontation and climax was coined by Fields in 1979, narrative structures have been analyzed by philosophers such as Aristotle millennia ago (Janko, 1987). While narrative structure theory can be somewhat universal, Fields' (1979) tree-act structure for instance was designed with two-hour movies in mind, whereas video game lengths vary from dozens of minutes to hundreds of hours. If climax is meant to be the apex of the story in terms of intensity, then it should be somewhat short because intensity decreases over time. Thus, a traditional three-arc structure would seem odd for a game where one arc may be less than one percent of the whole experience. Hence, even a game such as *The Order: 1886*, which openly markets itself as a movielike game, still has to make compromises in its structure to fit the pacing of a video game. Furthermore, whenever games utilize cutscenes for narrative purposes, they can also take advantage of the established cinematic conventions such as narrow camera angles to evoke tension. Therefore, modern video games may attempt to be movielike since they are familiar compared to the relatively unexplored video games. Hence, even *NieR: Automata* utilizes many cinematic features such as cutscenes in storytelling. However, in this study I am interested in analyzing the new experiences that *NieR: Automata* provides with its gameplay.

3. Data and Methodology

NieR: Automata was released on March 7, 2017, in North America and a few days after in Europe (Vitale). *NieR: Automata* takes place on Earth in the year 11 945. Over six thousand years beforehand, aliens invaded Earth via machine lifeforms they created. In response, humans escaped to the Moon, established the Council of Humanity and started building androids to liberate Earth. However, despite repeated attempts, the androids were incapable of defeating the machines. Thus, the Council of Humanity created YoRHa, an elite android military force, whose name is not an acronym, to fight the machines. This war between androids and machines has lasted for millennia without any signals from the aliens and the Council of Humanity only broadcasting short messages.

Throughout *NieR: Automata* the player controls three different characters: 2B, 9S and A2. 2B is the protagonist the player uses initially. 2B, B standing for Battle, is a YoRHa combat android. 2B is presented as a professional who prioritizes completing her objective and sometimes scolds others for behaving cordially, even though she is not as cold as she may seem. She is accompanied by 9S, a YoRHa Scanner android whose primary job is to gather intel about the machines. Unlike 2B, 9S was programmed to be kind and curious. Finally, the third protagonist is A2 who is a defect android that rebels against YoRHa which makes her an enemy of 2B and 9S. She is described as aggressive and impatient and perhaps even stupid due to her model being outdated compared to 2B and 9S. However, in Route C she gains a sense of obligation and duty to finish the ongoing conflict between androids and machines.

The game can be divided into combat and story. *NieR: Automata's* combat blends different gameplay genres. When controlling 2B and A2, the combat is primarily a spectacle fighter and can be compared to games such as *Devil May Cry* (Capcom) and *Bayonetta* (PlatinumGames). Spectacle fighters feature a third-person melee combat with a heavy emphasis on flashiness, such as elegant dodges to avoid enemy attacks and killing them with stylish attacks. 9S can also fight this way but he is weaker at it than the other two androids. To compensate, 9S can hack enemies which turns the combat into a shoot-em-up minigame where the player controls a ship from a bird's eye view and avoids enemy projectiles and eliminate the enemies to complete the hack. 9S can also hack into non-sentient objectives such as databases which also use the hacking minigame with an emphasis on exploration over combat. There are also shoot-em-up sections when 2B and 9S use fighter pilots. Additionally, the game also changes camera angles frequently even during the combat sections. For instance, during one part the camera follows the player from behind whereas the next section is displayed in a bird's eye view or from the side in 2D. The story sections differ greatly as well. While

there are many cinematic cutscenes, there are also dialogue in midst of gameplay, written dialogue and sometimes the gameplay itself is used for narrative.

While *NieR: Automata* was developed by PlatinumGames game studio, its story is credited to director Yoko Taro who is known for making games with stories that utilize the game medium. For example, he directed *Drakengard*, a game in which the player mundanely kills hundreds of enemies before dying unceremoniously as a commentary on how "insane" video game protagonists that kills hundreds of people are (Bailey, 2014). Despite his tradition of merging gameplay with story, Taro's games have received mixed critical reception, largely due to poor gameplay. Bailey (2014) states how "there's the matter of them (Taro's games) not being particularly enjoyable to play, no matter how daring or experimental they might be." A testament to Taro's vision is that the secret ending of Drakengard is a rhythm-game which ends with a modern airplane hitting the protagonists' dragon which then lands onto New York where his ashes spread a disease that appears in *NieR* which precedes the events of *NieR: Automata*. Fortunately, *NieR: Automata* was developed by PlatinumGames which is highly regarded for their gameplay which finally provided a Yoko Taro game with enjoyable gameplay.

The data for this thesis was conducted by an extensive playthrough of the game. The game took roughly 28 hours to complete with almost all of the content in the game completed. During this playthrough, 5,899 screenshots were taken as a form of notetaking. The high number of screenshots can be explained by the fact that each line of dialogue requires its own screenshot. Therefore, a short dialogue between two characters may require up to 20 screenshots. The game uses a lot of foreshadowing and many of the plot points are very reliant on understanding the background story. Thus, I will mention story whenever it is necessary to understand my analysis.

NieR: Automata has a unique chronological order in which it is played. Normally, games follow the standard linear chronological structure of most narratives from start to finish. However, *NieR: Automata*'s story is divided into three parts that will be referred to as Routes A, B and C. The naming derives from the fact that each route results in Endings A, B for Routes A and B respectively, while Route C ends with Endings C, D and E. Additionally, these three Routes can be divided into two story arcs. Routes A and B cover the first arc in which the protagonists 2B and 9S must defeat the humanoid machines Adam and Eve. Route C, featuring new protagonist A2, starts after the defeat of Adam and Eve and concludes the story. Furthermore, Routes A and B contain exact same events but from the different perspectives of the 2B and 9S. In other words, the game's first narrative half is first played from 2B's perspective in Route A, then the game goes over the exact same events from 9S' perspective in Route B and finally continues the story in Route C.
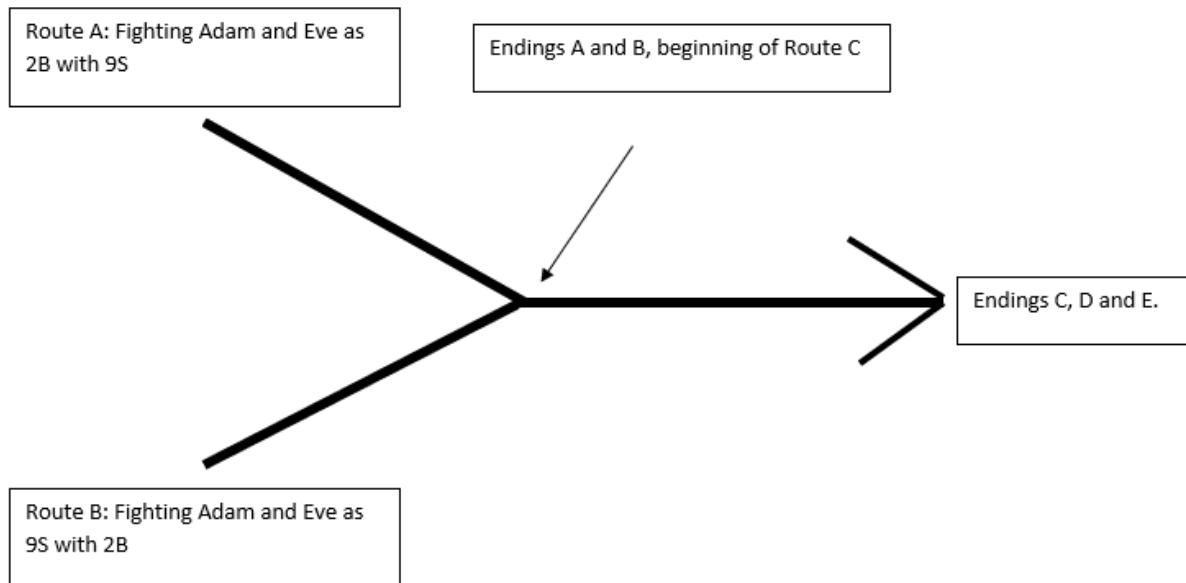
Figure 3. Story progression in *NieR: Automata*

While the game has five major endings, they are not hierarchically equivalent. Endings A and B are endings to their corresponding routes but not the overall story, as the plot still continues afterwards in Route C. Additionally, they are essentially the same ending just from the two characters', 2B's and 9S's, perspectives. Most people who complete the game will get either Ending C or D which can already be qualified as proper endings but Ending E, albeit a secret ending, is considered the true ending players should seek. In addition, there are 21 secret joke endings that will be elaborated on in section 4.3. when they become relevant to the ongoing story.

Ultimately, this study will use traditional narratological terms of events and existents to establish the general story of the game which could be translatable to other media. In addition, most of the analysis will be on aspects of the story that I argue to be unique to gaming. I will refer to this as narrative agency, which I define as moments of ludic gameplay that have meaningful narrative significance. Initially, I considered terms such as immersion or engrossment but not only are they not exclusive to games but even within the context of games they refer to the state of perceiving yourself in the mediated environment, or in other words, "feel like he 'is' in the world that the game creates (Madigan, 2012)", which can apply to non-narrative games as well. Furthermore, the term also acknowledges that gameplay can become more meaningful with narrative context. For example, the player may feel indifferent about traversing from one point to another but if the player is given a story-related reason to get there as soon as possible then it may develop narrative significance. Movies may implore the protagonist to move quickly as well, but the watcher is a passive participant whereas in games they have active role in traversing quickly. Also, whether the player can actually influence

the events is not as relevant as the illusion of agency. Obviously, narrative agency will be more powerful on subsequent playthroughs if it has impact, but when playing a game for the first time the player does not know the consequences of their actions.

Furthermore, I will also analyze the different sections with narrative agency using the concept of genre as a rhetorical tool in mind. While every part of a video game could be considered some type of genre, they vary greatly in how much narrative significance they have. As such, I will focus less on narratively insignificant parts such as combat sections with no additional context. To reiterate section 2.6, video game narratives have less established conventions than other media so I will also take that into consideration when analyzing each scenario.

4. Analysis

This section will go through the events of *NieR: Automata*. Section 4.1 will introduce the narrative elements of the game whereas 4.2 and 4.3. will introduce more elements narrative agency by focusing on how different characters perceive the world differently and decision making in games. Finally, 4.4. focuses on the final three endings and what makes Ending E's narrative agency particularly powerful.

4.1.   The Introduction – Establishing character roles

The game begins with Route A in which the player controls 2B exclusively. Next, the game will go through the events of Route A but from 9S' perspective instead. In other words, Route A and B repeat same encounters and events. However, since 9S can hack into machines, his playthrough will also provide additional insight into the machines' psyches. The primary argument of this subsection is that the controllable character affects how the game's story unfolds and even how players themselves may interpret different events. Since the Routes contain largely same events, I will summarize the common story events and highlight whenever there is something notable between them. However, the game was designed to be played one Route at a time so it is possible there are instances in Route B that only make sense after completing Route A. In addition, I will reveal the other major plot points to support my incoming analysis.

The most notable development throughout Route A is that the protagonists' and the player's perceptions of machines develop from mindless adversaries to individual beings with their own thoughts or desires. Secondly, 2B and 9S have a complicated relationship in Route A and B where 2B is noticeably distant from 9S yet has emotional outburst whenever 9S is either in danger of dying or dies. For the sake of clarity, I will explain the final plot twist of the story. As mentioned in section 3, the letter in each androids' name reflects their model type. 9S is a high-end Scanner model, whose irresistible curiosity made him bound to discover the truth that humans have gone extinct, which occurs in Route B, and the current battle between androids and machines is meaningless, since it was supposed to be about returning humans to Earth. Therefore, YoRHa assigned 2B under a false moniker to accompany 9S and kill him whenever he learned the truth. 2B's actual name is 2E, with E standing for Execution. Type E-units are androids designed for killing other YoRHa androids. Thus, both Route A and B begin with 2B being aloof to 9S because she may have to kill him at some point. In fact, it is also implied she has already killed 9S on numerous occasions. Despite the name reveal,

I will still refer to her as 2B. Finally, the game's Ending E starts with a battle against the credits of the game which will be elaborated on in section 4.4.

The story starts in the middle of an ongoing war between androids and machines as the first protagonist, 2B, is assigned on a mission to take out a Goliath-class, meaning an exceptionally large, machine unit in an abandoned factory. As 2B is on her way towards the location, she states the following quote that will be the basis of this study.

> "Everything that lives is designed to end. We are perpetually trapped in a never-ending spiral of life and death. Is this a curse? Or some kind of punishment? I often think about the god who blessed us with this cryptic puzzle...and wonder if we'll ever get the chance to kill him."

For a new player, this statement can only be taken at face value. Firstly, 2B states that everything that lives is designed to end yet they are trapped in a spiral of life and death. To expand on this more, machines and androids' lives are not limited to their physical bodies. Each android has a black box which is effectively their current personality and memory. Androids can upload their black box data into a database and retrieve it from there. This means that even if the physical body of an android is destroyed, their old memories can simply be inserted into a new body. The machines' equivalent of a black box is a machine core, although machines are perceived as mindless weapons in contrast to the more sentient androids. However, all androids and machines can be recreated even without their black box or machine core, but they lose all their previous memories and experiences. As mentioned in Section 3, both androids and machines were created by organic beings, humans and aliens respectively to fight for them. Thus, 2B's quote could be talking about her human-creators. Regardless, this quote is still rather vague at the beginning and the player may not think much of it.

However, after completing the game this statement is more revealing. Now, it is clear she is referring to her own predicament of having to partake in a meaningless war in addition to having to kill her friend repeatedly. While that is one way to interpret the never-ending spiral of life and death, it could also be interpreted from a video game narrative standpoint. While I have argued extensively about how stories can be a significant part of a video game experience, it is also true that on multiple subsequent playthroughs players tend to prioritize gameplay over story. In other words, devoted players may keep playing the game for non-narrative reasons such as to master the combat system However, from the in-game characters' perspectives new playthroughs repeat the same violence they have already experienced and as such they are trapped within the game. Finally, the comment about

killing her god is actualized in the final battle as the player fights against the credits of the developers who made the game.

The opening minutes of Route A showcase 2B's combat prowess as she effortlessly defeats the machine forces. This also functions as a combat tutorial for the game, where the player is taught how to fight. This opening is somewhat typical for action-based video games and by itself provides little insight to the story. However, it displays 2B's strength and may also portray the game as a straight-forward action game where the enemies exist for the player to destroy. In contrast, Route B starts peacefully with 9S condescendingly spectating a machine trying to wake up a deactivated machine it refers to as its brother until 9S is ordered to assist the incoming YoRHa troops which also includes 2B that are approaching the factory. However, he is also assigned to hack into machines to weaken them before their arrival which functions as a tutorial to 9S' hacking mechanic which is essential to his playstyle. As mentioned before, 9S was not designed for combat and as such he is an inferior fighter to 2B. Instead, 9S can defeat enemies more effectively by hacking into them during which the game turns into a 2D isometric shoot-em-up. Furthermore, the game aesthetic changes from the regular realistic graphics to colorless digital textures to showcase he has entered into a network. While hacking is mostly used for fighting, sometimes it is also used for narrative purposes when 9S is exploring, for example, YoRHa's database.

Figure 4. Hacking gameplay

After their respective introductions, 2B and 9S first meet each other as 9S arrives to help 2B defeat a machine. Next, they greet each other and exchange information before splitting up to find the enemy Goliath more easily. During this greeting scene, the camera is also angled behind

whichever character the player is using. This reinforces the notion that the two Routes tells each character's perspective. Once splitting up, the two remain in radio contact. 9S tells 2B how he is glad to work with her as Scanner units such as himself usually work alone. After describing it as kind of fun, 2B rejects him by stating that emotions are prohibited. Up until this point, 9S has also referred to 2B as "ma'am" which she also prohibits, deeming it unnecessary. As mentioned, 2B has talked to 9S in a very strict and professional manner but the player may pick up that her tone shifts throughout the mission. While she seems very emotionless whenever 9S can hear her, she displays different ranges of emotion in other circumstances. For instance, 2B is also accompanied by a flying robot called Pod 042, who provides tactical support but also functions as a ranged weapon for the player. The game has a running joke with Pod 042 always giving seemingly obvious suggestions and clarifying everything. For instance, early in the game Pod 042 tells 2B: "Proposal: Dispatch it (the hostile machine) as swiftly as possible" to which 2B replies "You don't say". However, 2B only shows this sarcastic side of her when 9S cannot hear her. This is proven in Route B since the player never hears 2B's sarcastic comments when playing as 9S after their radio messages.

Eventually, they reunite to fight the target Goliath but 9S gets damaged and he lands on top of the Goliath whose name is revealed to be Engels during Route B. This revelation is explained by 9S being a scouting unit who was designed to gather data about machines. In contrast, battle-androids are designed to destroy machines so learning there is no reason for 2B to learn her enemies' names. Regardless, 2B who is controlled by the player in Route A then climbs on top of Engels to aid 9S. In Route B, however, the player is immobilized as 9S and has to wait for an AI-controlled 2B to reach him instead. 2B tells Pod 042 to help her with repairing 9S but Pod 042 interrupts her, stating that 9S's vital signs are too poor to attempt repairing him now. 2B yells at him to shut up and do as her says with a desperate voice. 9S wakes up and asks her to leave him and 2B yells at him to shut up as well. 9S states that they are soldiers who are proud of their service. Once again, the shift in 2B's tone is obvious if the player knows her origin but it is admittedly possible that a new player may not question her shifting behavior. Regardless, 2B leaves 9S to heal and confronts the machine who starts repeating the word "kill", which is 2B's first instance of hearing a machine speak.

Meanwhile in Route B 9S is attempting to repair himself and it also introduces the player to hacking stages that are not just small combat areas such as in Figure 4 but can be explored further. During his repairs, 9S contacts 2B to inform he found a weakness and that he is attempting to hack it. 2B's only response is that she told him to shut up. Finally, to finish the battle, 2B jumps out of her flight unit and stabs the Goliath with her sword while yelling "Would you just die already". However, 2B and 9S are then surrounded by multiple Goliath units. 9S suggests using their black boxes' self-

destruction mechanism to defeat the Goliaths and assures 2B that he has stored 2B's current black box data into a server. Thus, 2B and 9S suicide bomb themselves.

After the battle, 2B and 9S can be seen in a space station called The Bunker which is the headquarters of YoRHa. As 9S approaches 2B, he tells how the mission was a success but 2B stops him and thanks him for uploading her memory data into The Bunker. 9S states that he does not remember this as he was unable to upload his own data memory to the server, meaning his last memory is before they met. 9S salutes 2B and proclaims the YoRHa slogan "Glory to mankind" which 2B mimics. However, after 9S walks away 2B can be seen clutching her fist which is not visible on Route B's version of the cutscene. Naturally, 2B's response is caused by her knowledge of humanity's extinction and the fact that she had killed 9S yet again.

After the cutscene, 9S will do a routine configuration with 2B which is done by the player accessing the in-game menu options, where the player can adjust numerous settings, such as screen brightness and activating the option to self-destruct, which can be used as an attack maneuver. Here, 9S will comment on the numerous settings, such as mentioning that nobody likes the idea of self-destructing, but it must be turned on due to protocol. The player can here also turn voice volume off which will actually get a response from 9S, albeit only in text-form as his voice is now muted. This can be considered a tiny detail that even the game options are tied into the actual game world, so muting the game is explained as the android turning her receptors off. Finally, 9S also remarks that this procedure is being recorded for posterity. However, this scene is revisited in Route B and this time the player is shown a recording of the actions they made in Route A as 2B. As an additional touch, the player can praise 9S' voice in Route A which 9S will acknowledge internally in Route B.

So far Routes A and B have shown their differences by either giving each character exclusive content such as environments, dialogue and camera angles. However, those features can be translated into other media relatively easily. An author could write 2B's and 9S' experiences in separate different chapters that have unique dialogue and exclusive events, such as when 2B fights without 9S. However, the two characters were always separated from each other during those events. In contrast, both 2B and 9S are present during the configuration scene yet the game reinforces that the player is experiencing it from one character's perspective by using narrative agency. During Route A the player is given full control of the configuration settings to the extent they can refuse the self-destruction protocol and annoy 9S by muting him. In Route B, however, the player loses all agency and instead has to watch someone else do it. Since the player does not control 2B, they also lose control of her configurations. In other words, the only difference in expression during this scene is whether the player is in control.

4.2.   Routes A & B – Narrative agency as character immersion and Endings

After 2B's configuration, she and 9S are instructed to return to Earth by the Commander, the leader of YoRHa to aid the local resistance group. During their travel, 9S ponders why a combat model such as 2B would be assigned to do a recon job with a Scanner but 2B instructs him to just follow orders. Before arriving at the Resistance camp, they also notice docile machine units. As they approach the camp, the leader of the camp makes an odd comment about 2B being "Number Two". 9S inquires if the leader knows 2B to which she replies that the Bunker told them to expect them, despite the Commander claiming they had lost contact with the camp. The camp leader, Anemone, asks the androids to assist the locals. At this point, the duo has to do a few tasks for the local androids to unlock shops which is used to develop 2B and 9S' relationship. Once completing the missions, 9S tells 2B that these "chores are a real pain in the butt" and 2B scolds him by saying that helping a valuable ally benefits themselves. These early quests also introduce numerous game mechanics that will be used throughout the game, such as quests, collecting materials and upgrading equipment.

The next paragraph will quickly summarize the following several hours since they are relevant to the study yet do not necessarily need to be elaborated on in an intricate manner. 2B and 9S are sent on numerous missions throughout the game world for different reasons, such as rescuing missing androids or negotiating peace treaties with other machine factions. During this journey, the two will meet more machines which contradict their conceptions of machine sentience. The best example of this is Pascal, who is a pacifist machine that has disconnected himself from the machine network and is the leader of a peaceful village with other docile machines. In fact, Pascal's village cooperates with Anemone's resistance group despite the fact androids and machines are at war. The machines' sophistication is further displayed by the different machine encounters. While Engels could only speak one word, 2B and 9S later discovered machines that started mimicking more complicated human concepts, such as fashion, religion and governments. The complexity of machines is further demonstrated by side quests and Route B. *NieR: Automata* has numerous side quests provided by different machines that each have their own desires.

For example, in the quest *Idiot Savant* the children in Pascal's village make fun of a machine for being allegedly stupid. This claim is based on the fact that other children keep asking him whether he would want to have a cheap or an expensive coin and the machine always picks the cheap one. Thus, 9S is asked to hack into the machine to see if there is something wrong with him. Surprisingly, the machine has an advanced circuitry which is reflected in the game by it being one of the hardest hacking fights in the whole game. The machine then states that if he keeps acting stupid, the other

machines will keep offering him cheap coins which is more profitable than accepting the expensive coin once.

Route B also provides insight into machines that the player defeated in Route A. For instance, one boss fight takes place in a theater stage against a machine called Simone dressed in garments. In Route A it is acknowledged that Simone is intelligent because she uses kidnapped androids' black box signals as bait but besides that she is treated as a regular boss encounter. However, Route B reveals her background whenever 9S, who is controlled by the player, hacks into her. Simone became obsessed with beauty because she fell in love with another machine and she went insane as she tried different methods, such as decorating herself with garments, to get his attention. From face value, 9S' Route B is relevant for the player as it shows the different personalities and motives that the enemy machines have. While 2B's perspective showcased machines as hostile savages barring a few exceptions such as Pascal, 9S's perspective highlights that even the seemingly evil machines have their own background and tragic history.

However, the next extract attempts narrative agency by assuming character roles. Just like in Route A, early into the game, 9S and 2B get ordered to go the desert where they first meet Adam and Eve. In 4.1, it was mentioned how the two had an awkward relationship since 9S and 2B had different ideas of professional discourse, since 9S wanted to be more casual whereas 2B insisted on remaining professional. Now, this interaction will be examined in detail. The following is an extract of their interaction in the desert after hearing an announcement from the human Council from the moon as they implore androids to keep fighting for mankind.

> 9S: Those Council broadcasts are always so stiff.
>
> 9S: Who opens a sealed gate with explosives?
>
> 9S: There's gotta be an easier way, right?
>
> 9S: This sand sure is slippery.
>
> 9S: Careful. We've got enemies approaching.
>
> Machine: An…droid…. De…sert… K-Kill… Me…Meat…
>
> 2B: These machines are talking.

These lines are the only dialogue for minutes and they mostly consist of 9S making random statements. However, for some reason, 2B does not respond to or even acknowledge them until it is somehow related to machines. This interaction between 2B and 9S may give the player different

impressions depending on who they are using. While playing as 2B in Route A, 9S may come across as very noisy and excessively talkative, whereas with 9S it comes across as 9S trying to get acquainted with 2B who is being cold-hearted, aloof and detached from him. Whether this was a deliberate decision is debatable, as it is entirely reliant on the player's perception. The game does not specifically say that this is intended at the time. For example, while 2B makes constant remarks about prohibiting emotions, she never expresses her annoyance of 9S's chattery. However, there are arguments to support this theory. For one, video games are primarily created with entertainment in mind. Most games aim to give the player something new constantly, whether it is new mechanics, storytelling or content. While many games repeat content, they are still presented as new objectives or missions. Route B offers some differing elements from Route A, yet it still has hours of identical content with identical dialogue. The only difference is that 9S gets contacted by Operator 21O instead of Operator 8O which would not be enough to justify hours of repetition. Most directors would have given 9S new alternative content, such as new enemies to fight in order to keep players engaged. While Route B has new narrative content, such as insight into the machines', in-game mythology and the exposure of YoRHa's secrets, they are spread in-between story sections the player already completed in Route A. Naturally, the repetition could be partly due to budget restrictions. Nevertheless, I believe the developers considered the repetition itself to be significant and not just an economical compromise.

My argument is that the purpose is to let the player see how 9S is treated during the first half of the story compared to 2B. She is surrounded by the cheerful 9S and Operator 8O, whereas 9S is constantly told not to be emotional and stick to the mission by 2B and Operator 21O until the last third when 2B becomes friendlier with him. However, as mentioned, the actual dialogue does not change. This is an example of *NieR: Automata* utilizing game media from the standpoint of seeing different perspectives. Other media cannot display different perspectives without clarifying what is different. For instance, books can tell stories in first person but telling the same scenario from different perspectives still requires rewriting and rewording it. The only difference between the desert dialogue in Route A and B is which character the player is controlling.

Furthermore, 2B's reversion to antisocial behavior towards 9S should be more apparent in Route B as the player has already seen throughout Route A that 2B cares for 9S as evidenced by the encounter with Engels among other instances. Normally, one can recognize the shift in behavior by consuming the media multiple times but at this point the game is not even halfway through and the two characters' relationship is not fully shown yet, which again alludes to repetition being a narrative choice. As discussed, video games are not as developed when it comes to narrative structure and I

believe this is one of the instances where Yoko Taro is attempting something different that has not been established as a regular feature yet. While I believe Taro intended to repeat content to emphasize their interaction, I have been unable to find any source that comments on this interaction so it is possible it was more effective for me than others. If so, Route B's repetition may feel lazy or meaningless to some players. Ultimately, knowledge of 2B's secret proves that she was intentionally distancing herself from 9S.

The main antagonists of Routes A and B are Adam and Eve who command the machines. During the game it is revealed that machines have killed their alien creators and are instead more interested in humans. While they are encountered a few times throughout the Routes, the third encounter is the most relevant for this study. 2B and 9S partake in a battle where 9S gets kidnapped by Adam. While Route A showed how 2B rescued 9S from Adam, Route B shows what 9S did during captivity. After the fight, the game continues with 9S being in a massive hacking level. 9S quickly realizes that he has been connected into the machine network and starts investigating it. Despite being a narrative section, the game omits voice acting and converts into a visual novel instead. While exploring, 9S learns that the machines have compiled a database of human activities ranging from different forms of government to philosophy and mathematics. Furthermore, the machines do not attempt to create their own versions of cultures and values but instead imitate humans. Despite the machines being able to adapt in battle, the machines do not ever alter their behavior when mimicking humans. For instance, if machines try and fail at creating a democratic government, they will repeat it in the exact same manner and therefore fail again. Also, the comment about machines adapting in battle can be used to explain why the machines become stronger during the game alongside the player who also becomes stronger by fighting machines.

It has been mentioned a few times throughout this thesis, but *NieR* games are known for their blend of different gameplay genres. Generally speaking, they usually use a specific genres for specific scenarios somewhat consistently. For instance, in *NieR*, visual novels are used extensively for dreams. Admittedly, *NieR: Automata* is less consistent where it uses what genre but there are some patterns. Firstly, all 9S' hacking attempts into networks take place in the hacking space as showcased in Figure 4 regardless of whether there is any actual combat so it is clear whenever the player is in a network. Secondly, digital documents frequently provided in text-form which makes sense as they are documents. Video games have mixed other genres for decades as shown by the prevalence of cutscenes. However, *NieR: Automata's* usage of gameplay mechanics such as hacking for storytelling

also contradicts Aarseth's claim that games are dependent on other media for storytelling since he claimed games utilize other media such as movies or comic books for narratives.

After some researching, 9S hears a voice and recognizes it to be Adam. Adam tells 9S how machines have learned and grown from fighting and have gained a new consciousness. According to Adam, all living beings are slaves to desire and desires give life a meaning. However, different beings have different values, such as beauty for Simone or hatred for him. 9S denies this but Adam adds how 9S "does not trust anything, wants to destroy everything, has lost hope in everything, wants to obtain everything and wants to be loved by all." This is followed by the line: "You're thinking about how much you want to **** 2B, aren't you?". Since the four-letter-word is censored, the word in many people's minds is assuredly "fuck". Upon her character reveal before the launch of the game, 2B immediately became an online phenomenon because of her appealing appearance (Hathaway 2016). Despite being designed for battle, 2B is designed to look beautiful and she dresses in a fashionable dress and was given a beauty mark despite being an android. Furthermore, the game has an optional achievement called "What Are You Doing?" for looking at 2B's upskirt ten times. Since release, so many cosplays and risqué fan arts of 2B has been published that the series director Yoko Taro asked fans to send the "rude drawings" to him (Carden 2017). Therefore, it is obvious that the developers intentionally made 2B attractive to the players. While Adam is saying the line to 9S, it could easily be interpreted that he is also relaying the message to the players who fancy 2B which is a piece of narrative agency in a form of fourth-wall breaking as reading it catches the player's attention. It is no coincidence that this interaction was conducted in a visual novel genre as I believe a spoken version with a potentially uncensored word would have lost its rhetorical effect. Regardless, 2B kills Adam and approaches an injured 9S again. Similar to the opening act, the game again changes the camera perspective on each Route depending on which character the player is using which once again reinforces the idea that the player is experiencing the story from different perspectives each time.

Next, I will discuss the first two Endings of the game, *Ending A: flowers for m[A]chines* and *Ending B: or not to [B]e*. Once again, the endings are for the most part the same but they are from 2B's and 9S's perspectives, respectively. However, while the word ending implies the end to a story, the game's actual story is only halfway through. However, they do conclude the first half of the game's story. Many modern games provide multiple endings but most games provide the player with a decision at the end of the game that decides which ending they get. In fact, that is how Endings C and D are also obtained. Yet, a singular playthrough of *NieR: Automata* requires the player to get at least three endings to complete the game in some capacity. However, Ending E requires the player to

get all four endings first and is often regarded as the canonical ending. For that reason, Endings A and B should not be considered traditional endings. In fact, completing Ending A provides the player with a message from the developers where they inform that the game is not over yet. Then, Route B ends with a cinematic trailer showcasing Route C.

Nevertheless, Endings A and B start with a final fight against Eve where 9S gets corrupted with a virus after hacking into Eve and is about to go berserk. Since 9S is infected, his current data cannot be updated to the Bunker, meaning he would have to return to his backup data from the beginning of the game. 2B states that if 9S loses his current memory it means he will also lose "the you that exists at this very moment". As 9S is about to turn corrupt, 2B chokes him to death at his request. Having killed 9S, 2B cries and hugs 9S asking "Why does it always end like this?". Compared to previous instances of foreshadowing, such as 2B's opening quote about killing gods, this quote means little to first-time players. Players who are unaware of *NieR: Automata's* multiple endings may feel they missed something crucial in the story. However, players who know about *NieR: Automata's* multiple endings were probably less confused by this statement as they would expect the game to continue. Obviously, the quote refers to 2B's repeated murders of 9S. However, 9S managed to upload his memory to nearby machines, meaning his personality is still intact albeit in a machine body.

The notable difference in Endings A and B is the final monologue spoken by either 2B or 9S. In Ending A, 2B monologue states.

> "What is it that separates machines from androids like us? The machines have gained emotions… Consciousness. The final screams they summoned on the edge of death… They still echo within me".

As mentioned, the machines the player meets throughout *NieR: Automata* become more advanced and sophisticated throughout the game. However, 9S' quote in Ending B conflicts this notion.

> "And so, final battle with Adam and Eve came to an end. This battle will likely have a great effect on the outcome of the war. 2B and I – our battle will continue for some time to come. But that's another story for another day"

This is a stark contrast from 2B's ending, where she questioned the difference between the two lifeforms and admitted machines having a consciousness. 9S still sees machines as an emotionless enemy, despite him being the one who gets access to the machines' psyches. Since 2B is a battle-android, the player does not learn about the machines' backgrounds since her role, and thus the player's, is to eliminate machines whereas 9S was created to gather intel by hacking into

machines. However, the player has become more compassionate towards machines while playing as 9S, since some of the machines such as Simone and Eve are no longer presented as callous villains but have their own tragedies. Therefore, from the perspective of narrative agency, making 9S more tolerant of machines instead could have worked better. However, it could be analyzed as 2B being more open-minded and recognizing machines as sentient beings because she does not see machines as humanity's oppressors since they are extinct whereas 9S is indoctrinated by YoRHa propaganda.

From a narrative perspective, the inner monologues of Endings A and B utilize the different characters' insights and perspectives on the matter. However, one could argue that other media can also have similar elements by for example writing the same story from different characters' perspectives. Yet, I would argue games can showcase the characters' different viewpoints more effectively since the player is the one controlling 9S and executing the machines while hearing their inner thoughts and backgrounds. Similarly, the player can only hear each protagonists' thoughts when playing as them.

In terms of narrative agency, Route A itself provides little analysis without comparing it directly to Route B. While Route A established the premise of *NieR: Automata,* Route B's primary function was to showcase the differences in how 2B and 9S perceive and experience the world. While it would be easy and adaptable for any medium to accomplish this by showing how other characters treat the two differently, Route B accomplished narrative agency by making the player experience the difference themselves by playing as the characters. In addition to 2B's aloof behavior, the two protagonists also have different supporting characters with contrasting personalities. Firstly, 2B and 9S both have tactical support units which in terms of gameplay provide them with ranged attacks. 9S' support unit Pod 153 and Operator 21O both upkeep an impersonal relationship with 9S where they discourage him from nonprofessional discourse.

In fact, all 2B, 21O and Pod 153 have a similar "one affirmation will suffice" retort to 9S' repeated "yeah, yeah" phrase which he uses whenever he receives unpleasant orders or instructions. The fact that all three have the exact same reply to 9S' "yeah, yeah" suggests that both 21O and Pod 153 are also aware that 9S has been killed on numerous occasions. While it could be argued that they simply wish to remain professional, 2B's supporting cast is more outgoing and casual. 2B's relationship with her Pod 104, who declares obvious commands such as to kill the enemy, was already mentioned in 4.1. as an example of how 2B is more casual and sarcastic when 9S cannot hear her. Furthermore, her personal assistant Operator 6O is more introverted and repeatedly contacts 2B to discuss things unrelated to their mission. As such, it is possible 2B is provided with friendlier

assistants to keep her morale up whereas 9S' assistants are more distant as they expect his memory to revert soon. Finally, 9S himself is also friendly and uplifting towards 2B.

To reiterate, nobody in Route A or B directly states how differently the characters are treated. Instead, the player will experience the difference by immersing themselves as the playable character. Admittedly, this is highly subjective and interpretative which means not all players will necessarily feel narrative agency. Alternatively, one could argue all interpretations are subjective so it is acceptable to create own meanings. Regardless, there are some clear examples of the game clarifying you are experiencing the world from 9S' perspective. Naturally, some of these examples are more significant than others. For example, while rewatching your own configuration settings from Route A in Route B may seem like a humorous detail, it also helps establish that the player is no longer participating as 2B. This can also be seen in a few instances where 2B runs to an injured 9S. During Route A, you have to run to 9S whereas in Route B 2B runs to you.

More importantly, 9S' perspective also breaks the player's expectations of the story. The game started as a story about saving humans from a machine/alien threat which is a popular premise in contemporary media and may have been chosen as something players can feel motivated to accomplish. The reveal of humanity's extinction dozens of hours of later may provide similar frustration and disappointment that 9S feels at the moment which would not have worked if it were revealed in 2B's Route. Moreover, it once again ties to 2B's opening quote about the spiral of life and death. In Route B the player experiences the spiral as they go over the events of Route A and experience 9S being alive and back dead again. Finally, since humanity is extinct too and they created humans, then 2B is also deprived of her chance to kill her gods

4.3. Route C – Agency and decision-making in games

Route C starts shortly after the events of Ending B with a cutscene where the Commander rallies the YoRHa units to attack the machines since Adam and Eve's demise weakened their defenses. The player controls 9S who is told to hack enemy machines. 9S is still working with Operator 21O who is not her stern usual self. She has a considerably more lighthearted voice and gives 9S compliments and 9S questions her behavior. To briefly return to Route B, *NieR: Automata* features many side quests and while many of them focus on machines, some also focus on the androids. One latter side quest is from Operator 21O called "Data Analysis Freak 2", where she asks 9S to retrieve her artefacts from humans. 9S finds her a shoe, a toy and a ledger. 9S sends them to Operator 81O who is intrigued

by the artefacts. They then learn about the concept of families, where Operator 81O starts wondering if androids had families too before cutting off, before contacting him again to thank him.

Hence, it seems that Operator 81O has been learning about families and has adopted a role of an older sister or that of a mother with 9S. Side quests have been ignored up until now as no other side quest has served apparent relevance to the main story yet. However, the side quests should be considered canonical to the story as it introduced 2B and 9S to many other docile machines which have different needs and desires. For example, 2B and 9S meet one enemy Goliath they faced in Route A and B named Marx. Being incapable of fighting in his current state, Marx stats pondering the number of androids he has killed and his purpose in life now that he can no longer fight. Similarly, the protagonists meet a philosopher machine called Jean-Paul who is celebrated by other machines but refused their gifts and departed to explore the world. When hacking into Simone as 9S, the player may even recognize the machine Simone talks to as Jean-Paul which is a reference to the real-life couple of Simone de Beauclair and Jean-Paul Sartre. Also, these side quests surely attributed to 2B's tolerance of machines as a sentient lifeform. These are interesting aspects of narrative agency as the player develops more meaning to character relationships by performing the optional tasks. Regardless, after 9S has hacked into the machines 2B lands to the city ruins and the two provide aid for the other YoRHa units until they get surrounded by machines who launch an EMP attack at them. 9S, who did not get hit by it, hacks into the androids to repair them. While 9S gets everyone functional, the other YoRHa units go berserk and attack the duo. In the end, all YoRHa units, including the space Bunker, get infected by the virus, resulting in the death of all YoRHa units except 2B and 9S. However, 2B and 9S get separated by 2B sacrificing herself to protect 9S from another virus attack which infects her.

During the next set piece, 2B has to get to safety before she is corrupted by the virus. Throughout the set piece, 2B's vision gets blurrier and glitchier as the corruption increases, which is another utilization of the game medium in displaying how 2B is functioning. In the configuration settings scene it was established that the game's audiovisual effects, such as sounds, graphics and the UI are connected to the androids' hardware, so the virus breaking the game's UI and causing aural distortion is consistent within the game's setting. Similarly, her struggle to move is also expressed by the toilsome gameplay. In addition, both 2B and the player have extreme difficulties seeing or hearing properly. This is a moment of narrative agency similar to the microwave tunnel scene discussed in 2.3. where the player is asked to do a relatively simple but straining task to keep a character they care about alive. Traditional definition of agency could provide the player with the chance to survive if

they play well but illusion of agency has already been established to be a strong narrative tool. Eventually, 2B gets assaulted by more YoRHa androids, but the third playable character A2 shows up and kills them. 2B, who has been corrupted beyond repair, stores her memories into her sword and asks A2 to take care of the future and 9S. Then, 9S runs into the same location where 2B is as he sees A2 kill 2B. The scene ends with a chaotic collapse which separates 9S and A2 from each other and injures both.

A few weeks after, the Pods have a private conversation where they confirm 2B's death since her black box could not be updated to the now-destroyed Bunker and that they have a duty to support A2 and 9S. At this point, the player is given freedom to decide in which order to play the rest of the events, but for the sake of clarity, this study will focus on A2's story first and then 9S'. It is also worth noting that while this may seem like it provides narrative agency, the order has no bearing in the story and as such it has little narrative significance. When discussing cybertexts, I argued how game stories can add new details to story events depending on the play order. As such, it would have been beneficial if the game recognized the player's play order in some manner. It is possible the developers gave the player the option to choose as they were unsure whether players were more motivated to learn about A2 or witness 9S' recovery. A2 had a brief moment in Routes A and B but her inclusion was ignored until now as it was not relevant to the study until now.

The most notable part of A2's story arc is about Pascal and the agency of decisions in video games. When she approaches the Resistance camp to repair herself, she sees Pascal who is attacked by machines. As a reminder, Pascal is the leader of a pacifist machine village who has helped the player throughout the game. A2 saves Pascal but does not believe in his pacifism and calls machines "soulless murder bots with fancy names". When A2 tells she seeks revenge for all her friends machines have killed, Pascal offers A2 to kill him if it saves her soul. Here, the player is presented with the option to either spare or kill Pascal but it is in fact one of the times where the event's narrative is hindered by an unnecessary attempt of agency. Canonically, A2 spares Pascal and starts collaborating with him. Thus, the game must now provide a solution if the player breaks canon by killing Pascal. While it has already been acknowledged that *NieR: Automata* has five main endings A—E, it actually has 26 total endings where each ending has one letter capitalized in brackets for each of the 26 letters in the alphabet. For instance, Ending A's official title was *Ending A: flowers for m[A]chines*. However, the remaining 21 endings between F—Z are lighthearted remarks about what would happen if the player did something unintended. For example, killing Pascal gives *Ending Z: over[Z]ealous* which has the following description: "A2 destroyed Pascal. Pascal's death led to

the collapse of his village and its resident going out of control, resulting in the elimination of all androids on Earth". There are different joke endings for different scenarios, such as eating a mackerel which is hazardous to androids or running away when the characters are asked to go somewhere urgently. While they are intended to be humorous, they could actually be used as a rebuttal to Juul's critique about players not following the script since *NieR: Automata* considers player behavior in urgent situations. Unfortunately, the option to kill Pascal is problematic since while the player knows Pascal to be benevolent and docile, A2 the character sees him as "a murder bot with a fancy name" so killing Pascal would be an understandable choice. This option is particularly odd since 9S was presented all the evidence to believe machines were at least equal to androids, but the player was never given a choice to embrace machines as 9S the same way A2 is after meeting her first-ever docile machine.

Nevertheless, A2 canonically spares him and approaches the camp where Anemone recognizes A2 as an old friend. However, the camp do not have the necessary tools to repair A2 so she must instead go to Pascal's village. Reluctantly, A2 goes to Pascal's village to request aid. Next, A2 and Pascal continuously aid each other and A2 learns to tolerate machines. However, Pascal's village is attacked by hostile machines which leaves only Pascal and the children of the village alive. They retreat to a new location but are attacked yet again. After A2 and Pascal defeat the enemies, they return only to see that all the children are dead after stabbing themselves in their machine cores. Pascal deduces that this has occurred because she taught them fear so that they would avoid dangers but instead the afraid children committed suicide. Pascal asks A2 to either kill him or reset his memory. This is one of the few instances where the player is asked to make a moral decision. However, there is also a third option, which is walking away and letting Pascal stay in his current state. This obviously presents the moral option of whether it is better to die, live with agony or live happily in ignorance but there is an additional detail. As revealed near the end of Route B, machines do not learn from their mistakes when adapting humans but redo it. Therefore, if the player resets Pascal's memory, he will eventually try to organize another pacifist movement that will also fail. Also, the option to walk away is another way the game utilizes the medium as it is not an option presented to the player, but he can do it regardless. If the player chooses to reset Pascal's memory, he returns to the village where he sells machine limbs and children's machine cores to the player, unaware of anything.

As discussed in section 2, when discussing games as a storytelling medium, the ability to make meaningful choices is often the first concept that gets mentioned but the inclusion of choices

can easily hinder the story. Usually, story choices feature two problems. First, the choice has to feel significant to be meaningful. Choosing to spare a nameless nobody for a reward or letting them die for no gain is not a meaningful choice. Conversely, the choice cannot have too large of an effect on the story because the writers would then have to write multiple quality stories rather than just one. As a result, many games instead make the player make a choice in the final hour or so as the rest of the game is relatively short to write. Alternatively, the player is given a different ending based on their in-game actions. For example, *Undertale*'s happiest ending is accomplished by not killing anyone while the "worst" ending is accomplished by killing everyone. Thirdly, games may offer decisions in the middle of the game that ultimately result in the same conclusion, as evidenced in 2.3. when discussing *The Walking Dead*.

The two choices about Pascal's fate are examples of choices done poorly and well. In the first choice, killing Pascal would massively alter the story as canonically A2 learns to forgive machines by interacting with him. As such, the developers decide to nullify that choice with a joke ending which stains the whole scene. If someone opted to kill Pascal, they then have to reload the save and spare him because the game insists on it. As mentioned, the player and A2 have polar opposite perceptions of Pascal so while A2 may be conflicted, there is no internal struggle for the player as they have no intrinsic reason to kill Pascal. In contrast, the second choice is provided after Pascal has earned A2's trust as she starts to live in harmony with them. Since Pascal is not relevant to the main conflict itself, his fate has no bearing on the rest of the events so his existence is no longer necessary to advance the story. Furthermore, Pascal is no longer a random docile machine A2 considers killing for no reason but a victim of a tragedy who wishes to cease his current existence. By now, both A2 and the player care about Pascal so it challenges the player what they think would be best for Pascal. This instance clarifies my statement on narrative agency when I said same actions develop different meanings through narrative context. The first choice had no, if not negative, narrative agency whereas the second choice is enriched because of it. This inconsistency in quality is odd because binary morality choice is one of the most recurring narrative situations in video games so there should be some clarity on what makes them effective. In other words, the first choice's failure cannot be blamed on Taro attempting something new and ambitious.

This concludes A2's part for now as the player switches to 9S. 9S wakes up in the Resistance camp after being repaired by Devola and Popola from Route A. 9S immediately asks about 2B's death and it is immediately noticeable how 9S' cheery and energetic voice has turned into a quiet and monotone one. 9S gets a side quest where an android asks him to retrieve his dead comrades' dog

tags so he can hold a funeral for them, which inspires 9S to hold a memorial to mourn 2B as well. After this, 9S decides to investigate the tower that emerged as 2B died but realizes it is protected by three defensive systems. Pod 153 asks 9S for his intentions similar to A2 and Pod 042, but 9S gives it an answer immediately. He wants to destroy all the machines then kill A2. To deactivate the defense systems, 9S has to climb three towers and destroy them. He finds the first one that has a sign written in Angletic, a fake machine language, meaning "meat box". 9S questions why they have built such a large metallic structure and Pod 153 comments how there are many useless parts. 9S states how machines do not have meaning to anything they do. The name "meat box" derives from the fact that this is a combat arena where 9S has to kill dozens of machines to progress. He eventually reaches the top, where the core of the tower is pleading for help. 9S calmly commands Pod 153 to launch a maximum output energy blast at the core. Normally indifferent Pod 053 tries to appeal to him before being interrupted and commanded to demolish the core. After this, the Pods have a short talk where they are concerned about 9S' mental state. Having destroyed the meat box, 9S approached the next tower called soul box. Soul box only consist of hacking challenges and the player is revealed more information about machines and androids. The tower 9S is trying to hack into is some sort of a launch program, which makes 9S assume they are trying to shoot the human server on the Moon. There are also more YoRHa documents, which have been forbidden even from the Commander. It is revealed that black boxes, the soul and memory of androids, is created by reusing machine cores, the soul and memory of machines, meaning that the two lifeforms share same structure. Black boxes are created out of machine parts as humans "deemed it would be inhumane to install standard AI in androids that are ultimately destined for disposal".

9S then enters his own memories where he sees his moments with 2B and sees her. 9S fights the copy of 2B and mounts her and stabs her with his sword repeatedly. What 9S is actually stabbing is the core of the tower. With two defense mechanisms down, the Pods once again worry about 9S' mental status. The Pods, however, are unsure of what to do about it. Soon after, 9S arrives at the last defense system called the god box. However, at this point the game starts alternating between the two characters as they both travel there. At the top of the god box, 9S finds Operator 81O who is forced to fight 9S. Barely conscious Operator 81O repeats her lines throughout the games, such as the "one affirmation will suffice" whenever 9S said "yeah, yeah". Her final message is "please kill" as A2 impales her from behind. A2 walks past 9S before telling him that 2B told her that she wanted 9S to become a good person. Furious 9S gets up to fight A2 but falls down another pit as a machine lifeform enters the god box to fight A2.

Throughout Routes B and C, The Pods 042 and 153 have had numerous private conversations which initially started as professional discourse about sharing data but they gradually become more personal. During one such conversation the Pods talk about an error in their transmission. Pod 042 says that they have become unusually protective towards the three protagonists and start wondering if they have developed a will and self-determination. Yet, Pod 153 reminds that they have a mission to fulfill which is all that matters. The Pods also tell each other not to die, even though death has no meaning to them. Next, the player controls 9S who is told about Operator 21O's death but also that he can now attempt to hack into the tower. 9S enters the tower and fights her way through androids before being surrounded by enemies that look like 2B. 9S is ecstatic about getting to "see and kill her" and during the battle tells how she does not have to worry as he will kill her. This gives Adam's quote in Route B when he said that 9S wanted to "**** 2B" an additional interpretation. Indeed, it is likely that the censored word was actually kill which would not have made sense to the player in Route B.

After exposition where 9S learns that YoRHa was designed to fail and be replaced with updated androids, the player controls A2 who has a boss fight against two humanoid machines that keep multiplying despite how many of them A2 kills. Pod 042 then gives her an odd suggestion as he asks A2 not to destroy the enemy because he believes the machines cannot maintain all the copies they are creating. If the player refuses to kill enemies, the two girls then start arguing with each other whether they should kill A2. One machine thinks they should not kill her, as she has proven to be a worthy opponent and letting her be a threat forces the machine lifeforms to evolve. On the other hand, the other machine thinks she is too big of a threat and must be eliminated. The girls them deem each other "the enemy" and start fighting each other. In section 3 it was mentioned that the analysis would largely ignore gameplay details that had no narrative purpose. For example, I have not analyzed the actual boss fights such as how Simone synchronizes her attacks with her music. That is because boss fights in particular are often tests to see if the player has learned the necessary mechanics. In other words, their genres are skill tests. However, there is an unwritten assumption that the player must attack the boss until it dies. Hence, it was noteworthy that in this instance the developers actually take a decades-long established situation of boss fights and defy it. In addition, Pod 042's suggestions functions as an exigence since the player needs to realize not to attack the enemy. Furthermore, this defiance also has narrative significance as the machines' motives will be explained in 4.4.

While Route A's purpose was to introduce the player to the world and the topical themes and Route B highlighted the difference in character perspectives, Route C is commonly viewed as the

highlight of *NieR: Automata*. Up to this point, 2B had been presented as the main protagonist who is attractive, powerful and open-minded so her and the other androids' death immediately sets the tone for the rest of Route C. It also introduces some of the high value factors of Yoko Taro's games such as death, 9S' descent to rampageous insanity and the feeling on impending doom as both androids and machines are seemingly approaching extinction. Death can be perceived in numerous ways such as the androids' genocide, Pascal's suicide wish and both 9S' and A2' revenge stories. The story has a clear paradigm shift in tone as even though machines were threats in Routes A and B, their assaults did not actually result in any meaningful consequences compared to just the opening hour of Route C. Despite that, the game still uses same mechanics and systems which highlights that the game

. Alternatively, it could be viewed as syntax limiting the player's actions, as 9S' bloodthirstiness could have been reflected more in his gameplay, such as by changing his in-game animations to be more violent. Nevertheless, Route C also introduces new information by showing the Pods' increased concern, developing A2's origin story and also by revealing that androids were created from machines, which will all be relevant in the final confrontation.

4.4.   The final revelation and Endings C-E – Player sacrifice as a narrative tool

In the end, 2A and 9S make it to the top of the tower where they confront each other. A2 implores 9S not to fight, as they must disable the tower which is a cannon aimed to fire at the moon. 9S scoffs at her and explains what he learned about the demise of humans and purpose of YoRHa to be replaced with new android-models. Additionally, 9S says that A2 killing 2B is enough reason for them to fight. This is also the point where A2 reveals 2B's secret identity to 9S and the player. The existence of Execution units was teased back in Route B's side quest *Amnesia*, where an android asks 2B and 9S to reveal who killed her friend only to be revealed that she was a Type-E unit ordered to kill her friend. Being unable to live with the burden of killing her friend, she erased her memory. 2B has a noticeable change in mood during this quest, questioning 9S wants to help her. Furthermore, the amnesiac android comments on 2B looking familiar which she quickly attributes to YoRHa units looking similar. During the side quest, 2B also utilizes the "feelings are prohibited" and "one affirmation will suffice" methods mentioned in 4.2. Finally, upon completing the quest, 9S asks 2B if she was unaware of Type-E units and 2B tells him that some things are better left unknown. This was also hinted in 4.3. about A2 being used in future E-modules, meaning A2 is 2B's predecessor unit. Naturally, while players may have noticed these details throughout the playthrough, their foreshadowing is more apparent on subsequent playthroughs. During the reveal, the game shows the

beginning of the game where 2B and 9S detonated their black boxes and the first two Endings where 2B chokes 9S to death. To repeat, when 2B chokes 9S in Endings A and B, she cries and yells "Why does it always end like this?". At the time, it was an odd statement but now it is clear that she has had to kill 9S numerous times with his memory being reset each time. 2B evidently cares about 9S but since she always must be ready to kill him, she tries to stay distant from 9S.

Endings C and D are determined by which character the player controls in the final battle between A2 and 9S. Choosing to fight as A2, she defeats 9S and hacks into 9S who has been corrupted. A2 asks Pod 042 to take care of 9S, sacrificing herself to destroy the tower, resulting in *Ending C: meaningless [C]ode*. This already counts as beating the game and the game gives the player one more datafile about the machines. It reveals that the aliens designed the machines with the sole command of "defeating the enemy". The machines always need an enemy, whether it is androids, aliens or other machines. Having no enemies left, the machines then attacked the aliens and killed them. Next, they targeted androids until realizing that they could not destroy all androids as then they would have no enemy left. Therefore, they started malfunctioning on purpose to divide the machines, so they had each other as enemies, which explains the likes of Pascal, meaning the war between machines and androids was actually designed to never end just so that the machines, and by extent, androids had an enemy to fight to fill their purpose. This now contextualizes why the machines started attacking each other at the end of 4.3 during the A2 boss fight. It utilizes narrative agency because the player learns to manipulate the machines' flawed AI with their ludic choices.

Conversely, Picking 9S in the final battle ends with A2 having the upper hand but hesitating to kill him, which allows 9S to stab her although he impales himself through A2's sword as they both bleed to death. Nearing death, the game turns into visual novel format again where it shows 9S' thought process. He talks about how he was used to being alone and was excited to work with 2B, who came across as "rather aloof and cold, even". He deduces it is because she did not want to be attached to someone she had to kill again and again. This quote also gives credence to the theory that Route B exists to showcase their relationship. However, it could also be critiqued as an exigence by the developer to clarify Route B was intended to showcase how 9S is treated compared to 2B in case the player did not realize that. He is then approached by the mysterious girls representing machines, who tell him that the tower was initially designed to shoot a missile at the moon but interacting with androids, Adam and Eve changed their mind. Instead, they wished to shoot their own ark of machine memories with Adam and Eve in it. Adam asks if 9S wants to join him. 9S deduces that he no longer

has a reason to hate machines and the player can decide whether he wants to join Adam and Eve which completes *ending D: childhoo[D]'s end*.

Yet, there is still Ending E which can be achieved by completing endings C and D first. Ending E will commence right after completing whichever the player completed afterwards. After 9S' and 2A's deaths, Pods 042 and 153 confirm that all YoRHa units are dead. The Pods reveal their mission was to oversee the progress of YoRHa and now they must delete all data about YoRHa. However, Pod 153 notices a halt in data check and asks to pause the data removal as the credits roll. Choosing yes stops the credits and resets them. Pod 042 comments how the protagonists' personal data is leaking out and Pod 153 tells him to ignore it and delete all data. Surprisingly, Pod 042 refuses to follow orders. It has concluded that he "cannot accept this resolution" and wishes to keep the data intact, believing Pod 153 also wishes the characters to survive. Pod 153 warns that salvaging the data is dangerous and asks if "you still wish for them to survive?". Choosing yes unlocks *Ending E: the [E]nd of YoRHa*. The game has a final shooting section against one more enemy: the credits. The player first shoots the director Yoko Taro's name before more names appear. While the player is fighting the credits, the Pods talk about how they were created to execute the Project YoRHa plan and had no capacity for emotions but connecting and exchanging information between us "six" caused them to create consciousness. There are three protagonists and two Pods, which is obviously only five. Therefore, it is highly likely that the sixth participant is the player itself.
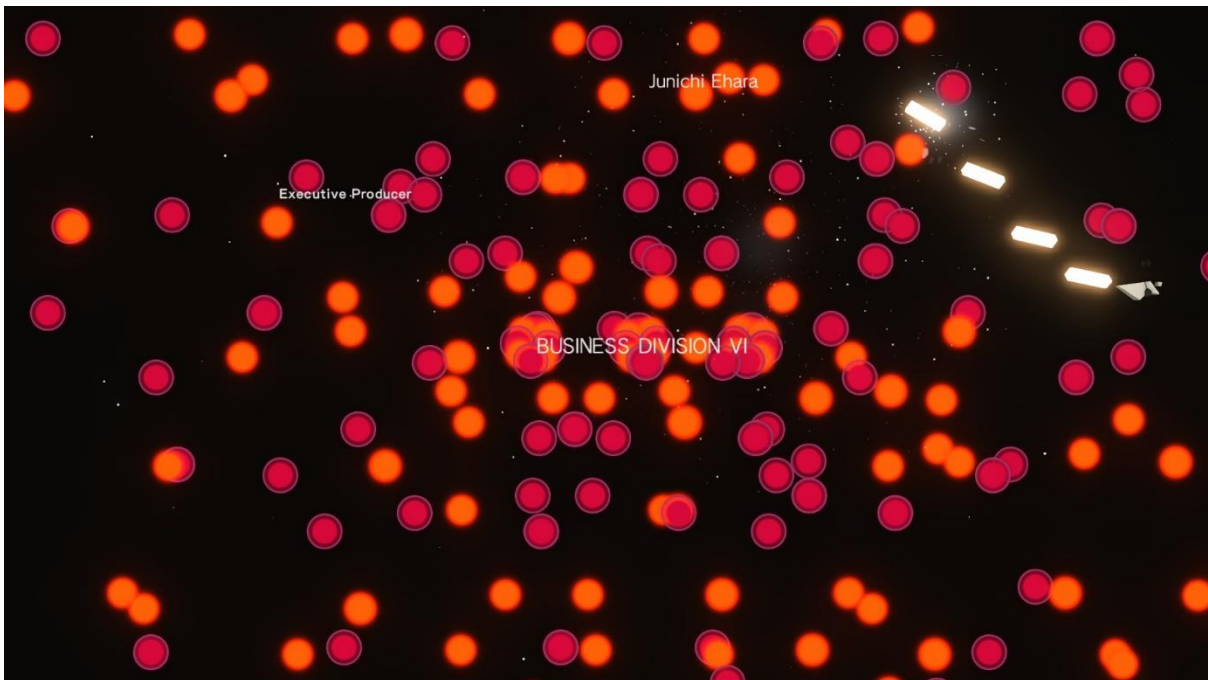

Figure 5. The final battle

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The credits fight is the most difficult encounter in the game excluding a secret optional boss fight unrelated to the main story. If the player dies during this fight, the game itself asks whether the player accepts defeat. The screen also goes black until a quote appears. The quote is from another player who has completed Ending E and left a message for future players. If the player continues and dies again, the game asks whether it is all pointless with even more supporting quotes from other players. Upon third death, the game asks whether "you think games are silly little things". Fourth death asks the player "do you admit there is no meaning to this world" and the screen is full of player quotes. Fifth death asks whether the player wants to quit. If the player decides no, they get a rescue offer from another player. Accepting this help surrounds the player's ship with other players' ships that provide increased firepower and whenever the player gets hit, another player takes the hit for the player instead which enables the player to defeat the credits. Furthermore, the boss fight's theme song turns from a solo performance to a choir once the other players join. Completing the credits fight results in one final cutscene where the Pods attempt to revive the protagonists. It starts with the following quote. "Everything that lives is designed to end. They are perpetually trapped… However… life is all about the struggle within this cycle. That is what "we" believe."

The beginning of the Pods' quote is very similar to 2B's initial quote about being perpetually trapped in a cycle. To finally analyze the ending about killing gods, it can be argued that the "god" who created the game's cycle of events is the director and other game developers. None of this would have happened if they did not release the game. However, the player gets the chance to kill the gods by shooting the credits in Ending E, fulfilling 2B's wish. The player's role is further emphasized after the cutscene where the Pods start directly speaking to the player, addressing them as "the player.". Pod 153 asks if the player would like to say anything to other players "who are suffering because they cannot finish *NieR: Automata*". Choosing yes offers a menu that provides different statements the player can say, including their account name and country. Thus, the messages the player saw from other players were written by them as well. Picking an encouraging message results in Pod 042 talking to the player. Pod 042 will state the following lines and for the sake of clarity, the player will respond with a "Yes" each time.

> Pod 042: Pod 042 to player. Please respond to this quarry. You have faced crushing hardship and suffered greatly because of it. Do you have interest in helping the weak?

> Pod 042: Selecting this option enables you to save someone somewhere in the world. However, in exchange, you will lose all of your save data. Do you still wish to rescue someone – a total stranger – in spite of this?

Pod 042: The person you save will be selected at random. As a result, this person who cries out for help even as we speak may be someone you intensely dislike. Do you still wish to help?

Pod 042: You worked so hard to unlock Debug Mode and Chapter Select but they will no longer be available to you. Do you… still wish to help?

Pod 042: You may not receive thanks for your efforts. Some say that your efforts are purely for show. Do you still wish to help? Are you truly – TRULY – sure about this? Very well. In exchange for your data, I will convey your will to this world.

Then, the game takes the player back to the menus where all his saved quests, weapons and items get deleted one by one. The Pods give one final message: "And so, we must say goodbye. I feel a slight amount… of sadness. To all of you who spent time with this game… Thank you for playing."

Generally speaking, *NieR: Automata* has not utilized the actual combat in much of its storytelling, despite how prevalent it is throughout the game. The closest examples to it are the machine fight at the end of 4.3. and how weak 9S is in pure combat compared to 2B and 9S but can defeat enemies by hacking into them which features a shoot-em-up minigame which is also used when 9S hacks into databases with an emphasis on exploration over shooting. Yet, Ending E is the most definitive example of utilizing narrative agency and it is accomplished by using the regular hacking shoot-em-up gameplay. Firstly, the player is overwhelmed by the hordes of credits which could be argued to be Aarseth's concept of ergodic texts taken to an extreme level as the player must be very practiced to beat it without help and is discouraged to stop trying. After repeated attempts, the player becomes overpowered with the help of other players and triumphs the previously overbearing task. Therefore, players understand the benefit of being helped and are offered a chance to do the same. Yet, it also utilizes the illusion of agency as the player is immortal when assisted by other players but from their experience, they were responsible for defeating the credits. Since it was created to be an emotional moment, most players will not test how many *lives* they have during their first playthrough. Furthermore, Ending E enables the player to change the sad endings of C and D even though Ending E is also designed by the same credits.

However, the fact that the player can only help others by forfeiting their entire save data provides this decision great significance. The player has spent dozens of hours investing into the game so losing all of it is a meaningful loss. Other media can have stories about sacrifices as well, but a book cannot require the reader to undo their whole process they have made. As discussed in 4.3, one problem with choices in games is that one of the options may simply be more beneficial for the player so they have no reason to pick otherwise. Yet as Pod 042 explained, the player will both lose their progress and possibly never gain anything in return. Logically speaking, the player has no reason to

help others. As such, this choice tests whether the player would help other humans at their own expense and it is also built upon the gameplay of the past thirty hours of ergodic consumption as the player has gotten to know the events and the existents. In subsection 2.5 Aarseth dismissed the notion that players would kill their own character in a video game which I believe Ending E, which has much larger consequences, single-handedly refutes. Utilizing game credits as an encounter is also very different for games. However, *NieR: Automata* could have been influenced by *Super Smash Bros. Melee* (Nintendo), where the credits function as a first-person shooter where the player can attempt to shoot as many credits as possible for a high score. As mentioned by Miller, new situations are recognized by comparing them to previously known situations.

5. Discussion

In this master's thesis I have argued that video games can enhance their narrative functions by utilizing the most essential aspect of video games: player participation. To do that, I analyzed the story of *NieR: Automata* from the beginning to the end and highlighted the scenes which utilized what I defined as narrative agency. *NieR: Automata* also challenges some of the arguments the ludologists made about video games not being a narrative medium. The main story of *NieR: Automata* shares many narrative elements from other media. For instance, the twist about androids being based on the enemy machines is similar to mech anime such as *Neon Genesis Evangelion* (Tatsunoko) and *Darling in the Franxx* (Trigger) both have similar twists about the friendly mech-units being created from the enemies they fight. As such, the goal of this study was not to see how video games can tell different stories but instead how they can tell stories differently from other media.

I have examined the academic framework for video game studies by presenting the theories of narratology and ludology. Ultimately, neither theory is applicable to studying game narratives for different reasons. While narratology embraces video games as a narrative medium comparable to literature and cinematography, it lacks the framework to analyze video games as a unique medium. However, narratology could still be used to study games that do not emphasize the game medium as much. Regardless, literature and cinematography have created their off-branch methodologies, such as close reading, to circumvent the lack of media-specific terminology in narratology. While ludology may seem like the answer to study games in greater detail, it fails due to the creators' preconceived notions of games as an anti-narrative medium. Based on my research, game narratologists did not become as prevalent as ludologists such as Aarseth and Juul. The discrepancy in famous researchers could be explained by the fact that the ludologists created their own field of studies which is more recognizable than utilizing established methodologies. In addition, I introduced the concept of genres as a rhetorical tool. Coincidentally, *NieR: Automata* itself uses lots of video game genres in its gameplay, but I focused more on the narrative significance of different genres rather than how much they add to the game's mechanics.

While I initially started writing this thesis due to my passion of video games, I was also discouraged by the state of game studies as I found many of the most prevalent game academics' viewpoints to be counterproductive to game analysis. While the ludologists claim that they want the debates to stop and focus on actually studying games (Frasca 2003), their contributions to actual game studies have not reached the same status as their initial criticism of narratology but instead they may have stunted the development as contemporary academics are inclined to refer to the debate which restarts the cycle similar to how the androids and machines in *NieR: Automata* are doomed to repeat

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the same cycle repeatedly. Admittedly, I have also contributed to their relevance by discussing them as much I have. However, there is an additional explanation for the current state of game academics which is the existence of social media and video essays. Realistically, social media such as YouTube has higher demand for media analysis such as games and movies. Thus, people who are interested in studying video games as an occupation are more likely to become YouTube essayists rather than video game scholars. For example, Mark Brown from *Game Maker's Toolkit* (2018) analyzed how video games can be designed to be more colorblind-friendly whereas George Weidman from *Super Bunnyhop* (2019) compared Assassin's Creed Odyssey's (Ubisoft Quebec 2018) ancient Greece to modern real-life Greece utilizing VR-technology. This is not to argue that academic video game research should be replaced with YouTube essays entirely as it has its own problems such as a lack of register, a lack of peer-reviewing and some financial incentives but video essayists can contribute a lot of theoretical framework that is currently lacking in academic game studies.

If video games had a more established theoretical framework, my study would have focused more on how the game's story promotes existentialism with its game mechanics. Many of the machines in *NieR: Automata* are named after real-life philosophers, such as Karl Marx, Jean-Paul Sartre and Blaise Pascal. In fact, Pascal the machine reads Friedrich Nietzsche during one cutscene. Even though machines and androids were designed with the sole purpose of warfare, 2B and many of the machines the player encounters have given their lives own meaning and many of them will self-destruct once they feel they have reached their self-imposed purpose. Moreover, Ending E allows the player to reject the negative Endings C and D with the illusion of agency. Thus, this is something I could analyze further in another study.

6. Conclusion

In this master's thesis I showcased that *NieR: Automata* utilizes gameplay to improve its storytelling. This was conducted by analyzing its story and highlighting the scenes which utilized what I defined as narrative agency. I defined narrative agency as a moment of ludic gameplay that has meaningful narrative significance. Video games differ from many traditional media in that the player is an active participant who is involved with the story assuming there is one. Even if the player cannot influence the story, their on-going engagement with the game still connects them to the game world as opposed to a distant observer. Thus, narrative video games can merge gameplay mechanics that the player expresses themselves with to the on-going narrative to enhance both.

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