Meta-narrative in BioShock games

Sveučilište u Zadru

Odjel za anglistiku
Sveučilišni prijediplomski studij Anglistike

Petra Vujica

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Izjava o akademskoj čestitosti

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Zadar, 23. kolovoza 2023.

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1. Introduction

Due to technological advancements, we almost have an unlimited supply of stories concerning every genre imaginable. The old forms of storytelling media are mostly considered literature and movies as the constant improvements to the printing press and cinematography make them easily accessible. Books offer insight into character's minds, detailed descriptions, and a variety of genres at everyone's disposal. Film, on the other hand, seems to offer even more with its rich visual presentation, empowering soundtracks that add to the overall experience, and the ability to bring to life emotional scenes written on paper through a moving actor performance.

However, in the past couple of decades, a new contender in the form of video games has emerged with a brand-new way of telling a story through elements that go beyond descriptive or even visual. They are an interactive and very player-driven media that allows its viewers to engage with whatever world they have chosen to immerse themselves in. In 2007 Irrational Games published a new intellectual property of First-person shooter [1]genre that used its form to shift the narrative perspective of player agency and to shed light on the question of consequence and choice. The goal was to create a game that would make people feel and fully become a part of the imaginary world they played in. According to Ken Levine, the creator of the *BioShock* franchise, players should not be only observers of the narrative, but its participants. *(Ken Levine, "From Shodan, to Big Daddy, to Elizabeth: The Evolution of AI Companions", 2013)*

This paper will thoroughly analyze and explain the meta-contextual narrative and commentary of the *BioShock* franchise by going through all three base games, excluding the DLCs[2] (since their existence is more utilized as an expansion to the *BioShock's* storyline rather than a means to provide any further meta-contextual input). It will further present a comparison between old forms of storytelling media i.e. books and movies, with the narratives that can be found in video games alongside the different perspectives that all those different experiences deliver. The objective of this thesis is to explain the meaning behind the term „meta-narrative" and its integral role in the *BioShock* universe. By using the method of close reading as a primary

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[1] „a type of video game whose gameplay involves shooting enemies and other targets and in which a player views the action as though through the eyes of the character they are controlling."
(https://languages.oup.com/google-dictionary-en/)
[2] Downloadable content

analysis tool, tied with the visual materials and numerous examples from the games alongside the commentary from lead creators and designers, this research paper will ultimately attempt to break down one of the most influential games of the last decade.

2. The storytelling in video games

2.1. Early stages

Throughout history, nothing has influenced the course of human civilization with as much intensity as stories. They inspired many philosophies, different arts, and technology while simultaneously encouraging us to explore, dream, fight, and most importantly, *create*. No matter if they are consumed through books, experienced through movies, or interacted through games, they are an important part of our lives and will continue to be for as long as human creativity exists. Video games are the newest addition to the storytelling media and provide a different approach when presenting a narrative however, that does not diminish any level of importance that they carry since their ability to give player agency to interact freely in their respective media is almost non-replicable in other storytelling forms.

Stories in video games have developed from a few lines of text used for exposition and short pixelated cut-scenes to high-definition and complex experiences that are well-known today. Of course, if we look back to the origins of video games, we can observe that most of them, if not all of them, were not very narrative-heavy or even had a story at all. Josiah Lebowitz and Chris Klug indicate the simple premise of *Spacewar!* (1962), the earliest account of a computer game that only allowed the player to move dots and lines across the screen, and *Atari's Pong* (1972) which, due to hardware and memory storage restraints could only display the story in a form of text on the side of the arcade cabinet instead of in-game. It wasn't until the era of games such as *Donkey Kong* (1981) and *Dragon's Lair* (1983) that narrative was at the base of the game's structure and gameplay (13-15).

2.2. The key elements that shaped the storytelling aspect in games

Before deeply structured stories became prominent in modern gaming, only a few complex stories were featured in American and Japanese RPGs[3]. In 1993 however, the release of the game *Myst* caused a significant turning point in gaming and changed the trajectory of its approach to storytelling. Instead of a third person, the game used the first person perspective,

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[3] role-playing game

making the player the hero of the game. Lebowitz and Klug name other novelties such as the switch from musical score to ambient noise, the shift from 2D to 3D graphics, and most importantly, due to the story of *Myst* taking place on an island, it provided the player all the freedom to explore and piece together the clues from notes and journals about the mysterious setting (19). While also receiving numerous sequels and imitations alike, this departure from the usual adventure game story formula gained *Myst* the title of the best-selling PC game of the 1990s, before being dethroned by *The Sims* in the 2000s.

The adventure game genre remained dominant for several years until made completely dormant by the inception of the popular video game genre of MMOs [4] and FPS that started oversaturizing the video game market in the early twenty-first century. Games have also started rapidly changing their structure and basis to accommodate the updated hardware of the newly released consoles in the form of Nintendo's 64 and Sega's Saturn. Lebowitz and Klug highlighted Sony's PlayStation with its advanced processor and larger storage space that managed to create the most groundbreaking titles of its time by introducing FMVs, which were computer-animated movies that were non-interactive and already rendered in advance. Although crude by today's standards and glaringly different from other sections of the game, it provided players more of an insight into character interaction and behavior by observing their body language and facial features making them feel alive and tangible. It soon pushed other developers into creating more cinematic stories and throughout the years, with the numerous upgrades to the game's system, the line between FMVs and in-game graphics soon became blurred however, it still missed a crucial element in its storytelling approach, voice acting (24)

Although featured occasionally, the voice acting was mostly brief and non-prominent. The release of *Metal Gear Solid* (1998) finally showcased the power that voices can carry. The central role in Hideo Kojima's franchise is placed around the retired government agent, Solid Snake. Having an intriguing storyline interwoven with themes of love, war, and dangers of weapon modification and engineering, it also featured the various cast of characters that Snake could interact with. Recorded by the superb cast of actors, most notable are the important pieces of dialogue and conversations that he has with other characters over the radio system (see Figure 1 below). Even though the facial expressions were invisible to the player, the pure emotion was still able to be translated and emitted through their voices alone.

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[4] massive multiplayer online

Figure 1. The Codec screen in Metal Gear Solid, 1998.

Fast forward to today, many game developers are still pushing boundaries when it comes to technical upgrades and finding ways to include innovative elements in their stories. From creating well-developed and complex characters, they also strived to build an environment that would allow the player the freedom and incentive to explore its vastness. Games such as *Fallout New Vegas* (2010) and *Borderlands* (2009) gave an open-ended gaming experience by having large expansive worlds, unique sets of characters, and specific art styles. This further verified the grand importance of storytelling and its undeniable presence in the modern gaming sphere with designers and creators even trying to improve the experience by smoothing over the fourth-wall-breaking factors in their titles to enhance the seamless fusion between gameplay and its story. *Prince of Persia* (2008) for example, indirectly guides the player on how to behave and accommodate to the game by mimicking the movements of the other characters during combat and chase scenes, purposefully avoiding any obtrusive moments that tell players what to do, allowing them to freely acquire knowledge through interactivity.

As an innovative form of media that is meant to paint storytelling through interaction, video games are completely different and unique in comparison to books and movies. By including the interactivity aspect, game designers have more factors to take into account when creating a new title, such as pacing due to the control now being mostly player-driven and providing a coherent synthesis between gameplay and the story. They allow players to ultimately become the active hero of their tale, explore, and engage in combat, providing agency over puzzle-solving and even the outcome of the narrative with its numerous branching paths. The absence of this particular type of interaction in other media is mostly due to technical limitations that result in inconvenience and arduousness making it usually unachievable as opposed to games where those restrictions are almost nonexistent. By slowly erasing the obvious immersion

breaks, the engagement level in games has become exponentially greater with games even becoming comfortable enough to use their media to not only acknowledge the fourth wall barrier but also use it as a narrative tool in the form of meta-contextual commentary and expand out of its bounds of restriction to address the viewers themselves, achieving something unimaginable and certainly unattainable before.

3. Meta-Narrative

To grasp the concept of *BioShock* and its overarching theme it is important to explain the term of meta-narrative itself. In literature, although there still does not appear to be any sort of precise definition tied to the term, meta-fiction is very prominent and even greatly acknowledged as reflected in the works of Mark Currie and Patricia Waugh. When strictly talking about video games however, meta-narrative is used more broadly and freely as opposed to philosophy and literature since their usage is mostly limited to explaining and legitimizing the beliefs or practices that exist in society. According to James Cox, the meta that is present in gaming could be labeled as "fiction that points out its own fictionality." (para.3). The research paper further explains that one of the most defining traits of meta-narrative is the act of breaking the fourth wall which originates from the ancient Greek plays where the actors would address the audience and remind them of important plot points. Since there are three walls encapsulating the stage, speaking with the viewers shatters the invisible barrier thus creating the case of meta-fiction. Similar in regards to meta-narrative encountered in the movies, this type of narrative present in the games is self-aware, tends to break the fourth wall, and points out its fictionality without breaking the fiction itself. It is imperative to understand that a meta-narrative must be an already established narrative or piece of fiction in the game to fulfill its meta-commentary purpose. Providing further examples of this, the paper highlights the lack of explaining when it comes to language or grammar during the act of book reading since it is given that the reader already knows how to approach a certain piece of literature. The same applies to movies as time skips and fast forwards are an implied passage of time and should not be explained as their use is understood as a means to spare the viewer from unnecessary and time-consuming scenes. Games, however, prove to be a slight deviation from this rule due to their development being, at least when compared to books and movies, still relatively young and constantly changing. For instance, even if it does appear to be the case, the way-points, tutorials, and in-game instructions in the game should not be considered meta-fictional just like the credits at the beginning and the end of the movie. Although in-game tutorials are not meta-fictional, they are

still present to guide the player in how to navigate the world and to define the purpose behind certain button prompts, rendering them different in regard to other storytelling media.

3.1. Categorization

It could be argued that all of these pieces of media have a certain amount of interactivity that is completely dependent on the viewers' attention and participation. Should the viewer pause or turn off the movie or a game, the interactivity is immediately broken. In comparison, movies are the most passive out of the three, books require the reader's imagination to guide them through the story which is played out in the reader's mind while games provide the greatest amount of liberty and immersion when it comes to engaging the player. According to Cox (para.5), there are 4 classifications of the meta-narrative found in games alone; **emergent, external, internal, and, immersive.**

- An **Emergent type** of meta-narrative is where the game purposefully addresses and acknowledges its own fictionality. In *Animal Crossing* (2001) a character named Mr. Resetti breaks the fourth wall the most by thanking the player for purchasing the game among other examples; „Anyway, let me just say thanks for buying this game, Animal Crossing. Um...on behalf of everyone at Nintendo, I...um...I... What was the next part?."

- **External type** refers to the message that is usually transmitted from the developer to the player however, the meta-narrative stays in-game. An example of the external type of meta-narrative could be in the form of a secret message left by the development team that addresses the player while never being acknowledged by other characters in the game. A great number of Easter eggs [5] fall under this category.

- **Internal type** is the type that is mostly used to subtly allude to the fictionality of its world while never really breaching outside the boundaries of the fourth wall. The meta-narrative related to this type is usually led between two in-game characters. *Metal Gear Solid 2: Sons of Liberty* (2001) has Solid Snake remarking that he has "infinite ammo" which refers to a clothing item that grants the player an infinite amount of ammunition in the game which is mostly used to ironically address the current situation that character inhabits.

- The **Immersive type** uses players themselves as a way to establish the meta-narrative inside the fictional universe. The player's unique role and distinct position that he has in the game allow him to become easily incorporated as an essential element in the narrative's creation. *Stanley parable* (2013) is a famous example where the player is the main character as the never-seen narrator guides them throughout the game and its levels. It is self-aware and highly conscious of the fictionality of its surroundings, reacting

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[5] Hidden messages or references meant to be discovered by the player.

properly to every player's decision whether he follows or obeys the rules even having the game-breaking sequences as a part of the script.

3.2. How is meta-narrative implemented in BioShock

If *BioShock* were to be classified by one of these categories, the most appropriate type suitable for its meta-commentary, themes, and purpose would be the **immersive type** of meta-narrative where the player unknowingly plays the central role throughout all three games. Combining the player's experiences and behavior when interacting with the world and various characters, it surpasses the narrative of the game itself and ventures above the main storyline to provide commentary that is meant to be acknowledged by the viewer. In William Irwin's (10-11) analysis of *BioShock* and its philosophical themes, it is mentioned that the real meta-narrative of the game stems from the fact that the players believed that they were "free" when interacting with the game's universe right until the moment where their autonomy was dramatically stripped away. The two following games in the franchise follow a similar pattern in addressing the limited nature of player's autonomy and restrictions that arise within the scope of the game's base and structure.

BioShock's twists venture beyond the game itself and are completely meta-narrative as they leave players with a changed perspective, shatter every expectation about the game's concept into broken fragments while managing to create an immersive experience that successfully breaks out of its video game media to include the player and make him the center of its narrative. Its primary purpose is to affect the player, urge them to self-reflect, and push them to shift their perception of the role, agency, and autonomy that they have in games.

4. What is the story of BioShock?

"Things grow inside you. We're part of you now, you think you hear them say. You step away from the med bench. The diagnostic screen presents a revolting before and after. On the left side, the before side, you see yourself. What you were. Human. And on the right side… what you are. What you've become…" (Irrational Games, 2)

These are the introductory sentences of the pitch for the original *BioShock* with game developer Ken Levine as a creative director, in hopes of finding a publisher and proper funding for what will become one of the most influential games in the last 15 years. Levine's pitch contained detailed layouts for weapon modification, schematics for player movement, description of enemies, inhabiting not an underwater city, but an island called

Salvacion. However, what set it apart from all of the other First-Person Shooter games (FPS) at the time was that *BioShock*, at its core, was a *story*. The short 17-page document was filled with descriptions, story set-ups, pictures with concept art, and even tiny excerpts of dialogue from different characters, giving a cohesive indication of what the *BioShock* game will eventually become. Released in 2007 it featured a vast array of weapons, immersive combat, and violence alongside a compelling narrative which marked it as one of the most memorable experiences to date.

4.1. BioShock

The game follows the story of Jack, a passenger on board a crashing plane who finds himself amid the convoluted and intriguing storyline of the underwater city called Rapture. The once shining utopia, built by the industrialist and objectivist Andrew Ryan, is now in ruins and filled with the genetically modified and ADAM-hungry Splicers that roam the city. The title itself poses a mystery since the word does not appear to carry any distinct meaning. The word "*shock*" is believed to be an homage to Irrational's first gaming project *System Shock 2* (1999) with *BioShock* being labeled as its spiritual successor. However, the whole title could also be regarded as the shortened version of the word "Biological shock" which precisely ties into the themes of the game and the journey that both the player and the main character go through.

As Jack traverses through the fallen city, he encounters many characters from the friendly revolutionist Atlas to the adamant doctor Tenenbaum, eager to help save the lives of the young girls called the Little Sisters who are in charge of harvesting the ADAM from corpses, all under the watchful eye of their fierce protectors, the Big Daddies. Throughout the experience, the player is forced to make morally difficult choices regarding the fate of the Little Sisters with the game's outcome completely dependent on the player's decisions. The first game's narrative revolves around the question of free will and the agency that the player has by making the main character be mind-controlled by the trigger phrase that makes him complete all the objectives needed to finish the game thus shattering the illusion of choice that the players had before becoming the part of Rapture's storyline. By providing limited information about both Jack and Atlas, who is the main villain, it ultimately tricked the players into comfortably adapting to the protagonist's role which made the final revelation much more impactful. Combining themes of philosophical nature, moral dilemma, unique setting, and consequences of unbound technological advancement, *BioShock* offered an insightful and incredibly immersive experience.

4.2 BioShock 2

BioShock 2 was released after the original *BioShock* almost two and a half years later by Take-Two Interactive. This time instead of Irrational Games with Ken Levine at the helm, *BioShock's* sequel was developed by another team at 2k Marin. Even with a solid score of 88 on Metacritic, it is the lowest-rated game out of three, with a low financial success and critical reception from the player base. Nevertheless, *BioShock 2* was an ambitious sequel eager to return the players to the familiar setting, while attempting to improve all the faults of its predecessor (Reblin-Renshaw, 39).

The year is 1959 and this time, our player character is a Big Daddy, the menacing and imposing figure that the player fought in the previous installment. The introduction contains a four-minute-long prologue that establishes our protagonist and his bond with a Little Sister, who happens to be the daughter of the game's antagonist, Sofia Lamb. *BioShock 2* continues to engage with the themes of morality and choice as the plot centers around Subject Delta's journey to rescue Eleanor Lamb from her mother while encountering various characters whose role becomes pivotal in the development of the story as once again the choices we as a player make are what dictates the ending of Delta's story. *BioShock* 2 presents a fresh perspective and ameliorates certain aspects that were introduced in the first game as well as shining light on the prospect of individualism and what it means to have free will in a society that is run by a collectivist mindset. The game concludes with six possible endings, in all of them Rapture is destroyed with Sofia Lamb's fate depending on how your choices shaped Eleanor, and alongside her help the protagonists manage to escape the falling city. Each of the endings feels conclusive as the emotional soundtrack heard over Eleanor's narration neatly wraps up into a satisfying finale. In the final moments of the game Delta looks over the lighthouse in the distance and while for now, the Rapture dream is over, there is a completely new city to explore behind its closed door.

4.3 BioShock Inifnite

Once Irrational showcased a trailer for the newest addition to the *BioShock* universe, it was evident that this installment would be a great departure from the previous games. Instead of the underwater utopia, the players were introduced to the vibrant city in the sky, Columbia. It also featured a voiced main character which was unusual for the franchise while heavily borrowing art elements from Art Deco and Steampunk, brimming with enigmatic visuals and highlighting the dark side of the serene surroundings. It was enough to generate an overwhelming excitement

for the thought-provoking *BioShock Infinite*. Following the first showcase, a great number of trailers came, early demos featured a plethora of now-cut content, open-world exploration, an expanded multiverse, an environment that promptly reacted off-script to player behavior, etc. It received critical acclaim upon its release both from the audience and critics alike, accumulating nearly a hundred awards.

The game is centered around Booker DeWitt, a hardboiled former Pinkerton detective who is tasked by two mysterious strangers to retrieve a young woman by the name of Elizabeth and bring her to New York. The girl is located in the flying city of Columbia and held captive by its founder Zachary Hale Comstock who also happens to be her father. The main themes are a melange of American sensationalism, hyper-capitalism, racism, American revisionism, classicism, etc. Quantum mechanics and multiverse theory also make their entrance into the narrative due to Elizabeth's power of manipulating and creating tears in the fabric of reality being the primary reason behind her captivity. As Booker and Elizabeth unravel the city's dark secrets amongst the social and political turmoil, the emphasis falls greatly on the relationship between the two characters as their stories are revealed to be more interviewed than they realize. Booker is Comstock and he sold his daughter Anna, or in this reality, Elizabeth to clear his debt while granting Comstock his heir. In the tussle, while she is being taken her pinky gets severed by a tear which results in her omnipresent powers. The ending is unexpected as it is revealed that 20 years later the Luteces, two strangers from the beginning, approached Booker with an offer to reunite him with Elizabeth on account of losing all of his memories. The mission is clear, Comstock has to be killed in the place of his birth, in the river where he took his baptism after the Wounded Knee otherwise, the circle will never be broken. The game ends with Booker's drowning and the screen fades to black.

The meta-narrative that is tied to *BioShock Infinite* is that the game's structure is a reflection of the gaming sphere as a whole and the limited number of paths we have in the game, even under the guise of "freedom." In the first two games choice had some sort of effect on the ending while all the small choices in *Infinite* proved to be utterly meaningless. No matter which decision the player took, which type of combat he used, or which lighthouse he entered during the sea of doors section, it all led him to the same path that was intended by the developers of the game. It retains the franchise's signature *BioShock* formula of elaborate twists and immersive environment while providing players with the new unique setting, weapons, and enhancements alongside its complex narrative, beautiful visuals, and, a thought-provoking ending that thematically connects all three games in the franchise.

5. The question of meta-narrative in the BioShock games.

This section will focus on the main subject of this paper, the meta-narrative present in the *BioShock* franchise, and all the instances it manifests throughout the games. It will branch from art direction which encapsulates the environmental storytelling and the musical component that subtly urges the player to discover and engage with his surroundings while also hinting at the theme of its universe. It will examine the immersive aspect and how relationships with the non-playable characters can manipulate a player's decision and the effect that they have on his experience. Finally, it will thoroughly analyze the hermeneutic horizon which is the main element in how we as players interact with the game, how we perceive the world when playing the game, and how *BioShock* uses it to its advantage.

5.1. Art Direction

Figure 2. The Prometheus statues in the "Welcome to the Rapture" section in BioShock, 2007.

Ken Levine drew most of the influence for *BioShock* from many literary works and artists such as George Orwell, Aldous Huxley, Eric Hoffer, Tom Stoppard, etc (Levine, 2021). Even the design for Andrew Ryan bears a striking resemblance to Howard Hughes, an American business magnate, while his morals and ideals are undoubtedly most influenced by Ayn Rand, in particular, her novel *Atlas Shrugged*. Where the book stopped, Andrew Ryan continued and while we could only read and imagine the idealistic utopia that John Galt might create, *BioShock* offers the visual representation of that potential alternative future in all its destructive glory. Carrying a demeanor of self-importance and condescension, Andrew Ryan introduces himself and the purpose behind Rapture's creation. Throughout Ryan's speech, the acknowledgments toward Ayn Rand become rather obvious as we are welcomed by a grand statue of Prometheus, almost taken straight from the cover of one of her novels. As Figure 2 above shows, he is standing tall, muscular with hands triumphantly held over his head. But all of this, as most of the imagery in *BioShock*, is a façade on a surface level. Upon closer inspection, we can observe that the statue's hands are bound which precisely plays into the thematic exploration of the game.

The detailed level design is a key contributor to the game experience. In Rapture, much of its utopian appearance is complimented by Art Deco. Open areas are framed by smooth walls with linear and sharp-edged aspects alongside geometrical lines and stylized decor. The gloomy and dark localities fall in contrast with the glow of broken neon lights. Even if glass oval tubes looking out to the ocean are enticing, the infrastructure of Rapture is what captivates the attention. Although aesthetically pleasing it certainly leaves a psychological mark on the player. Splicer's screams and grunts are eerily echoed throughout the empty corridors, Big Daddies' heavy thuds can be heard on the tile floors, and the shadows are much more amplified by the whimsical lights. It leaves players on edge, horrified and gasping for breath, a peculiarity that *BioShock* manages to accomplish through architecture alone.

The aforementioned neon signs serve more than one purpose, as they act as a waypoint to the Fort Frolic where we meet an unhinged and sadistic individual called Sander Cohen, a premier artiste who revels in artistic expression and absolute chaos. He tasks Jack with a simple request, to kill his 4 estranged disciples, take their picture and frame it in the Atrium. According to Irwin (18) uniqueness of *BioShock* is emitted through its narrative, managing to deliver a story in the only way that is possible for video games. Not limiting itself to the words and actions of other characters, it utilizes all of the capacities that its medium offers in order to transcend the message directly at the player. Engaging the viewer and educating them about the intricacies and details of the complexity of human nature through various emotional triggers. The majority of *BioShock*'s emotional impact would be diminished if it was solely watched or read instead of played. It almost feels like a grand spectacle where you feel like a main attraction, observed and followed. During the combat, the player is tracked by a spotlight beam, with classical music accompanying our way as we attempt to reach Cohen's apprentices. Jordan Thomas, the creator in charge of this section stated; "you're invited to participate in this awful work of snuff art. That was a baby step, but it was me trying to say, hey, you're a participant here too. Let's sing a duet." (Mcmullan, para.5).

Figure 3. The comparison between the two choices regarding Gil Alexander, BioShock 2, 2010.

In *BioShock 2,* we can observe how our choices shaped the art direction of the game in the form of statues that decorate the Rapture's halls. After the confrontation with Lamb, we take over the role of the Little Sister, seeing the world through her eyes. Their world is much more stylized and desensitized as opposed to their surroundings where blood trails are represented as rose petals, the splicers are people dressed in tuxedos, dresses, etc. Depending on what we decided to do with Gil Alexander, for example, he is either depicted as a snake monster fought by Delta or a man being pulled out of a snake (Figure 3). This further indicates the meta-narrative nature of the game.

BioShock franchise offers many opportunities in terms of visual storytelling in the narrative and *BioShock Infinite's* thematic is mostly paralleled with the original *BioShock*. The first game starts dark, and gloomy, with brass sculptures showcasing Rapture's grandeur before descending into horror while *Infinite* does the exact opposite. The Lighthouse Booker steps into is desolate, cold, and unwelcoming unlike the gleaming Art Deco beacon featured in both games, before rocketing into the glorious city of Columbia. Visually, *Infinite* begins similarly to that of its two predecessors. Jack's plane crashed into the Atlantic Ocean and Subject Delta awoke first to his reflection lying in the puddle. Water always played a great symbolism in the games, in *BioShock* it represented both figurative and literal pressure, life and death as it proved both beneficial and detrimental to the player. In *Infinite*, Booker DeWitt's story also begins in the water as he is taken to the lighthouse by two strangers confusingly arguing about the semantics of rowing.

When we first lay eyes on Columbia it is a breathtaking sight, the sense of amazement and awe is palpable as these sights instantly evoke nostalgia and are meant to remind players of their first visit to Rapture. Instead of Andrew Ryan's introductory speech, the sight alone, the soft instrumental of *"Will the circle be unbroken"* complimenting the art direction of the city, colored in bright and radiant colors of red, white, and blue as we steal a glimpse of the poster featuring our game's main antagonist, speaks louder than words. Ken Levine put a lot of attention towards art design outside of Columbia as they represent America's golden age and Art Nouveau. The visual presentation does not waver as the player proceeds into the open and

airy Columbia's Welcome Center, greeted by the imposing statue of its founder, Zachary Hale Comstock. In the first game, Rapture was dark, gloomy, and claustrophobic while *BioShock Infinite's* Columbia is bright, open and allows for close-range combat but also utilizes the tears and sky-lines to attack from afar, while still maintaining the high details that are necessary for environmental storytelling. Maps are plastered around the city encapsulating the realism as the layout and architecture reflect the game's theme as no matter which two doors you choose in a level, they would always connect to the same path.

5.2. Environmental storytelling.

BioShock approaches its narrative mostly through environmental storytelling, providing agency by breathing life into Rapture, making it impossible to not get immersed in its world. According to Janet Murray (113), "The more realized the immersive environment, the more active we want to be within it." *BioShock* is a prime example, as we pass through Neptune's bounty, we can come across a plethora of evidence that hints at the lives of Rapture's citizens and how Rapture manages to sustain a livable environment. While crawling through the Atlas' hideout we can spot several boxes filled with various contrabands containing everything Ryan strictly prohibits. Religious books, movies, cigars, and alcohol can be found, indicating that not everyone was completely in agreement with Ryan's regime. Arcadia is an entire level dedicated to showing how Rapture obtains its oxygen through lush forests and copious amounts of plant life that generate the city's much-needed supplies.

In *BioShock 2*, the environment acts as an answer to the question of what happens when a failed society finds hope in a new philosophy. Sofia Lamb is cold, calculating, and completely ruthless when she wants to be. Initially brought into Rapture as a psychiatrist tasked to help denizens of Rapture who were having a difficult time adjusting to their new life, such as increased anxiety due to the lack of natural sunlight, soon allowed her to take advantage and establish a utopian and collectivist society in the city. All of this evidence could be scoured throughout the game via incredible usage of environmental storytelling and through various Audio Diaries as they provide not only narrative-heavy information but solutions to puzzles and various codes. Lebowitz and Klug explain that due to either budget constraints or time crunch, developers opt to use journal entries in order to replace the much-needed narrative beat of having talking and moving non-playable characters (NPCs). Although lacking, it can prove to be intriguing as we can peer into the minds of other characters we have not met before, a narrative style that was only attributed to books is now greatly incorporated in games as well (42).

BioShock goes a step further with its Audio Diaries. To stop and read notes or excerpts found in-game could be engaging, but it ultimately slows down the pacing of the game. Some players might not be even bothered to go through all the reading, therefore missing out on important worldbuilding information and diminishing all the interactivity and immersion. In *BioShock*, players can listen to 122 audio logs, and 129 of them in *BioShock* 2, providing interesting sources of information through the character's voice while at the same time avoiding the break in pacing. To completely understand Rapture's narrative the essential information has to be looked for. The utilization of ghosts in the first game counts as this, where we can observe a woman banging and screaming in front of Steiman's office or Atlas regrouping people for his revolution. The audio diaries are not randomly placed either, for instance, in a desolate Kashmir restaurant there is one sitting on the table next to a party hat as we listen to dejected Diane McClintock describe spending the New Year's Eve alone as the sound of Atlas and his splicers attacking the city can be heard in the background. *BioShock 2* offers an even bigger variety of Audio diaries, some of them even including full character arcs such as the story of Mark Meltzer or Nina Carnegie. It all makes Rapture and its inhabitants feel alive with the player as the active participant in the heart of its storyline

5.3. Musical component

The usage of music in the *BioShock* franchise was always deliberate, as it is considered a fundamental part of environmental storytelling and narrative by providing game-to-player cues. In William Gibbons' detailed analysis of the musical component in *BioShock* he states that these songs are used to provide commentary and certain levels of meaning and therefore can be considered as "diegetic pieces in video games", used as a building foundation of Rapture as it enhances the feeling of that particular time period (para.6-7). In the first minutes spent exploring *BioShock*, the sharp and narrow spaces are filled with the sound of gentle swing and jazz fusion of *Bobby Darrin's „Beyond the Sea"*. Following the descent from the top of the stairs to the desolate bathysphere, it is both immersive and unsettling as it seethes with deep irony. The songs more often than not cheekily hint at the narrative points in their games, thus creating a secret language between the player and whatever setting they find themselves in. It is not clear whether Jack can pick up on these contextual cues since he does not voice his opinions, but the player certainly can, therefore serving its meta-narrative purpose. *BioShock 2* also features a handful of musical highlights including *Patti Page's "How Much Is That*

Doggie in the Window" and *Anette Hanshaw's "Daddy Won't You Please Come Home",* with both of them acting as diegetic elements in regards to hidden meaning and commentary.

However, *BioShock Infinite* features one of my personal favorite moments during the early game section where the player can just stand and listen to a gorgeous barbershop quartet's rendition of "*God Only Knows.*" It is a brief, sweet, and immersive break from the game as Booker moves to his objective, serving its meta-commentary purpose that goes beyond just being a discoverable secret hidden in the game. The game's soundtrack is filled with foreshadowing and anachronisms. The aforementioned *The Beach Boys* hit came out in 1966 while Booker was exploring the 1912s Columbia. There is an in-game explanation for this, as Fink's brother made a monopoly by plagiarizing the songs he heard from Elizabeth's tears and making them time-period appropriate, but just like how music was used in *BioShock* to converse with the player, soundtrack plays even a bigger role in this installment, particularly *"Will the circle be unbroken"* that can be heard following Booker before he gets baptized, as the song references not just American exceptionalism and religion but the thematic of the unbroken circle of violence inhabiting Booker's life.

5.4. Immersion and importance of the first person perspective

When first lying eyes upon the underwater utopia of Rapture, the sight is awe-inspiring, large buildings connected by glass tunnels; the New York evocative skyline filled with attention-grabbing neon lights decorating various establishments. However, awe quickly turns to horror, its welcoming exterior glow dissipating into a war-stricken interior.

In the original pitch the purpose of *BioShock* is to "scare the hell out of people." (Irrational Games, 5). It is needless to say that these same effects can be experienced through other media however, nothing completely compares when you feel like you are the one being chased, running with a gun in hand, sometimes frozen in the spot until you realize that this is not like a movie where one can put hands over their eyes and trust that the actor playing a character in a movie will get out of the situation unscathed or where you can close the book shut and walk away. It is you who is responsible for the outcome of your character and with that revelation, every unusual additional step that is not your own or every passage of a shadow makes it much, *much* more terrifying.

When Jack reaches the lounge area where a huge neon plasmid advertisement in the shape of a hand, literally points to our next objective alongside some further instructions, he gains his first

plasmid [6](Electro Bolt). The gameplay suddenly transitions into a cutscene as we helplessly watch an uncomfortable short scene of Jack writhing in pain as he injects the plasmid, losing all motor function, passing out, and falling to the bottom floor. As a conclusion to the tutorial section, we catch a glimpse of the Little Sisters and their fierce metallic protectors, the Big Daddies. The scene is meant to demonstrate that even a city of great achievements and unimaginable inventions, can produce advancements that have disturbing purposes and consequences. Alexander Galloway makes a distinction between a first-person view camera used in FPS and the subjective camera shots used for a film. He considers a POV shot as a "generalized approximation", while video games are one of the first modern media to faithfully represent a psychological case of mimicking an actual vision, showing the world as the character we are playing sees it (65). Some games take this mimicry of a psychological state even further, such as doubling the vision when the character consumes too much alcohol or bloody specs around the corners to signify an injury or near death. The in-game "camera" emphasizes the control that the player has over the character while they move it around as it develops into their viewpoint, not the avatar's, making the tension and the feeling of helplessness amplified when it is taken away.

BioShock 2 uses the first-person perspective as a tool to improve hacking mechanics which was previously performed as a non-diegetic mini-game in the style of *Pipe Manina* (1989), as the structure of the subgame took a lot away from the immersion. In the sequel Delta uses a remote hack tool where he stops a needle on a specifically colored part of a gauge and the hack tool is used just like any other weapon in the game without any break from the Delta's point of view. Since this could be considered a part of diegesis it furthers the immersion aspect. The darts are scarce and can be bought meaning that player needs to manage their resources, further incentivizing thoughtful strategy on the player's part. Delta has the ability to dual-wield weapons, which not only fixed a critique of the last game but it also narratively makes sense. The technology improved since we last visited Rapture and we are filling the massive shoes of a genetically mutated, dangerous, and technologically empowered Big Daddy. The enemies push the player to use all the elements in the arena, water for Electro Plasmid or pools of oil that could be ignited with Incinerator, setting up traps and turrets this type of extensive planning makes the player proactive instead of reactive.

5.5. How other characters affect the player's perception

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[6] A serum that allows genetical modification and is a source of power-ups in Bioshock.

Figure 4. The statue of Andrew Ryan, BioShock, 2007.

The original *BioShock*, with its dark and brooding color palette, introduces the player to Rapture using almost all the horror elements it can think of. The door behind closes and as we turn around in the pitch-black darkness, the light suddenly turns on and we are confronted by the big and imposing statue of Andrew Ryan looking down on the player while underneath him stands a red banner featuring one of his many objectivist mantras; "No Gods or Kings, only man", see Figure 4. The game utilizes our horizon of expectations, ultimately providing a red herring right from the start. The aggressive red banner and Ryan's scowling expression lead us to believe that he is the villain of the game. Atlas sits in a glaring contrast to Ryan's grim and pompous introduction. He is a revolutionary leader, aiming to help Jack navigate through the hostile environment, instructing us how to use our weapons, warns and provides information about various enemies to the player, clears our obstructed path, he even walks us through our first usage of a plasmid. He is a helpful aid in our ear, constantly conversing with Jack. It almost seems that the game bends backward at any chance it gets to make sure that we like and trust Atlas. He eventually reveals that the reason he contacted Jack is because he needs him to save his wife and child, thus creating a social contract between the two characters. With a clear and noble goal set in mind, the main objective of the game is established.

As we proceed to Ryan's office in Hephaestus, the design drastically removes itself from the Art Deco, stripping away its shining façade to portray Andrew Ryan surrounded by the engines of Rapture. The sudden change of art direction, Ryan's taunts, and significantly easier Big Daddy encounters subvert players' expectations into truly believing that this is the end game section with Andrew Ryan being the final boss. Using *Indiana Jones* movies as an example, Lebowitz and Klug demonstrate how knowing about the nature of the characters and the very setting can urge the audience to predict the unfolding events of the movie (228). What makes the *BioShock's* plot twist so memorable is the fact that we were mostly guided by our own assumptions. We assumed Atlas was a good guy without being told, believed we had control, and regarded Andrew Ryan as the villain. The game just told us we were wrong.

In the sequel, the effects of the first game are still very much tangible upon meeting our companion, Augustus Sinclaire, a sleazy businessman whose goal is to exploit Rapture's secrets and sell them on the surface. His cheerful demeanor and friendly attitude instill immediate distrust into everyone who had a chance to experience the first game even if he eventually subverts the expectation by acting as a helpful aid to the player throughout the whole duration of the game. The Little Sisters have a more human design which is intended to elicit more empathy and since we are playing the role of their protector, our time and bond with them is essential which is reflected in their dialogue when spending time with Delta. The empathy factor does not end with them, Splicers have also gotten an upgrade in their appearance, showing the passage of time, making them look older and broken. The amusing rants of Toasty Splicers from the original have shifted into genuinely devastating lines of dialogue from the new generation present in the sequel. Again, this is used to remind the player that these were once people with lives and families, forever ruined by Rapture. They also attack in unison, in every encounter they overwhelm the player, Sofia rallies them against Delta every time she speaks. This is a reflection of her philosophy and her concept of the Rapture family. Before, under Ryan's rule there was no collective to be seen and the game uses the narrative directly as an inspiration to the combat system. While being a Big Daddy, Delta was selfish and amoral however, Eleanor waking him up granted him free will, which is solidified by Sofia Lamb's quote; „Who, I wonder, would be so cruel? To force a mirror on a man with no face…" (BioShock 2, 2010) Instead of being controlled by his Big Daddy instincts, through this forced sentience, he is now controlled by the player. We gave his actions meaning and allowed him agency over them. Initially, Delta's actions towards Eleanor's safety seemed to be made out of duty, compulsion, and out of bounds of choice. His original intentions might not have involved self-sacrifice or fatherhood however, our gradual decisions and actions throughout the game prove that he consciously chose that path. "Love is just a chemical, no matter the origin. We give it meaning by choice." - Eleanor Lamb. (BioShock 2, 2010)

BioShock Infinite acts as the best example as it owes much of its success to Elizabeth, from her design, strong voice acting performance, her character quirks, and impactful character arc. Aside from books Irrational Games took a lot of inspiration from Disney movies. The biggest indicator is Elizabeth herself simultaneously emulating the story of Rapunzel with her tower

and Belle from *Beauty and the Beast* (Disney, 1991). In this twisted tale on her story, the beast is a mechanical monster called Songbird, Columbia's answer to the Big Daddies. Her design underwent multiple iterations, with the final product even visually resembling Belle with a white shirt, blue skirt, and a ponytail tied in a bow, as can be seen in Figure 5. For Ken Levine and his team, it was important that they got her character just right. Her existence subverts expectations because we believe that, since Booker is the player character and on the game's box art, he is the main character, when in fact the story of *BioShock Infinite* has always been Elizabeth's story. She is the driving force of the game and by the end, she overtakes the protagonist role, thus fulfilling her hero's journey. She is *Infinite's* greatest achievement and all of her mannerisms, naivete, infinite number of questions thrown at Booker, and playful demeanor, make her feel real.

Figure 5. Similarities between Elizabeth and Belle

There is no combat after we encounter Elizabeth, which means that we have time to bond with her. The game hinges on that we like her. The hallmark of a good story is that it manages to create an emotional connection between the player and the character, to feel fear when they are in distress or joy when they succeed in their endeavor. Not only is her mark on the player palpable, but on Booker as well as their dynamic becomes the focal point of the game. When Elizabeth witnesses' extreme violence conducted by the player, it puts a strain on her relationship with Booker, showing her disapproval through body language and refusal to make eye contact.

 After her experience with the outside world and the violence that both she and Booker had inflicted, alongside her imprisonment in Comstock's house, she becomes cold, revengeful, vacant, and sad. The scene where Booker rescues her and removes the needle from her back is meant to be grotesque but also forces us to empathize with her. The game undoubtedly compares Marilyn Frye's (12) famous analogy regarding oppression in the form of a birdcage to Elizabeth's situation. Even when Elizabeth is finally free from her captivity, she finds herself in a more crushing and metaphorical cage, or as the game sees it, a violent circle of abuse. She is determined and seeks revenge against Comstock, fully dependent and only gaining her powers

once she is truly emancipated from her oppressive environment. Throughout the game, the character's motives completely shift and even though our opinions of Booker might waver and change, we never stop rooting for Elizabeth.

5.6. Hermeneutic Horizon

Since we presumably played other video games before it is safe to assume that we hold certain expectations towards it. The notion that *BioShock* is a first-person shooter with a silent protagonist makes the basics clear. The players will use a joystick or a keyboard to interact with a certain set of buttons to make the character jump, run, shoot, perhaps strike up a conversation with other characters, and generally wreak havoc on whatever foe that dares to cross our path. Even if there is a dose of uncertainty about what is behind the lighthouse door, we certainly know what to *expect*. This particular concept came from German philosopher Hans George – Gadamer called, the Hermeneutic horizon.

According to Irwin, observers, in a sense, create their own interactions, meaning that not everyone will have the same outlook or expectations when experiencing a piece of art, therefore making a version of hermeneutic experience completely their own (7). However, this sentiment is two-fold since it also dictates that we are shaped by different experiences in return. It becomes art when it ventures out of its boundaries and communicates with the observer beyond the limits of the fourth wall. It is a concept that the player obtained long before resuming the role of Jack, before pressing start on the main menu, and before even turning on the game.

Games usually utilize contextual clues, tutorials, maps, and waypoints to guide players through unfamiliar spaces, much like books use chapters and page numbers to act as hermeneutic indicators and help readers navigate and interpret the content. The first sight that greets the player when starting the game is not the title, but rather the text "1960 Mid-Atlantic." The player instantly adapts to this information, accommodating to this whole new world that we are about to step into for what is presumably the first time, something that Jack wrongly assumes as well.

"A man chooses, a slave obeys!" – Ryan says. „You think you have memories. … Did that airplane crash, or, was it hijacked? Forced down, forced down by something less than a man, something bred to sleepwalk through life unless activated by a simple phrase, spoken by their kindly master." (BioShock, 2007). In the final confrontation, he then proceeds to command Jack to sit and run around like a loyal dog, before ordering him to grab a golf club and bludgeon

him to death, screaming at his face until he eventually does what he is told. Up to this point, we considered ourselves the player character, completely immersed in the Rapture narrative as Jack's story slowly became our story with all of it shattered the moment our controller failed to respond to our commands. We no longer felt in complete control, as it was Jack now who was confronting Andrew Ryan with both of our freedoms completely taken away. There are several reasons why this part of the game is so unsettling when playing. It is not only because of the brutal act of murder but its implication. We are not free and we are only here to follow orders. Our sensibility to this information becomes heightened as we soon realize that this is not the end of the game. There is a sense of bitterness as Atlas' voice chimes in, using that same phrase to mark the next objective. He used this phrase passively before, subtle enough to go unnoticed. We could disobey, stay forever in Ryan's office if we wanted to, shoot the walls, jump around, and turn off the console, but we know that the game won't progress until we do what he wants.

Only through exploration are we rewarded with metaphorical puzzle pieces that allow us to piece the story together in the form of foreshadowing. One of the audio diaries contains information that the bathysphere can be only used by those related to Ryan, Jack would get random memory flashes when interacting with specific items tied to his history, and many players, for instance, did not know they could kill Cohen after finishing his section. In the case of the other "mini-bosses" we encountered before such as Steinman and Peach Wilkins, we were particularly instructed to engage in combat with them. At that moment Atlas speaks up on the radio saying, „Would you kindly head up to Ryan's office and kill the son of a bitch?" (BioShock, 2007) Since his order does not involve Cohen, Jack has a free choice of dealing with his fate. Leaving him alive emphasizes the thematic symbolism of the game where both Jack and the player will blindly follow Atlas' orders and unquestionably abide by the game's rules. The term "managed schemata" by Dan Pinchbeck comes to mind, to label mechanisms used in games to affect the player (6). Every narrative beat of Jack following orders makes sense in terms of video games since we have to complete all the objectives in order to finish it.

In a game that is all about the false feeling of control and illusion of choice, Jack's only free decision that he had ultimately determined his fate. Whether is a selfless or selfish one, it is made by our own volition and is important to demonstrate the player's moral code over Jack when he is not under Atlas' control. It is separated into a bad, neutral, and good ending where Jack either becomes a ruthless destroyer of worlds or its savior.

Jordan Thomas, when referring to collectivist and objectivist philosophy in the games for the Telegraph interview, stated that; "the player will be exposed to far more philosophical viewpoints than these two extremes in BioShock 2." (Cowen, para.10) Sinclaire represents moral relativism, he is helpful, but he is ambiguous with his information. Subject Delta has multiple interpretations, but the most believable one is that he is an individualist. Choice is still an important theme in the game and is being majorly used to push forward the narrative. By making choices regarding the Little Sisters and the NPCs, the game learns about the player and therefore shapes the outcome of their story. The game does make the choices morally difficult through unreliable narration, advice that is in most cases contradictory alongside our own opinions as we get to personally know all the characters whose fate is in our hands. They affect the narrative in a way that reflects what Delta represents philosophically, especially since the decision to either spare or kill them is based on individual choice. The whole sense of mercy hinges on the complexity of each individual's situation and the background motives of these characters, therefore making the choices much more ambiguous. In Persephone, Sofia Lamb's monologue and confrontation are very similar to Ryan's as she reveals that Eleanor has been observing our choices, unknowingly influencing her behavior. The plot twist is not as surprising as it is powerful, with the implication being that Sofia failed and we were the ones who created her Utopian and thus unknowingly played the active participant in the shaping of the Rapture's demise.

BioShock Infinite opens with a fictional quote about multidimensional amnesia; "The mind of the subject will desperately struggle to create memories where none exist..." The *BioShock* franchise was never one to shy away from the mysterious exposition in their games and is considered to be a part of its *BioShock* formula alongside elaborate twists. Mystery allows for a greater storytelling impact and a memorable experience for the viewer. Lebowitz and Klug provide examples of *Shadow of Colossus* and *BioShock*, as they tend to reveal just enough to cause instant intrigue that hooks the player and instills the need to play the game in order to form their own conclusions (102).

Even if it seems unlikely for a shooting game featuring quantum mechanics and multiverse to be heavily influenced by historical novels, *BioShock Infinite* borrowed a lot of inspiration from Erik Larson's *The Devil in the White City: Murder, Magic, and Madness at the Fair That Changed America.* If the whiteness of the city wasn't noticeable before, it becomes glaringly obvious the more time we spend in Columbia. As a winner Booker's "reward" is to throw a baseball at an interracial couple as the crowd encouragingly shouts. It is the first among many,

in hindsight, meaningless choices in the game. Without knowing the consequences, the player must choose between throwing the ball at the announcer or the couple in front of him. Regardless of the choice, Booker gets recognized as the False Shepherd due to the mark on his hand, AD. In a gnarly scene of Booker fighting his way out of the raffle, the control is taken from the player to shed the spotlight and demonstrate both to us and the denizens of Columbia, the violent nature of our playable character.

Afterwards, we encounter the couple from the beginning of the game where we are provided with the first hint about the notion of all the choices resulting in the same outcome and the plurality of the universes through the coin flip experiment. No matter how many times the game is replayed, after pushing the square button the coin will always show heads, highlighted as one of the Lutece twins turns around, only to reveal a blackboard depicting this same result performed 123 times before. The Lutece twins are the embodiment of meta-narrative commentary. They died due to the machine malfunction, trapping themselves in a quantum state of superposition, therefore they cannot be harmed in any universe, making their every interaction used as a form of breaking the fourth wall. At the very beginning, if Booker refuses to leave the rowboat, they will comment how "he will, eventually", if by any chance the player tries to shoot them, they will unperturbedly remark that he missed and that he is wasting his ammunition, indirectly addressing the player.

"One man goes into the waters of baptism. A different man comes out, born again. But who is that man who lies submerged? Perhaps that swimmer is both sinner and saint, until he is revealed unto the eyes of man" (BioShock Infinite, 2013)

Comstock's Voxophone refers to a spiritual interpretation of quantum mechanics. The game also introduced the intricate workings of the many worlds' theory and the multiverse. Sid Meier famously defined games as "a series of interesting decisions." The world that the player enters is fictional with a defined set of possibilities. The concept of choice and what makes it interesting is that it is intricately interwoven with the narrative and the gameplay. There are seemingly available choices and the ones that are foreclosed. Player agency is a connecting theme of all three games and *BioShock* contextualizes this idea because all the choices in the game are already foreclosed, predetermined, and unavoidable by the design and the rules of the game. The final section of the game is very character-driven. Comstock does not reveal all the answers that we seek as Booker, in a fit of rage, kills the prophet and drowns him in the basin. Comstock knew that this would happen, we see it in the murals in front of his room, the only action the player can perform is to push the square button and watch the control being taken

away as Booker steps between Comstock and Elizabeth. We can't do anything the same way Booker can either because all of it is pre-determined. It happened, it is happening, it will happen. We drown and kill Comstock in quantum superposition, he dies in the middle of a baptism, a sinner and a saint. He is both and neither. No matter which unique playstyle, gear, weapon, or Vigor combination you used or the choices you made, every player that gets to this point sees the same scene, again signifying the hard determinism that the game is trying to portray. *BioShock Infinite* dabbles in many sorts of themes, but the focal point of its narrative is the notion that the *Infinite's* universe is deterministic, meaning that all the paths are already decided in advance.

In the universe of *BioShock Infinite,* all the other possible universes are accessed through different lighthouses. The *"Infinite"* in the title relates to the plurality of many accessible worlds. This modal theme permeates that every choice made creates a new world where an alternative choice is made. The small forking paths (the variables) give only an inch of freedom to the player in many of its constants that dictate the universe. The whole genre of FPS is characterized by many constraints that have predetermined outcomes. *BioShock* manipulates many of these ideas, the meta-textual themes of player illusion are present in all of their games. Unlike the previous player characters, the fact that Booker speaks is meant to throw the player off because we believe that he has agency when in reality he doesn't have any more choice than Jack does. If you threw the ball at Fink or not Booker will still kill Comstock, if Elizabeth wears the bird pendant instead of the cage it won't change the path she is on. Many games after the *Infinite* started implementing and perfecting this type of meta-commentary creativity through play.

Comstock's death robbed Elizabeth of answers and eventually, the story makes a full circle, the siphon is destroyed and Elizabeth takes us back to Rapture to kill Songbird. The setting is the welcome lounge where we got our first plasmid and the sound of "*Beyond the Sea*" in the background instigates a nostalgic feeling. However, Rapture's purpose is to demonstrate the various universes separated by a world of difference. Booker even breaks the meta by saying "A city at the bottom of the ocean? Ridiculous." (BioShock Infinite, 2013) Parallels do not seem like an accident or "gameisms" anymore, they are deliberate. *Infinite* is self-aware and the ending is nothing short of chilling and beyond melancholic. Booker and the player align completely and our confusion is evident in contrast to Elizabeth who, confidently and calmly, takes us through the sea of doors. We see many Elizabeths and Bookers emerge from different lighthouses. From the meta-narrative perspective, they could be regarded as different players

who perhaps made slightly different choices than us but ultimately reached the same place in the story. Wooden planks come beneath our feet as we run from one lighthouse to another, and no matter where we run or which door we open, they bring us to the same destination. Even if Booker is an established character, he is still an empty vessel inhabited by the player. The opening statement of the game carries grand importance because Booker was in the dark about his past as much as we were. Both he and the player tried to "create memories where none exist" based on trivial information told to us at the beginning of the game.

"There's always a city, a man, and a lighthouse." Elizabeth says. The statement is not only applicable to the sentiments related to the *BioShock* universe but to the gaming sphere as a whole. The epilogue ends on a hopeful note, whether Anna is in her crib is up to the player's interpretation. Our variable among the sea of constants is the chance of deciding the ending of Booker's story, much like how our choices determine the outcome of other *BioShock* games. A chance to break the deterministic circle. Even our own experience is a variable in itself. Did the player play the previous games before *Infinite*, did they listen to all of the Voxophones to contextualize the world they inhabit? All of these choices, the steps we took to get to the end, and the decisions we made before, shaped our experience through a hermeneutic horizon, and in a true sense of art, made us walk away with a different interpretation, out-look, and perception of the one we had before starting the game.

6. Conclusion

Storytelling in video games is reaching new heights with each passing year. Graphics and sound improvement, creative teams filled with talented writers, quality and convincing voice acting with engaging characters, soundtrack, and countless hours of content and worldbuilding are the building blocks for complete player immersion and narrative that video games as media can offer. As they are quickly catching up with the traditional storytelling forms of film and literature, video games continuously present numerous advantages in that regard.

However, these traditional forms still lack the interactivity aspect that the video game field has successfully implemented in their own media throughout the years. Even though the definition varies, according to Josiah Lebowitz and Chris Klug, it means that "Whether it simply evokes an emotion in the viewer or alternatively invites analysis to truly understand the work itself, any art that lasts is multilayered and reveals more upon each repeated examination." (117-118). With each revisit to an art form, something new is presented and a shift in interpretation occurs.

For example, books with upside-down texts and pop-up books could not be considered interactive, as it is primarily impossible to change the content of their stories. Games on the other hand, allows players to explore cities, engage in conversation with central characters of the universe, learn about their surroundings, and collect many lore-heavy pieces in order to have a fulfilling experience in those in-between moments where they have control of their actions. Despite this milestone in terms of storytelling and immersion it is important to note that the player always follows the predetermined rules and paths set up by the game's developers. By defining the term "meta-narrative", its purpose, and the proper categorization it was easy to recognize the most important pieces of meta-commentary that could be found throughout the franchise, starting from the art direction and music to the environmental storytelling aspect that provides contextual cues and encourages the players to explore the underwater utopia and discover all of Rapture's secrets. It also highlights the critical importance of having engaging and interesting characters that can potentially skew and alter the player's perspective and shift their motives, as *BioShock* provides an in-depth characterization of many important as well as minor characters through the clever usage of Audio Diaries and captivatingly crafted pieces of dialogue. Finally, the success of *BioShock's* formula, with its twists and subverted expectations, is mostly due to the hermeneutic horizon and the expectations that we have when in the act of playing as every game in the *BioShock* franchise based its thematic around that concept. Using the immersive form of meta-narrative, the original *BioShock* manipulated the idea of player agency in how the game's rules dictate our behavior to unquestionably follow orders until we reach the ending, all under the guise of freedom. *BioShock 2* shifted the perspective by putting the player in the shoes of the enemy from the first *game* while addressing the philosophical question of individualism and free will. *BioShock Infinite* introduced a multiverse in its story while providing a meta-commentary on the linearity and fixed choices of the game's narrative. The central theme of lack of choice and determinism is not only applicable to the *BioShock* franchise but all the games in existence. There is always a game mechanic (lighthouse), a player (man), and a setting (city) to which the player is introduced. All that is left is the choosing.

7. Works Cited

1. Lebowitz, J. Klug, C. (2011), *Interactive Storytelling for Video Games A Player-Centered Approach to Creating Memorable Characters and Stories,*

2. Reblin-Renshaw, L. (2020), Ludonarrative Synchronicity in the 'BioShock' Trilogy, page

3. BioShock The Collection, PlayStation 4 version, Irrational Games,2016.

4. Murray, J. (1997), Hamlet on the Holodeck: The Future of Narrative in Cyberspace (Cambridge: MIT Press, 1997), page 113.

5. Galloway, A.(2006) *Gaming: Essays on Algorithmic Culture (Minneapolis: University of Minnesota, 2006), xii.*

6. Irwin,W. (2015), *BioShock and Philosophy Irrational Game, Rational Book.*

7. Marilyn Frye, "Oppression," in Gender Basics: Feminist Perspectives on Women and Men, ed. Ann Minas (Belmont, CA: Wadsworth, 2000),

8. Pinchbeck, D.(2009) *"Shock, Horror: First-Person Gaming, Horror, and the Art of Ludic Manipulation," in Horror Video Games: Essays on the Fusion of Fear and Play, ed. Bernard Perron (Jefferson, NC: McFarland & Company, 2009).* Kindle edition.

7.1. Web sources

9. Ken Levine, "From Shodan, to Big Daddy, to Elizabeth: The Evolution of AI Companions" (presentation, BAFTA, London, UK, March 11, 2013).

10. Cox, J. (2014), *The Four Types of Metafiction in Videogames, https://www.gamedeveloper.com/design/the-four-types-of-metafiction-in-videogames*

11. Irrational Games (2002), *Bioshock, the first person action horror, from the creators of System Shock 2 and freedom force*, https://videogamecreation.fr/wp-content/uploads/2020/02/Irrational_Games_Bioshock_Pitch.pdf

12. Levine, K. (@levine). "Rand, Orwell, Huxley, Eric Hoffer, Tom Stoppard." Jan 25 2021, 8:33 a.m. Tweet.

13. Mcmullan, T.(2015), Horror, Humour And Purgatory: In Conversation With BioShock And The Magic Circle Developer Jordan Thomas, https://www.alphr.com/life-culture/1001850/horror-humour-and-purgatory-in-conversation-with-bioshock-and-the-magic-circle/

14. Gibbons, W. (2011) *"Wrap Your Troubles in Dreams: Popular Music, Narrative, and Dystopia in BioShock," Game Studies* 11(2011), https://gamestudies.org/1103/articles/gibbons

15. Cowen, N.(2010) *"BioShock 2 developer interview," The Telegraph, January 13, 2010,* http://www.telegraph.co.uk/technology/video-games/ 6980675/BioShock-2-developer-interview.html.

8. The meta-narrative in BioShock games: Summary and keywords

This bachelor thesis focuses on the immersive meta-narrative and commentary featured across all three games in the *BioShock* franchise while comparing the evolution of video game stories to traditional media of books and movies. It defines the notion of meta-narrative and all of its characteristics that are present in the games such as the use of the art direction, the musical component, environmental storytelling, immersion aspect through the first person perspective, etc. Original *BioShock* was groundbreaking at the time due to its thought-provoking nature and multiple endings while also questioning the player's agency and freedom. Although less critically acclaimed, *BioShock 2* impressively corrected all the faults of its predecessor, and expanded its choices regarding multiple endings, and shed a spotlight on the philosophy of individualism, collectivism, and the meaning of free will. Finally, *BioShock Infinite*, through multiverse theory and quantum mechanics ironically commented on the deterministic nature of video games and singularity of choice while connecting all three games in a cohesive unit, expanding out of its game media to uniquely address players and their role in the games they play through the act of immersion and interactivity.

Keywords - Meta-narrative – player agency- storytelling media- Choices – Hermeneutic Horizon – Jack -Subject Delta – Booker DeWitt -Elizabeth Comstock – Plot twist – Multiverse

9.   Meta narativ u BioShock igrama: Sažetak i ključne riječi

Ovaj diplomski rad usredotočuje se na imerzivnu meta-naraciju i komentare koji se pojavljuju u sve tri igre u franšizi BioShock, uspoređujući evoluciju priča u videoigrama s tradicionalnim medijima knjiga i filmova. Definira pojam meta-narativa i sve njegove karakteristike koje su prisutne u igrama kao što su korištenje umjetničkog pravca, glazbene komponente, pripovijedanja kroz okoliš, aspekt uranjanja kroz perspektivu prvog lica itd. Originalni *BioShock* bio je revolucionaran u svoje vrijeme zbog prirode koja potiče na razmišljanje i zbog svojih višestrukih završetaka, dok je također dovodio u pitanje agenciju i slobodu igrača. Iako manje hvaljen od strane kritičara, *BioShock 2* impresivno je ispravio sve nedostatke svoga prethodnika, proširio svoje izbore u pogledu višestrukih završetaka i bacio pozornost na filozofiju individualizma, kolektivizma i značenja slobodne volje. Konačno, *BioShock Infinite* je kroz teoriju multiverzuma i kvantnu mehaniku ironično komentirao determinističku prirodu videoigara i singularnost izbora povezujući sve tri igre u kohezivnu cjelinu, šireći se izvan medija igre kako bi se jedinstveno obratio igračima te njihovoj ulozi u igrama koju igraju kroz čin uranjanja i interaktivnosti.

Ključne riječi -   Meta narativ– agencija igrača- mediji za pripovijedanje- Izbori – Hermeneutički horizont – Jack -Subject Delta – Booker DeWitt -Elizabeth Comstock – Zaplet – Multiverzum