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Post-apocalyptic fiction and its use in video-game worlds: A Comparative Analysis of Metro, Left 4 Dead and Dead Space

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Autor práce:

Daniel Mágr

Vedoucí práce:

Dávid Levente Palatinus, Ph.D.
Katedra anglického jazyka

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Zadání bakalářské práce

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<i>Jméno a příjmení:</i>	Daniel Mágr
<i>Osobní číslo:</i>	P19000217
<i>Studijní program:</i>	B0114A300068 Anglický jazyk se zaměřením na vzdělávání
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Post-apokalyptická fikce je jeden z mnoha velmi oblíbených žánrů napříč všemi kulturními odvětvími, ať už se jedná o knihy, filmy nebo o video-herní průmysl.

Ve své práci se zaměřím na post-apokalyptickou fikci video-herního průmyslu, jak jí zpracovávají vybrané tituly a na srovnání jednotlivých elementů všech titulů, které jsou charakteristické pro post-apokalyptickou fikci za použití vybrané literatury.

V úvodu práce se zaměřím na vysvětlení porovnávaných pojmů. V první části práce se zaměřím na popis vybraných titulů, vzhledem k vybraným pojmům a jak post-apokalypsu zpracovávají.

V druhé části své práce se zaměřím na srovnávání titulů.

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Vedoucí práce:

Dávid Levente Palatinus, Ph.D.

Katedra anglického jazyka

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L.S.

prof. RNDr. Jan Pícek, CSc.
děkan

Mgr. Zénó Vernyik, Ph.D.
vedoucí katedry

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Anotace

Cílem této práce je analyzovat post-apokalyptické světy ve video herním průmyslu a porovnat univerza her Metro 2033, Left 4 Dead a Dead Space, které tyto světy vykreslují. Hry tyto světy odlišují ve variaci element; od narativu, herního zážitku, subžánru nebo důvodu ke katastrofě. Každá hra pak popisuje různý vývoj společnosti, který se tato práce bude snažit porovnat a popsat.

Klíčová slova

post-apokalypsa, videohry, katastrofa, společnost, postava, vypravěč, horror, narativ

Annotation

The aim of this thesis is to analyze specific post-apocalyptic worlds recently becoming characteristic and emblematic in the video-game industry. To that end, this thesis will compare Metro 2033, Left 4 Dead and Dead Space universes that show these worlds. Worlds in these games differ in various elements such as narrative, gameplay, sub-genre or the causes of the catastrophe.

Keywords

post-apocalypse, video-games, catastrophe, society, character, narrator, horror, narrative

Contents

1. Introduction.....	10
2. Terms and Concepts.....	13
2.1. Post-Apocalyptic fiction.....	13
2.2. Narrative in video-games.....	14
2.3. The Gameplay.....	18
3. Milestones of post-apocalyptic video-games.....	21
4. Metro 2033.....	26
4.1. Game Overview.....	26
4.2. What leads to the Apocalypse in Metro 2033.....	28
4.3. Society’s development after the Bombing.....	29
4.4. Narrative structures.....	32
4.5. The gameplay.....	34
5. Left 4 Dead.....	36
5.1. Game Overview.....	36
5.2. What leads to the Apocalypse in Left 4 Dead.....	37
5.3. Society’s development after the Green Flu Outbreak.....	38
5.4. Narrative structures.....	40
5.5. The gameplay.....	41
6. Dead Space.....	43
6.1. Game Overview.....	43
6.2. What leads to the Apocalypse in Dead Space.....	44

6.3. Society's Development after Both Causes of the Apocalypse.....	45
6.4. Narrative Structures.....	47
6.5. The Gameplay.....	47
7. The brief comparative analysis of Metro 2033, Left 4 Dead and Dead Space.....	49
8. Conclusion.....	54
List of references.....	56

1. Introduction

Video-games have been with us for a long time, and it all started back in the 20th century with simple games such as *Nim (1940)*, where the only goal was a try to avoid picking the last match. Video-games from that time went through a rough and hard development, either in part of the narrative or the gameplay complexity. They mainly became a leisure activity for adolescents and young adults. (Finke et al 2018, 673). The development went from games such as *Pac-man (1980)* through classics like *Wasteland (1988)* or *Bomberman (1983)* to games we know now, such as *The Witcher 3: Wild Hunt (2015)*.

Video-games have played a huge part in my life. I spent most of my free time playing video-games when I was old enough to understand what was happening on the computer screen. Whether I crawl through subway tunnels in *Metro 2033 (2010)* or fight with the monsters with a silver sword in *The Witcher (2007)*, those digital worlds helped me let go of the real world. The most significant benefit that it did bring me is that I get different sights on some problems, especially when I have been thinking about similarities between the situation depicted in *Metro 2033* and the real-world crisis in our present times.

Through the years, I have been playing many genres, such as fantasy games, modern warfare games or casual cartoon-like games, but the genre I enjoy the most is post-apocalyptic fiction. It is because it describes what could happen if the society ended up in a nuclear war, turned into zombies during a disease outbreak or if

spaceships bring on Earth an alien parasite that could control the mind. Not to mention the atmosphere these games can bring and how they can devour you.

The games I have chosen, namely *Metro 2033*, *Left 4 Dead (2008)*, and *Dead Space (2008)*, are the most known from the post-apocalyptic genre in the world (Pursey 2022). One could say they define the genre itself; even so, every title focuses on a slightly different main idea. As an example, *Metro 2033* is inspired by the eponymous book by Dmitry Glukhovsky, and it describes the world after the atom fallout when the society in Moscow had to flee into tunnels of the city subway. Furthermore, all three games depict the post-apocalyptic world differently, and the developers had a very distinct idea of how the world could look after the catastrophe. In this thesis, I focus on the main differences and compare them.

However, the selection of games was not affected only by the status of being one of the most known representatives of today's post-apocalyptic fiction. All three games bring to the genre their execution of post-apocalyptic worlds with their own execution of the idea of the post-apocalyptic genre with many different elements and with new conceptions that differ from the prevailing image of the genre. This gives me a fine opportunity to compare the games' narratives, gameplay or the different development of society in each video-game world.

Through the years, the depiction of post-apocalyptic scenarios in the video-game industry has changed. Many video-games that create post-apocalyptic worlds are set after the nuclear fallout, but that became overused, and there was a need to bring something new to refresh the genre. For this reason, the developers started to use

different narratives, causes, gameplay structures or even the society in worlds developed differently to create slightly different viewpoints or completely alien views of the destroyed world.

In the first part of the thesis, I am going to give an explanation of the terms I will use for the comparison of the chosen games. I will explain what the post-apocalyptic genre is because it is a fundamental element for understanding the usage of post-apocalypse in the video-games. Then I will explain the narrative and its structures so that the developers use different narratives and structures to keep the player immersed in the game. Then I give an explanation of the gameplay and show what is taken into consideration through the development.

In the second part of the thesis, I will focus on the titles, mainly on the first games from each franchise, because they show the clearest different approaches for the genre depiction. The part will focus on the terms explained in the first part and the causes of the apocalypse, and society's development.

In the third part, I will focus on comparing the points I analyzed in the second part and show the differences and similarities between each post-apocalyptic world.

2. Terms and Concepts

According to Booker and Thomas (2009, 55), post-apocalyptic fiction is often confused with dystopian fiction, which deals with society development in a wrong way by the sense of the real world. It has common elements, but post-apocalyptic fiction is mainly set directly after the disaster or in times when society was destroyed. In terms of narratives in video-games, it was, in history, unclear whether the games could have a narrative or not because a large amount of the first video-games were defined as a leisure activity and did not have any narrative at all (Bucler 2012). Gameplay is how the game is created to immerse a player into the game world, and it is often an aspect of deciding if the player will play the game or not.

2.1. Post-Apocalyptic fiction

The word “apocalyptic” comes from two old Greek words that were put together “apo”, which means of, away from and “kalyptein”, which means to cover, conceal. The compound word “apokalyptein” means uncover, disclose or reveal. Then Church Latin took over the word and changed it into “apocalypsis”, with the meaning revelation. The word apocalypse was formed in the late 14th Century, and in its origin, it means revelation or disclosure. The meaning of a cataclysmic event is relatively modern and new. The definition of “belief in an imminent end of the present world” is from 1858. (etymonline, n.d.)

The most visible examples of post-apocalyptic fiction are mainly from the human-caused disaster that somehow wiped humanity out. For instance, wrong usage of science

or nuclear war between the world powers. However, Booker and Thomas have written that ancient literature was at the mercy of natural or supernatural phenomena and their aftermath because there was no high technology which could cause the apocalyptic disaster. (Booker and Thomas 2009, 53)

The post-apocalyptic fiction deals with the world and how the people survived the disaster and how they are surviving in the changed world after the society falls. It differs in many ways, and it is up to the author what he uses to build a narrative. According to B. K. Bass (n.d.), these tales take place some time after the event that caused it to happen, although some may start with the catastrophe in question before moving on to the aftermath. He also says that how the world ends may play a pivotal role in the overall narrative, and the potential for new ideas is hypothetically limitless.

However, if one looks at contemporary post-apocalyptic video-games, it is rather usual to see that post-apocalyptic games tend to fall into several camps. According to Hartup (2015), today's video-game industry uses the scenario of a wasteland from the nuclear fallout, which becomes a standard setting. Another widely used setting is a disease-based apocalypse that usually comes with some side-order monsters, such as zombies or mutants.

2.2. Narrative in video-games

If one looks at the narrative before the gameplay, it was not always in the video-game industry. Players would hardly try to find any glimpse of a story in *Pac-Man* (1980) or a game of *Nim* (1940). However, from the times of the first games with

stories such as the first *Donkey Kong* (1981), the narrative of video games fairly evolved, and in a fair amount of games, stories became part and parcel of the games.

First of all, not every good and fun game has to have a narrative. For example, let us look at the sandbox survival genre, especially the game called *Minecraft* (2011). It does not have a narrative because the main objective of the game is that the player uses mainly his creativity in an open and almost unlimited world. It is free for the player to create some meaning of the game; whether to build or explore the world, there is nothing to guide the player in his playing.

The narrative in video-games could be defined in two parts. The first is the structure that refers to the story's progression, the different sections and subsections; the second is how they are connected and interconnected to form a plot and how the game shows a story. (Stone 2019)

According to Lindley (2002), the player has to learn a gameplay gestalt to proceed through the game. Also, he adds that experiencing a game as a narrative is a need to create a narrative gestalt which unifies the game experiences into coherent narrative structures. In other words, there is tension between gameplay and narrative, which can lead if gameplay consumes most of the cognitive resources of the player; the player will have little scope to perceive complex narrative patterns to feel immersed.

The video-games evolved through the years in complexity, and as a reaction to it, so does the narrative. The game that is considered the first game with a story is *Donkey Kong* (1981). The plot of the game is simple. At the beginning of the game, Donkey

Kong runs with the Lady, and Mario has to catch him at every level, but Donkey always climbs to the next level.

Chris Stone (2019) described four main types of narrative that were and still are used in video games. The narrative described above is typical for the old school games and their used narrative. The first narrative widely used in games such as *Crash Bandicoot* (1996) is a linear narrative. It is a well-known narrative because it is used in books and movies. After all, the receiver or player cannot change anything in the story and passively goes from the beginning to the end of the story.

The second type, Stone (2019), describes as a pearls model. This model is still, in its meaning linear, but the linearity of the main story-line could be interrupted sometimes, and it is typical for older role-playing games. This is the first narrative that cannot be found in other media.

The third type is a fully branching narrative when the player's choices during the playing have a major role in how the story and character in the play world will develop and how the game ends. What is interesting Stone (2019) says that this narrative structure has been attempted in the form of interactive books. The fourth narrative is known as an amusement park narrative, which is almost the same as the branching narrative. Still, players access the story rather by exploration than by completing missions. According to Lebowitz and Klug (2011, 205), this could evolve into an open-ended story, but in their words, there is a difference between those two narratives. The branching story is still in the hand of the writer, and he controls it, but in the open-ended

story, it is more based on the player's actions and is actually driven by him instead of the writer.

Also, video-games use several narrative forms that help them create a story that is more interesting for the player. The instance that is worth mentioning is a passive form of narrative, as they are present in most games and take a large part of the narrative in the game. The most used passive form is cut scenes. Cut scenes are film sequences in video-games that happen without the player's interaction. Another one is the loading screen, which could provide a player with a narrative background or a gameplay tip (Domsch 2013, 32 – 34)

The second type of forms that Domsch (2013, 34 – 42) describes are actively nodal forms, and the instances he is taking under consideration are quick time events, dialogue trees, and event triggers. Quick-time events are a variation to cut scenes, where a player has limited time to take action before a prompt on the screen disappears. Quick-time events tend to be extremely short, and that should force the player to react fast. If the player fails to hit the button shown on the screen, it often ends up in a fail screen. Dialogue trees are conversations with non-player characters. The player is on the lead where the conversation will go on because the dialogue offers the player choices of what he can say to the non-player character. Event triggers are invisible to the player, and their function is to trigger some narrative event by the player's action. Games often want to create an illusion that the player has some agency over what will happen.

The third form of the narrative Domsch described (2013, 43 – 47) is the dynamic form. This type includes non-player characters and timed events. The function of the

non-player characters is to help immerse the player into the game world. A non-player character could be a generic and stereotypical character with only the function of a courier. However, also there could be a non-interactive character that functions as an individual having a back story, and it could be a part of a story of the player's character. The time events are, for instance, quests set to the specific time in the game world that need an intradiegetic clock feature in the game, which means the game has a daytime clock feature included.

Also, when one looks at the game's environment, the player can find out that the games are different. According to Champion (2020), creating a game with cultural appropriateness that shows realism is crucial because it helps to immerse the player into the game world.

As for the post-apocalyptic games, there is no limitation of preferred narrative or used forms. For instance, if one looks at *Fallout* (1997) or *Dead Space*. *Fallout* uses the fully branching story because the player can alternate the end of the story by his choices. Nevertheless, in the case of *Dead Space*, there is a linear narrative, and the player cannot change anything or do any side activities. This changes how the player will experience the gameplay. Also, the gameplay often changes the feeling and the reason why he is going to play the game.

2.3. The Gameplay

Players play video-games for various reasons, whether they want to relax after a hard day at their job or want to play with friends when they do not have an opportunity

to see each other. Therefore games should offer various emotions in the industry called game experience. There are numerous emotions that games can invoke, from happiness to frustration, whose role is to immerse the player into the game that they are playing at that time. For instance, if some developers want to create a game with a video-game experience that is not known to them, they have to do some research on the experience of other people and overcome those limitations to create their own gaming experiences. (Muriel and Crawford 2011, 88)

Sweetser and Wyeth (2005, 4) approached the video-game experience from the game flow point of view. They suggest that the game should keep the player's concentration through a high work-load, and the task the player has to do must be sufficiently challenging to be enjoyable. They present the idea that if the player is skilled and the task has clear goals and feedback, it will bring a feel of total immersion to the game world.

Brown and Cairns (2004, 1298 – 1299) studied the video-game experience from the immersion point of view. They came up with three levels of immersion divided by barriers that need to be removed, passing on to the next level. The first level is engagement. This level requires players' time investment, effort and attention, and they suggest that when these barriers are lowered, the player feels engaged. The second level is engrossment, and the barrier for this level is game construction that makes players' emotions directly affected by the game. The last level is total immersion, and the barriers are empathy and atmosphere that makes the player feel cut off the reality and totally immersed in the game.

According to Wolf and Perron (2014, 201), it is also necessary to consider what type of player/gamer will play the game. Those types are generally divided into two groups: casual players that do not like high-difficulty games and play the games primarily for positive and pleasant fiction; unlike them, hardcore players tend to invest a significant amount into playing a game.

3. Milestones of post-apocalyptic video-games

With that being said, when one looks at post-apocalyptic fiction in the video-game industry, there are some video-games, or better-said milestones, which define the genre usage in the industry. The first instance is a video-game released in 1980 named *NukeWar*, which consists of text and sprites only (Wilson 1996, 80). *NukeWar* was set in the years of the Cold War, but there is a significant difference between the game consequence and the actual outcome of the conflict. The real Cold War was an unarmed conflict between superpowers, the U.S. and Britain, against the Soviet Union and its allies. The conflict “was waged mainly on political, economic, and propaganda fronts” (Britannica, 2022), and it did not escalate into using nuclear weaponry because of the collapse of the Soviet Union in 1991. However, the game’s outcome is different because of the usage of nuclear weaponry, and the game’s goal was to destroy the other superpower with everything left to use. (MobyGames, n.d.)

However, the *NukeWar* was not a very defining title of the genre because of its simplicity; it came eight years after its release. On January 2, 1988, the first *Wasteland* was released, which was a rather successful game. The game is a role-playing game based on the second *Mad Max* movie, *Mad Max 2: The Road Warrior* (1981), set in the southwest deserts of the post-holocaust United States. (Kritzen 1988, 28 – 29) The game is defining because it is one of the games that offer a persistent world, and it was the first post-apocalyptic game that featured this trait in it. (Reed 2020) According to Bartle (2003), the term persistent world means a virtual world which “continues to exist and develop internally even when there are no people interacting with it.” It means that

when a player returns to a location where he was before, he finds it in the state it was left. Also, as it was a role-playing game it offers, today, it is usual variable traits for a pre-generated character. Each trait should enable the player to do certain activities based on the points spent on each trait. (Kritzen 1988, 28 – 29)

Then it comes to a spiritual successor of the *Wasteland* game. The first game from the *Fallout* franchise. The first *Fallout* was made by the same development studio that developed *Wasteland*, Interplay Entertainment and released in 1997 as it is one of the most known post-apocalyptic games. It is set in the world after the “Great War”, a nuclear conflict between the United States and China. More precisely, the United States Armed Forces and People’s Liberation Army originated in China. (Fallout wiki 2021) It basically took the usual theme of the cause of the post-apocalypse, the nuclear war. The game itself does not differ much from its predecessor in the gameplay. Same as the *Wasteland* game, it uses its own system for character development. Developers took the idea of character traits and abilities from the *Wasteland* game and put it into *Fallout*, but they slightly differed and innovated it. The system created for character creation in *Fallout* was named SPECIAL, an acronym for several men’s abilities, such as Strength, Perception, Endurance, Charisma, Intelligence, Agility, and Luck. This, and books found by the exploration of the world, also improve skills, divided into three groups: combat skills (skills for weapon usage), active skills (skills for professions) and passive skills.

Last but not least, there are traits and perks that allow the players an opportunity to give their character a background. (Fallout wiki 2021) This is an interesting milestone in

post-apocalyptic fiction games. Even in the video-game industry, this lets the player choose the right attributes for his or her character, and it helps to feel way more immersed in the game. A variation of this system is used in various games such as *The Elder Scrolls* series, for instance.

After the first *Fallout*, developers decided to continue with the story that was introduced there. Original developers created and released the second game of the franchise a year after the first one. It continued and expanded the story while maintaining the same gameplay style as the first game. The game series was followed by two spin-offs in the early 2000s. The new publisher continued and released *Fallout 3* in 2008 when the original isometric view was changed into first and third-person perspectives, which were rather significant changes in the gameplay. Another improvement was the VATS targeting system, which gives the series a first-person shooter element. (Falero 2015)

Even after *Fallout* was released, some other video-games, such as *Armour-Geddon* (1991) or *Outlander* (1992), mostly used the same theme. A world after the nuclear fallout, and they were not such a success as the *Fallout* was. However, one year before the first *Fallout*, two games were released that brought another theme widely used in post-apocalyptic fiction. One was *The House of the Dead*, which was created by Sega. The game was initially released on arcade machines in 1996. The game is a light gun rail shooter, so the gameplay is rather simple because the rail shooters limit players' ability to move. The movement is limited by the "rails" that let the player move in a

certain direction, and the player only fires at approaching zombies with the light gun or mouse on the computer. (West 1997, 155)

In the same year was released yet another game with the zombie theme having numerous successors in the franchise till nowadays. The game worldwide is known as *Resident Evil* (1996), but its original name was *Biohazard*, which is now used only in Japan. According to Elston (2009), the reason why the game had to change its name to the West is that the U.S. just released a game called *Biohazard* at the same time when the head of marketing of Capcom let the U.S. know about the name. The first game from the franchise is well-known for its usage of tank controls. Matt Perez (2015) describes this gameplay feature as the game focus on movement that is relative to the character's orientation rather than the camera's as it is in nowadays games. This should make the game and the encounter with the zombies even more stressful, and sometimes it could be rather frustrating because the movement and the camera behavior were sometimes really clumsy. This kind of gameplay was used only in the first, second, and third games of the original franchise, but the third game had already added new gameplay features. Those additions were 180-degree turn and dodge command. (Gamestop 2016, 6:40) One of the most significant gameplay changes comes with the fourth game. They have changed the camera from the tank controls to an over-shoulder camera, so it lets the player use the new aiming system. However, according to GameStop (2016, 10:20), the most significant change was in the enemy structure. Enemies were not slow zombies anymore. They were replaced by infected villagers who do not hesitate to attack in speed with weapons like axes, crowbars, or even chainsaws.

These are the milestones of the post-apocalyptic fiction adaptation in the video-game industry. The games utilizing this genre have used some variation of the same setting. Most of the well-known and successful games use a setting of a post-nuclear wasteland or zombie-like monsters created by some virus, parasite or mutation, and they are on the journey to wipe out humanity.

The games chosen for the comparison are also milestones in the post-apocalyptic video-game industry. All three games are survival horror games set in post-apocalyptic worlds but differ from other games by the chosen gameplay, story development or society's development. If one looks at *Left 4 Dead*, it is considered as a game that brought the cooperation of four people into gameplay with a hidden environmental-based story. On the other hand, *Dead Space* is heavily inspired by *Resident Evil*, taking what worked fine there and trying to improve it with its own ideas and gameplay mechanics. Furthermore, *Metro 2033* was popular before its development because of the eponymous novel by Glukhovsky. It shows how the post-apocalyptic dystopian society can develop and what the world under the ground could look like.

4. Metro 2033

4.1. Game Overview

The whole video-game franchise of the Metro universe is an adaptation of Dmitry Glukhovsky's series of novels Metro 2033, Metro 2034 and Metro 2035 (Murphy 2011, 90). However, the adaptation does not follow the author's original naming because THQ, the developer studio behind the game franchise, decided to use different names for the second and third games. More precisely, Metro 2034 has been named *Metro: Last Light* (2013) and *Metro: Exodus* (2019) is set after the events of *Metro: Last Light* and the book Metro 2035 (Metro wiki 2022).

The Metro 2033 begins with a brief insight into the very end of the story when the player is thrown into the eyes of Artyom, the main protagonist of the game, who almost fell from the rusty ladder he was climbing on. After that, Artyom and his companion, whose name is hidden from the player and his behavior towards the player is rather cold, so he has an effect of a mysterious superior soldier trying to prepare the player on the Muscovite wasteland full of various mutants and frosty surroundings. This ends when Artyom and his companion will get to the meeting point, where other soldiers come after a few moments. After a few moments, the player and the rest of the soldiers have to defend themselves against a horde of mutants. This whole presentation of the end of the game ends when the player, Artyom, is taken up to the sky by one of a flying kind mutant, throws him down, and a buggy, which functioned as a machine gun nest, falls near to him. (MahaloVideoGames, 0 – 5:53)

After this short introduction of horrors found outside the tunnels and walls of the Moscow subway, Artyom wakes up in his cubicle at the home station Exhibition and follows his uncle to a station entry. There they waited for the ranger Hunter, who came to warn the station of the mutants. It was because he found that they had been running from something. After a short conversation, they get to the idea that they are running from mutants called Dark Ones, and they are supposed to be the next evolution branch of the human race, a homo novus. Then the station was attacked by mutants, and after the fight, Hunter said to Artyom that if he will not come back after three days, he had to go to the station named Polis and warn the whole Metro of the danger that brings with the Dark Ones. So Artyom set off for his journey through the Metro, where he has gone through the dangers of the subway tunnels, ghosts and mutants. When he came to the end of his journey, the Polis station, Artyom, got a new quest to go to the hidden station named D6, a nuclear warhead silo that should work as a Russian military base. It was forgotten for a long-ago instead. The reason is to destroy a nest of Dark Ones in the middle of Moscow to prevent their attacks on humanity in subway tunnels. Here is one problem, Artyom finds out on his way to the broadcast tower that Dark Ones only tried to communicate with humans, and because they cannot talk, they tried to contact people by telepathy, so if the player has gone through some side locations, the game offers two ends. Throw the rest of the warheads on the nest or throw off the ledge a targeting system. However, the second one is not the cannon game ending because, in the book, it is the destruction of the Dark Ones' nest, the only ending described there. (Wilder 2021)

4.2. What leads to the Apocalypse in Metro 2033

The cause of the apocalypse in *Metro 2033* is problematic because the game itself does not give an obvious clue about what happened or what preceded the nuclear bombing around the world. The only thing that could be randomly heard through the game is soldiers that guard a station entry talking about World War III. Clearly, one can say that the main cause was the nuclear war between world powers because the war began and ended in 2013 when Russia had a heated relationship with NATO and its allied countries. Even the name for the conflict has yet to be unanimously known. Some subway residents are talking about World War III; some named it the Great War of 2013, or in some remote stations is the name Conflagration.

People of the Metro do not know much about the conflict, as suggested. They do not even know how to name it. A significant portion of the documentation describing how the conflict started and what was the right problem for starting the nuclear war was destroyed through the twenty years of life in subway tunnels. Some documents say that the conflict started with a limited exchange between two Middle Eastern countries, but even this is not rather certain. Namely, the countries are Iran or Iraq and Lebanon or Israel. However, because of the limitation of the documentation, it has never known for sure which two countries started the conflict. What is well known is that this was the ignition point for all other modern countries with nuclear weapons, like France, Britain, China, the USA, North Korea and Russia started to initiate their nuclear weaponry. (Metro wiki 2021)

Then it all started. It is stated that the number of warheads launched the day humanity was wiped out and pushed down to their shelters and subway tunnels was around twenty thousand warheads around the world. The people of Moscow did not know that the warheads were launched, so to the very end, they did not know what would happen. At the time they had been warned by officials, it was rather late for most of them because, at this time, NATO warheads could be seen in Russian air space. Citizens rushed to the Muscovite subway, guarded by the military and as it was built for these occasions. Although the subway could take a large mass of citizens, there were too many of them. The military had to shut down the doors and even started to fire in the air as a warning. (WiseFish 2021, 3:40)

The aftermaths of the bombing were devastating. Survivors of Russia believed they were still at war with NATO forces, and the world was turned into a toxic, cold wasteland full of radiation of high levels, making the surface unlivable. Through the game, there was stated that the world was inhabited by seven billion people; however, in the Polis station is written in documents that only six or seven million people survived the bombing in Russia, which is rather scary in consideration of the number of one hundred and forty million people died during the war. (Glukhovsky 2010)

4.3. Society's development after the Bombing

The society in the Muscovite subway tunnels was shattered by the events that happened during the war and the final bombing on the surface. After the involuntary transmigration of around seven million people from their homes in the city of Moscow, they had to form groups, factions or even new nations in order to survive because the

tunnels were a completely new place to live for most of them. Residents of tunnels had to settle the former subway stations and create some sort of towns in them. However, they quickly discovered that stations would not survive completely separated from other stations. They had to form alliances with each other in order to survive, and it is because the toxic wasteland of the destroyed city of Moscow created a new, tremendous life. Animals that survived became deadly mutants that often sought shelter in subway tunnels.

As a result of this new threat from the outside world, the people of the Metro formed alliances commonly known as factions. They are united by a common ideology, interest, or by the elementary need for survival, and it grows into new nations in some instances. The main and the most prominent factions formed are the Fourth Reich, The Commonwealth of the Stations of the Ring Line, Polis, Rangers of the Order, Red Line, and Invisible Watchers.

The Fourth Reich is a fascist faction that took the ideas and policies of A. Hitler and his Third Reich. They are led by the Führer. They formed themselves around the core of Neo-Nazis and prewar xenophobes, and they want to achieve the goal of a Metro free of mutants and non-Russians. They are using the same genetic policy as what was used back in the history of the Third Reich. The Reich possesses an army of around three thousand men because they believe in quality rather than quantity, and their men are better equipped and trained on a man-to-man basis. (Metro Wiki 2021)

The Commonwealth of the Stations of the Ring Line, or in the short and commonly known term “Hanza”. They are led by President Pyotr Rusakov, and the name of this

alliance is inspired by the Hanseatic League, which was a commercial and defensive confederation of merchant guilds and market towns in Europe. It is the most influential faction in the Metro. Their policy, even when they possess the force of five thousand soldiers, is to be an apathetic bystander to the most strives in tunnels. (Metro Wiki 2021)

Polis is mostly considered the beating heart of underground life. It was formed by former members of the government, military apparatus, and intelligence. However, even though the Polis grants almost total safety, it lacks a head of state but possesses a council formed by prewar sects and of around five hundred men. Despite the low numbers of soldiers, the city is protected by the awe, and even the bandits respect that. The reasons are different, but the main two reasons are that there is a repository of knowledge that would be long lost without the city. The second reason is that it is located in the very heart of the subway, which is a strategic position, and if some of the sides wanted to attack it, it would cause significant losses on the attacker's side. (Metro Wiki 2021)

Rangers of the Order are an elite paramilitary organization commonly considered the protectors of the Metro. Their main goal is to eliminate mutants or bandits. Although they are supposedly neutral, they have close ties to Polis. However, they do not have home stations, only their base on the surface and the D6 bunker. Many of their members were in special forces or the military. (Metro Wiki 2021)

Red Line is an alliance of Soviet supporters led by General Secretary Moskvin. Their policy is the same as Stalin's. They possess the largest army in the Metro, but

soldiers are poorly trained and equipped. They force numbers of around seven thousand soldiers. (Metro Wiki 2021)

Invisible Watchers is a faction that controls all other influential factions and the skirmishes between them. It is formed by the remnants of the government, and they control and keep all factions and their conflicts in line. (Metro Wiki 2021)

4.4. Narrative structures

The game uses several narrative structures that help the player get immersed in the story and the atmosphere of post-apocalyptic life in subway tunnels.

The game uses loading screens that function as Artyom's journal entries, where he tells a story about his feelings. For instance, after the attack on the home station Exhibition, he says that the Hunter did not come back and about his struggles and worries from the journey through the Metro. Also, what is interesting is that the character does not speak in conversations with other people throughout the game. The only time one can hear him speak is while loading screens.

Even when the game is presented as a first-person shooter with the aspects of post-apocalypse, the game creates an illusion of a living game world. Non-player characters speak and react to Artyom, which creates the feeling of connection to the life that the character lives in the game. They react with either welcoming greetings or annoyed and fed-up comments. Also, the game will shortly bring characters that somehow influence the story, for instance, at the start of the journey. Artyom meets Bourbon, a trader, criminal and adventurer who teaches the player basics of survival on the surface and in

the tunnels, and his death somehow influences the main protagonist. Another instance is Khan, thanks to whom the player will get the idea that in tunnels are ghosts of prewar citizens. In other words, there are both influential characters that are involved in the story of the game and the coulis characters helping the player to feel more immersed in the game. Those influential characters are included in cut scenes where the protagonist talks with them. The dialogues here function to make whether an illusion of a player's immersion into the world or as a dialogue between the player's character and the most important characters in the game because of story progression.

Other structures that the game uses are quick events and event triggers. Both work altogether because in the game, the quick event often triggers an event that ends up in some gameplay change or another narrative form is triggered. For example, when the player with Bourbon is opening a vent grid after Bourbon get in a situation where he is captured by bandits and the player has to save him.

At last, the game uses a rather linear narrative with the aspects of the pearl model narrative. When the player is thrown into the tunnels, the game offers him only one way to go, straight forward to the end of the level or mission. However, some levels or missions offer the player to go slightly off the track to side chambers or corridors, where the player finds additional ammunition, weapon, or passive narrative form that are text logs, whether from the prewar era or after the bombing describing the stories of the people that died in the deep of the Metro. Also, the player could slightly influence the ending of the game by his explorations of the sides as the game has two endings, one

that is considered a good one but non-cannon and the second, a cannon end that does not require the exploration.

4.5. The gameplay

When one looks at the gameplay and considers the elements mentioned above, the game clearly uses the high-load and clear tasks to keep the player immersed in the game. For instance, Artyom has his own journal or map where the notes are written that are compulsory to complete as those are tasks to do before the player can proceed to the next activity or mission. The element that used to be even more immersed by this is that the notes are written in the first person, so it looks like the notes wrote the player.

Also, several elements picture the atmosphere, which also helps to immerse the player into gameplay. To be more concrete, it is possible to hear the sounds of falling pipes from afar in the dark of the tunnels. Another instance is seeing shadows of the mutants in the small stripe of the light that gives the player a feeling of being watched the whole time of his journey.

The last element of the gameplay, which has *Metro 2033* in common with *Left 4 Dead*, is that the game is fully in first-person perspective. This offers the player a full immersion into the character and his story. According to Denisova (2015), the first-person perspective leads to higher cognitive involvement by limiting the player's ability to evaluate the situation in the game. These limitations create a more significant feeling of a challenge, which requires being more cognitively engaged in overcoming the restriction. Rouse III (1999) said the first-person perspective immerses players more in

a game due to a feeling of decision ownership because the player decides through a game's main character's eyes. The only difference between the two is that, as mentioned above, Artyom does not speak with anybody throughout the whole game.

5. Left 4 Dead

5.1. Game Overview

The game, as a franchise, was created by Valve South which was an American game studio that was acquired by Valve from 2008 to 2010. In 2011 they refunded themselves as an independent studio named Turtle Rock Studio. (Booth 2002) There are two titles in the original franchise, *Left 4 Dead* and *Left 4 Dead 2* (2009), but there was an attempt to revive the franchise by creating a very similar game with at least a fraction of the original development team. The revival, at least as it was called, is *Back 4 Blood* (2021) which indirectly refers to the original two games.

The game begins with an introduction cut scene with the start phrase “2 WEEKS AFTER FIRST INFECTION”. Then the cut scene continues with the review of the main protagonists – Vietnam war veteran William Overbeck known as Bill, college student Zoey, account manager Louis and biker Francis. As the cut scene showed, it is only two weeks after the first infection, so that could be just a while from the actual outbreak, and it is not known how many survivors are there trying to survive.

When this is said, they hear a woman’s strange cry. They thought that it was somebody who survived. However, after a while, they found that it was just another type of the infected who was alternated by having long, sharp claws and was actually inoffensive before they disturbed her with the attack of other infected. The protagonists decide to run because another, rather larger infected, is rushing on them, destroying

everything in his way, and they end up on the roof of a flat house, where the actual game begins. (EA Polska 2008, 0:00 – 4:42)

5.2. What leads to the Apocalypse in Left 4 Dead

As was stated above, patient zero was probably infected two weeks before the player was thrown into the game, which shows that the virus spread extremely fast because it is already visible, that at least the town where the protagonists are is already lost to it. The virus was named The Green Flu, commonly referred to as The Infection. The name, Green Flu, was only a cover name for an unknown virus because CEDA (the shifted name referring to FEMA) wanted to prevent the civic panic. Civilians did not believe in this because through the streets of the town is graffiti on the walls saying “Not a Flu”. However, the main difficulty is that it is not clearly known what kind of virus it is, and there are several theories for it. Two theories considered as only government conspiracies are that it was caused by aliens or an act of God. The scientific approach is that the Green Flu infection is a virus based on the rabies pathogen that mutated to turn people into zombie-like, almost mindless monsters. (Left 4 Dead Wiki 2022)

Through the exploration of the town or a rural farmstead, players often see posters telling citizens to wash their hands, wear face masks or stay at home and have the windows shut. It is because it is not known how the virus spreads, or it is not clear that something that happened to the survivor caused the turning into the infected. Some

survivors say that their friends turned soon after they got bitten, so it looks like it is a catalyst rather than the cause of the infection. Also, there is a possibility that the virus is spread through the air or by the Boomer's bile, Spitter's spit or the cloud of smoke from the dead bodies of Smokers. (Left 4 Dead Wiki 2022)

The interesting thing that happens to some infected people is that they turn, and after some time, their bodies get modified by the virus to be able to use the full potential of their bodies and their lifestyles. They are called special infected, and it is not certainly known what causes some to turn into them and others not. For instance, the creature named The Tank is an individual turned into a being similar to a gorilla rather than a normal human being. The physiology of this creature shows that the upper body went through a massive mutation because it is way more muscular than the lower body, which grants it an insane power to throw even a car. (Roanoke Gaming, 4:00 – 15:00) Another instance that is even more interesting is the Charger. His physiology is similar to the Tanks, but it possesses a larger right arm, and the left one is dead, meaning it does not work anymore, but this does not make it interesting. Interestingly, it controverts the original thought that the infected are mindless creatures without any sense of humanity left in them. It appears that this kind of infected is able to say a few words, such as "Don't shoot me" or "Just go!". It actually looks like it knowingly tries to warn the survivors. (SSBloxLines 2010, 0:00 – 0:36)

5.3. Society's development after the Green Flu Outbreak

After the complete outbreak of the Green Flu, which is an aggressive unknown virus that turns people into zombie-like individuals with the only instinct to feed

themselves, it is hard to describe what is left of society. As stated above, it took only two weeks to almost wipe out every single sign of the human race and was not enough time to respond to the situation.

Society turned into surviving individuals that often very much soon die. Because the infection was rather fast, there is little known about the cities that were not in direct touch with the epicenters of the infection. Philadelphia, Pennsylvania, is the known epicenter, where patient zero was infected, and from there, the infection spread fast across the eastern United States. This almost cut out the eastern shores and left it without communication with the rest of the States, so little is known about what happened with the whole United States or Canada. (Left 4 Dead Wiki 2022)

If one takes the surviving individuals as a society, then it is impossible to describe them because they are often isolated with a low amount of supplies. For example, a sixty-year-old Whitaker, who owns a gun store located in front of Liberty Mall or someone who called himself a Church guy who barricaded himself in a church where he turned infected because he lets a survivor, claiming he is immune, in but he was not. (Left 4 Dead Wiki 2021)

However, there are two surviving groups that are apparently immune to the infection. The first group is compounded of Bill, a Vietnam veteran who survives the first moment of infection by fighting out of the hospital, where he has waited for his knee surgery. The second member of the group is Francis, who is a member of Hell's Legion bikers. He survived the outbreak because he was saved by his friend Duke, who killed his girlfriend who got infected. The third member is Louis, who was an assistant

manager at an electronics store, and his first contact with infection was at his job, where he talked with his co-worker. The last member of this group is Zoey, who was a university student surviving the outbreak after she had to kill her parents. The second group are Coach, who was a high-school health teacher. Ellis, a junior mechanic; Nick, who was a gambler and the last survivor of this group, is Rochelle, who was an associate producer for news. (Left 4 Dead Wiki 2021)

5.4. Narrative structures

If one looks at the narrative of the game, it is complicated because the game itself is a first-person shooter that focuses mainly on the walk through the level, killing as many zombies as possible and surviving the hordes. However, if the player wants and focuses on the environment, there are many things that show the player the narrative. As was stated a few paragraphs above, in the game are many posters that show a try to fight the infection, but that is not the only narrative element that could be found in the game.

The game itself uses the linear narrative because the main goal for the player is to get from point A to point B. Sometimes the player meets NPC, a non-player character, that gives the player a quest. For example defend themselves against the horde, which is required to do before the player can proceed to the end, but there are no other side quests giving the player a possibility to exceed the linear way of narrative.

Although there is little storytelling by the NPCs, the game has a rich narrative. The most narrative elements are possible to be found in the safe rooms and on the walls throughout the game when they are saying, for example, “City’s gone to HELL. Let’s

use the sugar mill as a holdout.” and if the player reads through them, it could be found the whole story from the beginning of the Infection to the complete outbreak, in other words, the narrative is mostly told by the active-nodal forms (NPCs or event triggers) and passive forms by the graffiti or notes from other survivors.

Also, the playable survivors tend to talk with each other certainly often. The conversations between the characters are turned into jokes, especially between Bill and Francis, although at certain times, they talk about their lives after the infection or even debate the information they have about the infected.

5.5. The gameplay

If one looks at the gameplay of the game, it is rather easy to find the main goal of every single mission/level. Start in an initial position which could be the roof of an apartment building (the very first level), and go through the hordes of common infected to the nearest safe house where the level is finished. It is truly a straightforward main mechanic. However, Valve included several elements to keep the player immersed in the atmosphere of overtaken cities and rural areas.

The first gameplay element used here is that the game punishes players if they do not stay together. For instance, the attack of special infected such as Hunter or Smoker often tries to find a separated survivor to catch in the animation of tearing and eventually kill the player. However, players have to think to keep some distance between them because another special infected benefit from the groups by spitting deadly acid or vomit that lure hordes to attack them and even when the Hunter attacks, it

is good not to be extremely close to each other because the players could be knocked and stunned for a little moment. (Goodman & Greenwood-Ericksen, 2010)

The second element would be a soundtrack. The game creates an atmosphere with a scary soundtrack, and it is mostly heard only at the beginning of each mission to introduce it or when something important is going to happen, for example, when the players have to defend themselves against the attacking horde. Aside from this particular situation, there is little of a soundtrack in the game. However, each special infected has its own specific theme that should work to warn players of coming danger.

6. Dead Space

6.1. Game Overview

Dead Space franchise was created in 2008 by the Visceral Games studio (formerly known as EA Redwood Shores) and published by Electronic Arts. The game is highly inspired by other horror games such as *Silent Hill* (1999) or *Resident Evil*. (Ars Technica 2019, 2:00)

The game begins with brief information about a mission that the main protagonist is sent in. After the information, the video log continues with a woman (Nicole) who talks to Isaac, the main protagonist and player character. She tried to describe what happened on a ship she was on, but something interrupted the message. Then it continues on the ship with five members. Isaac, Kendra, Hammond and two soldiers. After a brief conversation, the ship reached where the USG Ishimura lost contact with Earth Government. The ship tried to communicate with Ishimura, but nobody was responding, and they decided to land. However, something went wrong, and they crashed inside instead. After the team gathered themselves after hard land, they went on the board in the lounge. Strange was that there was literally nobody, so they decided to open the door manually through the console, and in the meantime, something attacked them, killing both soldiers, and Isaac had to run to the elevator, where the creature attacked him but got crashed by elevator doors. After a short while, Isaac eventually meets the other two teammates that survived. It is Kendra and Hammond, and they all decide to find out what happened on the board; they have repaired the travel system and proceeded deeper into the ship.

6.2. What leads to the Apocalypse in Dead Space

This is rather complicated to describe because the game does not give much of a clue what made mankind mine other planets. The game is set in 2508, and humanity went through an extinction-level event because of excessive mining and usage of resources which led to the decision that the remained humanity has to mine on other planets as the mean of survival. The CEC created USG Ishimura, the first ship designed for planet-cracking, which is a new way to mine other planets. (Dead Space Wiki 2022)

The second cause of the apocalypse is the Markers. Markers are double-helix objects of alien origin that flow through space without a particular reason, and eventually, they crash into planets emitting electromagnetic fields without any power supply. Their purpose and the actual way how they caused the apocalypse is that they reanimate dead bodies into creatures named Necromorphs through the alien contagion. This results in the activation of the Markers, and after the needed amount of life is consumed, it pulls the dead tissue with the planet parts into space to create Brethren Moon through the Convergence Event. (Dead Space Wiki 2022)

The Necromorphs are created to accelerate the process because it looks like the electromagnetic fields are weaker the farther an individual is from it. The bodies are morphed into various types. The most common morphs are named Slashers, who are the most common, and they are mostly threat when they are in groups. The name was given

to them because of the second pair of hands with bone blades that emerged from them. The other common necromorphs are, for example, Leapers or Lurkers. Nevertheless, there are many types, such as Infectors that help to spread the contagion or Hunters, who were created by Dr. Challus Mercer.

6.3. Society's Development after Both Causes of the Apocalypse

The society in the *Dead Space* universe is difficult to describe because the Earth went through many events that led to the final separation into various factions that do not cooperate with each other and have very different ideologies of what is good for the human population.

However, all the events, whether it was armed conflicts, environmental crises or resource crisis that was mentioned above, it led to the creation of the Earth Government. According to the history of the Earth's government, it was created mainly to create some stability to the unstable warring countries and create separated national-ruled Sectors. For example Scandinavian Sector, United Sector or African Sector (Dead Space Wiki 2022)

After the Earth came into some stability, another difficulty had to be solved. Colonies the Earth has already established on other planets. The Sovereign colonies were formed for the colonial administration, which should work as a connection point between the Earth and all space colonies. The main difficulty that led to these factions' end was because of two ideologies. One was the ideology of research of Markers which

have been thought will end the human problem with energy shortage. The second were secessionists seeking the form of an Earth-centric government, and those hostilities escalated into the Secession War, an armed conflict between Colonies and Secessionist where the Sovereign Colonies lost to the Secessionists because the colonies uncovered an existential threat in their research connector with Markers. They have decided to destroy all research and eliminate everybody that had some connection to it. Secessionists then created an Earth-centric government. (Dead Space Wiki 2022)

The next faction that was created after the discovery of the Black Marker on Yucatan by Michael Altman is Unitology. It is some sort of religion, and in the universe, it is an antagonist faction believing an intelligent divine alien race created the human race. They also believe that humanity will be reunified after death through the Markers, whose they consider sacred artifacts. Despite the fact that Altman is considered a prophet of the religion, he did not find it, he even wanted to sabotage the research, and because of that, he was eventually killed. The central theme of this religion is death, and they believe that they will be united as one after the reanimation caused by Markers (Dead Space Wiki 2022)

The last faction that was created after the resource shortcoming was Concordance Extraction Corporation, a public trading company that came up with the idea of a new way of mining the planets. They have invented planet-cracking. The faction has little to do with the conflicts between the other factions. They are only a mining and trading company that offers ships and equipment for resource mining. (Dead Space Wiki 2022)

6.4. Narrative Structures

The main genre by which *Dead Space* is defined is survival horror, which uses elements from other games with the same setting. Namely, it uses many elements from *Resident Evil*, from whom it was inspired (Nae 2018, 160)

The first narrative structure that a player will notice is that something is wrong because already in the introduction cut scene, there was no response to the call from the ship, and even after the crash, nobody comes to help the crew. This should help to create the feeling of being uninvited. Also, this feeling is intensified by shattered glass from windows and blood-covered walls. The blood also works as a pointer to where the player should go. (Simas 2016)

The game also uses environmental narrative structures, such as written blood messages from dead crew mates of Ishimura, giving the player a small hint of how to deal with the necromorphs. This kind of structure is used a lot in the game, and it requires a player's active participation because if the player refuses to pay attention, it loses its purpose. (Borgesen 2021)

The player also gets tasks after most of the conversations with NPCs that help the player to proceed further in the story. On those tasks, the player finds some clues revealing what happened on board the ship. All in all, the game uses a linear narrative.

6.5. The Gameplay

In this game are used some gameplay elements that are unique for the genre. According to Nae (2018, 163), the element that is the most immersive is implementing

the graphic user interface, such as a health bar, power level or weapon magazine, into the protagonist's suit or in the weapon. This makes the interface a part of the game world.

Another great element of gameplay is when a player has to open his inventory. In the games such as *Resident Evil*, the game will be paused by the opening of the inventory. In *Dead Space*, the inventory is a projection in front of the protagonist, and it seems like the character is reacting to the movement of the player's pointer. (Nae 2018, 163)

The next element that helps keep the player immersed in the game and differs from similar games of the same genre is how the enemies are being killed. Necromorphs are something similar to ordinary zombies or infected people in other games, and a shot in the head often brings them to death. *Dead Space* uses different gameplay mechanics of the same kind. The player can shoot necromorphs to the head, and eventually, it falls off, but that will not kill them. The player has to shoot off limbs from their body when planning to kill them.

7. The brief comparative analysis of *Metro 2033*, *Left 4 Dead* and *Dead Space*

The most visible similarity of the games is that they are set in inhospitable worlds that were affected by an apocalyptic disaster. However, they differ in many elements of how they describe the apocalypse. On the side of the apocalypse cause, it could be said the causes are similar in many ways, such as they bring their own type of hostile creatures that endanger humanity. However, the very beginning of these disasters is different, and it develops the game, its story and society's development in different ways. *Metro 2033* shows what it could look like if the world went through a nuclear war which made the world above the underground unlivable. This is similar to *Dead Space* world, but the reason for making the ground of the Earth unlivable is the excessive mining which depleted the natural environment resources and led to the Earth's drain of life. On the other hand, *Left 4 Dead* shows a completely different cause. The USA, and probably the whole world, were affected by an unknown virus spreading with uncontrollable speed, wiping the whole city in just two weeks after the first infection.

These disasters caused human beings to almost die out and formed the societies in these worlds. *Metro 2033* shows the society of Moscow developed in a dystopian society, which is a society living in oppressive conditions, which usually are extensions or exaggerations of real-world conditions. The meaning of this is often a critique of those conditions (Booker and Thomas 2009, 65). There is a critique of separatism and social control. On the other hand, *Left 4 Dead* shows almost no form of society because the survivors live completely separate from other people, except for two groups of survivors, who are immune to the infections. If one takes into consideration, there are

not almost any other details of the people being outside the epicenters of infection; it is hard to say anything about them. The society shown in *Dead Space* is almost the same in its beginning as the society in *Metro 2033*, but through time, they got united under the Earth Government and Secessionists. The opposing faction formed under the belief that Markers are meant to unite a new race is the critique of the religious fanatics that exist in the real world. This being said, it shares common dystopian societal elements.

The societies help to build up the narrative in the games. Firstly, in *Metro 2033*, the conversations between people, or even the reactions on Artyom, help to immerse the player into the world. Also, it uses passive narrative structures such as prewar logs, which help to create an image of how the war went, and the game focuses on creating a tense atmosphere through the tunnels through distant sounds. This is similar to *Dead Space* because it uses almost the same techniques to create an atmosphere of an uninvited place from the very beginning of the game. On the other hand, *Left 4 Dead* focuses mainly on the environmental narrative. Secondly, the narratives in *Left 4 Dead* and *Dead Space* are similar. Both games use linear narratives with no chance to explore some side locations to alternate the ending of the games. On the contrary, *Metro 2033* uses a linear narrative as well, but the game allows the player to alternate the ending by exploration of side corridors located in tunnels. In other words, it uses aspects from the pearls model narrative.

All of this is helped by the gameplay that the developers decided to use for their games. *Metro 2033* and *Left 4 Dead* share the same element of the first-person perspective helping the player to be connected with the protagonist of the game. On the

contrary, *Dead Space* uses the third-person perspective. However, it uses aspects of including a health bar on the backs of the protagonist, a bar showing ammunition on the weapon or inventory projection to immerse the player into the game. This is something *Metro 2033* and *Left 4 Dead* do not have. Instead of this, the games use a basic interface. Another difference is that *Metro 2033* uses the handwritten notes of the main protagonist to create an illusion of notes written by the player. That is something that the other two games miss because *Left 4 Dead* developers decided to use environmental storytelling, and in *Dead Space* the notes are basic quest journal notes, where the entries are created by the triggers. The atmosphere element of being watched all the time is also used in all three games. *Metro 2033* uses silhouettes and distant noises of the monsters and moving environment, which is similar to *Dead Space*. *Left 4 Dead*, instead of this, uses mainly soundtracks accompanying the events being triggered to create tension.

In addition, the games transform some of the anxieties or political ideas of the real world into a form of popular entertainment. *Metro 2033* is, according to Bishop (2018, p. 13), interwoven by the nostalgia for the Soviet era, anxieties concerning the present and a deep cynicism that anything can change for the better. Borenstein (2015, 86) said that in the game are also shown the two stands of the Marx's and Engels' Communist Manifesto, one showing the anxieties about dystopia and apocalypse, and the second showing the ghosts of the past (pictured by the actual ghosts of people who died in the tunnels). The next element shown in the game is in the final mission of the game. When a player has to go to the library, the only readable books are those that refer to ancient, classical societies of Greece as it is enough to rebuild the world. Next is Darwin's

changed publication, *Evolution of Species*, which refers to *On the Origin of Species* to show the rapid evolution of Metro beasts (Bishop 2020, 14)

Left 4 Dead, on the other hand, shows very little from the beginning of the subgenre. The zombie subgenre came first from Haitian voodoo, enslaved people controlled by witches and dark magic to work on their behalf. (McGlotten and Vangundy, 2013, 121) Instead, it takes mainly from the popular media first created by G. Romero in his movie *Night of the Living Dead*, which redefines the genre to its present state showing the zombies as carnivorous, mindless and cannibalistic creatures. The anxiety that should *Left 4 Dead* transforms into the form of the game is the loss of free will, which is more common for the original Haitian description of the genre, but is still present nowadays. The present fear shown in the game is virus culture developed in pre-millennium times of computer viruses and AIDS, which helped to create infection paranoia, described by Weinstock (2015) as a “restigmatization of individuals living with and fighting against life-threatening conditions.” The game shows an us versus them mentality as the zombies should picture the excessive consumerism led against the survivors. (DuPée 2022, 203).

Dead Space shows where the Earth could get if there is excessive mining, which exhausts the planet, and humanity will have to find other planets to mine to meet the needs for living everyday life. According to Majsova (2014, 117), it creates and represents the fear of not being alone in the universe and not being a supreme specie in outer space. In other words, it shows humanity’s supremacy against alien-like species by

giving them human-like traits, which should work as a try to re-establish human's central position in a decentralized universe.

8. Conclusion

The bachelor thesis aimed at showing and comparing how *Metro 2033*, *Left 4 Dead*, and *Dead Space* illustrated the disasters that almost wiped out humankind and the aftermath of such disasters impacting on societies, individuals and the environment they inhabit. All three games are adequate representatives of post-apocalyptic fiction, and all three of them present such conditions. I analyzed the chosen games, which led me to offer a comparative analysis of how each game renders the post-apocalyptic genre either via gameplay or via the depiction of the societies that developed within each game.

The key elements I described that served my analysis are the causes of the apocalypse, societies' development, narrative, and gameplay. Based on the analyses above, it is clear that all three games differ entirely in what is the disaster that caused an apocalypse, which pushed the human societies to develop differently within each game. These aspects, alongside the narrative, created a very different atmosphere within the games. All this was to create a different implementation of an unwelcome place on every step that the player does. The differences are also in chosen gameplay and narrative structures. In *Dead Space*, the player plays the game in the third-person, and the other two games are played in the first-person. In all three games, the story is told in different ways. For example, *Left 4 Dead* relies mainly on environmental storytelling, whereas *Dead Space* also adds dialogues with NPCs and a quest log, which is similar to *Metro 2033*. On the other hand, *Metro 2033* uses dialogues to create an illusion of the living world. All the gameplay and narrative aspects serve to immerse the players in the game world.

The main idea that one should take from this thesis is that the games show entirely different scenarios of how the world could end via the focus on different narratives and gameplay aspects used to create the games. Together with the anxieties that are transformed into games and how the society developed in each game, they also show how people nowadays are afraid of being controlled, the possibility of returning to the social ideologies of the previous century or the chance of not being the supreme race in the universe.

The thesis focuses on the differences between the three chosen games because they are more prominent; henceforward, the thesis focuses on the games' similarities, which are shown via described elements (gameplay, narrative, apocalyptic disaster and its aftermath, societies' development, and transformation of real-world anxieties). However, all of them have more to offer, such as main character development, relationships within the games' worlds, and psychological aspects of the protagonists, which build their personalities and the overall look at the meaning of their lives.

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