Diplomová práce

Narrative Complexity, Realism and Immersive Gaming in Cyberpunk 2077

Studijní program: N0114A300106 Učitelství pro střední školy a 2. stupeň základních škol
Studijní obory: Anglický jazyk
Základy společenských věd

Autor práce: **Bc. Jan Strádal**
Vedoucí práce: Dávid Levente Palatinus, Ph.D.
Katedra anglického jazyka

Liberec 2022

Zadání diplomové práce

Narrative Complexity, Realism and Immersive Gaming in Cyberpunk 2077

Jméno a příjmení: **Bc. Jan Strádal**
Osobní číslo: P20000746
Studijní program: N0114A300106 Učitelství pro střední školy a 2. stupeň základních škol
Specializace: Anglický jazyk
Základy společenských věd
Zadávající katedra: Katedra anglického jazyka
Akademický rok: 2020/2021

Zásady pro vypracování:

Cílem této diplomové práce práce je zkoumat videohru *Cyberpunk 2077* v kontextu kyberpunku jakožto subžánru science fiction a popsat, nakolik její obsah odpovídá typickým charakteristikám tohoto subžánru. K tomuto účelu bude zváženo široké spektrum jejích žánrových předchůdců literárních, filmových i (video)herních, stejně tak jako participativní dimenze aktérství zahrnuté v imerzivním hraní. Teoretická část práce se bude zabývat samotným žánrem, jeho vymezením a charakteristikami. Dále budou popsány vybrané teorie a koncepty z oblasti videoher. Praktická část se bude snažit aplikovat tyto teorie na danou videohru a posoudit, do jaké míry hra odpovídá žánrovým charakteristikám a v čem se jim naopak vymyká.
Metody:
1. Studium odborné literatury.
2. Zkoumání hry a jejích mechanik.
3. Aplikace vybraných teorií z odborné literatury na videohru.

Rozsah grafických prací:
Rozsah pracovní zprávy:
Forma zpracování práce: tištěná/elektronická
Jazyk práce: Angličtina

Seznam odborné literatury:

Bell, D. J., Loader, B. D., Pleace, N., & Schuler, D. (2004). *Cyberculture: The Key Concepts (Routledge Key Guides)* (1st ed.). Routledge.
Cavallaro, D. (2001). *Cyberpunk & Cyberculture: Science Fiction and the Work of William Gibson* (1st ed.). The Athlone Press.
Elias, H. (2009). *Cyberpunk 2.0: Fiction and Contemporary* (2nd Edition). LabCom Books.
Featherstone, M., & Burrows, R. (1996). *Cyberspace/Cyberbodies/Cyberpunk: Cultures of Technological Embodiment (Published in association with Theory, Culture & Society)* (1st ed.). SAGE Publications Ltd.
Fromme, J., & Unger, A. (2014). *Computer Games and New Media Cultures: A Handbook of Digital Games Studies*. Springer.
Kulshreshth, A. K., LaViola Jr., & Joseph J. (2018). *Designing Immersive Video Games Using 3DUI Technologies: Improving the Gamer's User Experience (Human-Computer Interaction Series)* (1st ed.). Springer.
McFarlane, A., Schmeink, L., & Murphy, G. (2019). *The Routledge Companion to Cyberpunk Culture (Routledge Media and Cultural Studies Companions)* (1st ed.). Routledge.
Murphy, G., & Schmeink, L. (2017). *Cyberpunk and Visual Culture (1st ed.)*. Routledge.
Torner, E., Waggoner, F. B. Z., & White, W. J. (2012). *Immersive Gameplay: Essays on Participatory Media and Role-Playing*. McFarland.

Vedoucí práce: Dávid Levente Palatinus, Ph.D.
Katedra anglického jazyka

Datum zadání práce: 12. února 2021
Předpokládaný termín odevzdání: 29. dubna 2022

L.S.

prof. RNDr. Jan Picek, CSc.
děkan

Mgr. Zénó Vernyik, Ph.D.
vedoucí katedry

V Liberci dne 12. února 2021

Prohlášení

Prohlašuji, že svou diplomovou práci jsem vypracoval samostatně jako původní dílo s použitím uvedené literatury a na základě konzultací s vedoucím mé diplomové práce a konzultantem.

Jsem si vědom toho, že na mou diplomovou práci se plně vztahuje zákon č. 121/2000 Sb., o právu autorském, zejména § 60 – školní dílo.

Beru na vědomí, že Technická univerzita v Liberci nezasahuje do mých autorských práv užitím mé diplomové práce pro vnitřní potřebu Technické univerzity v Liberci.

Užiji-li diplomovou práci nebo poskytnu-li licenci k jejímu využití, jsem si vědom povinnosti informovat o této skutečnosti Technickou univerzitu v Liberci; v tomto případě má Technická univerzita v Liberci právo ode mne požadovat úhradu nákladů, které vynaložila na vytvoření díla, až do jejich skutečné výše.

Současně čestně prohlašuji, že text elektronické podoby práce vložený do IS/STAG se shoduje s textem tištěné podoby práce.

Beru na vědomí, že má diplomová práce bude zveřejněna Technickou univerzitou v Liberci v souladu s § 47b zákona č. 111/1998 Sb., o vysokých školách a o změně a doplnění dalších zákonů (zákon o vysokých školách), ve znění pozdějších předpisů.

Jsem si vědom následků, které podle zákona o vysokých školách mohou vyplývat z porušení tohoto prohlášení.

1. prosince 2022 Bc. Jan Strádal

Acknowledgements

I would like to express my gratitude to my supervisor, Dávid Levente Palatinus, Ph.D., for his willingness to accept my topic proposal and his support during the writing process of the thesis.

Anotace

Cílem této práce je analyzovat videohru *Cyberpunk 2077* v kontextu kyberpunku. Práce obsahuje stručný přehled vývoje tohoto žánru od 80. let; ústředních témat, jež se v něm objevují; a konkrétních video her, které žánr rozvíjely. Dále práce posuzuje samotnou videohru *Cyberpunk 2077* jak z hlediska obecné klasifikace videoher, tak z hlediska její příslušnosti k popisovanému žánru. Práce zkoumá především narativ, který hra představuje, a jednotlivé složky hry, které dotvářejí její atmosféru. Analýza této hry vychází především z hledisek estetických, tedy vizuálních prvků žánru, a historických, tj. návaznosti videohry na ostatní kyberpunková média.

Klíčová slova

Cyberpunk 2077, kyberpunk, imerze, narativ ve video hrách, posthumanismus, videohry

Annotation

The aim of this thesis is to analyse the video game *Cyberpunk 2077* in the context of the cyberpunk genre. The thesis contains a brief summary of the genre's development since the 1980s and main themes of the genre; in addition to descriptions of particular cyberpunk video games. The thesis examines the video game *Cyberpunk 2077*, from several perspectives, including the traditional video game classification and other approaches to cyberpunk video games. The thesis examines primarily the narrative of the game and the elements which create its atmosphere. The analysis focuses chiefly on the game's aesthetic and historical ties to other cyberpunk media.

Table of Contents

Table of Figures

Index of Tables

List of Abbreviations

AI	Artificial Intelligence
BD	Braindance, an entertainment device in the world of *Cyberpunk*
FPS	First person shooter
MMO	Massively multiplayer online game
NPC	Non-player character
RPG	Role playing game
TRPG	Tabletop role playing game
UI	User interface
V	An alias for the protagonist of *Cyberpunk 2077*. Their full name Valerie or Vincent (based on their voice type) is rarely used in the game.

Introduction

In 2018, upon seeing the trailer for the upcoming video game *Cyberpunk 2077*, William Gibson, who is considered one of the most influential cyberpunk authors, tweeted that the footage of the game struck him as "Grand Theft Auto skinned-over with a generic 80s retro-future" (Frelik 2020, 186). The trailer also sparked a debate over why cyberpunk aesthetics remained the same over the last forty years (Frelik 2020, 185). Although the visual signifiers may be the most prominent, there are other aspects of cyberpunk media, such as narratives with underlying themes of human agency and subjectivity, or critical assessment of technologies and social division. This thesis attempts to examine those in the context of various cyberpunk media, with specific focus on the video game *Cyberpunk 2077*.

First three chapters of this thesis attempt to describe the cyberpunk media as a whole and establish a basis for analysing the game. The initial chapter covers the development of the cyberpunk genre across various media. It attempts to explain what stimulated the development and how the genre expanded from literature to other types of media. The second chapter presents an overview of cyberpunk games, primarily those which received at least some academic attention, and tries to explain what aspect ties them to the genre. The content of the third chapter intersects the previous two, as it attempts to highlight specific elements of cyberpunk narratives.

Chapters four to eight aim to analyse the game *Cyberpunk 2077* from various perspectives. Chapter four examines the development and release of the game as well as some of their circumstances. Chapter five describes the game within established categories of video game studies. Chapter six explores the narrative dynamics and types

of immersion present in the game. Chapter seven attempts to examine the game's connections to the cyberpunk genre from several perspectives. In this chapter, three approaches are utilized: historical approach, aesthetic approach, and meta-approach. The last chapter explains why the game is not suitable for pedagogical use, while also attempting to search for alternative ways of utilizing elements from cyberpunk narratives in education.

Research Methodology

When examining video games, both qualitative and quantitative methods may be applied. Their combinations are also possible, but the particular method depends on whether the research aims to analyse the players or the game itself. Since this thesis aims to analyse a game, at least three options are available: analysing the gameplay, analysing the temporality or analysing the game based on the viewpoint of information. For the goals set in the previous chapter, formal analysis of the gameplay is the most appropriate method.

Formal analysis is a type of research in which "an artifact and its specific elements are examined closely, and the relations of the elements are described in detail" (Lankoski and Björk 2015, 23). In the case of video games, their basic building blocks, also known as primitives, may be analysed. These include the game's components, actions, and goals (Lankoski and Björk 2015, 25–6). In this thesis, particularly those of these primitives, which influence the game's narrative, are examined.

When approaching the game as a contribution to the subgenre of science fiction known as cyberpunk, three main research questions arise:

- What is *Cyberpunk 2077*'s relationship to other cyberpunk media, primarily the tabletop games on which it is based?

- Which cyberpunk themes emerge from the gameplay of *Cyberpunk 2077*?

- What formal aspects of gameplay typical for cyberpunk games does *Cyberpunk 2077* utilize?

The thesis statement, which these questions intend to answer, is as follows: Despite using gameplay aspects and narrative devices of modern video games, the setting, plot, perspective, and aesthetic elements of the game are derived from early literary contributions to the genre of the 1980s.

Literature Review

To meet the ends described in the previous chapter, this thesis draws from both primary text sources and secondary literature. Primary sources of text used in this thesis include the game *Cyberpunk 2077,* released in 2020 by Polish studio CD Projekt Red as well as additional printed materials and official videos related to the game. Furthermore, primary sources of this thesis include the video game's tabletop precedents — three editions of *Cyberpunk: The Roleplaying Game of the Dark Future* (1988, 1990 and 2005) designed by Mike Pondsmith and published by R. Talsorian Games.

Secondary sources constitute two categories. First of them are works which attempt to describe the cyberpunk genre. Among those, the earliest attempts for a systematic approach towards the topic came from European scholars, such as Dani Cavallaro (*Cyberpunk and Cyberculture: Science Fiction and Work of William Gibson,* 2000) and Herlander Elias (*Cyberpunk 2.0: Fiction and Contemporary,* 2008). While Cavallaro focused on novels and short stories by William Gibson, Elias attempted to extend the scope to other cyberpunk media, such as films and video games. In addition to these efforts, particular aspects of cyberpunk fiction began to be critically assessed in 2000s. Examples of such works include *Virtual Geographies: Cyberpunk at the Intersection of the Postmodern and Science Fiction* (2003) by Sabine Heuser or *Cyberpunk Women, Feminism and Science Fiction: A Critical Study* (2013) by Carlen Lavigne. The most systematic efforts for describing cyberpunk started arriving in the second half of 2010s in a form of scholarly contributions published by Routledge. These include more general publications such as *Cyberpunk and Visual Culture* (2018) edited by Graham J. Murphy and Lars Schmeink or *The Routledge Companion to Cyberpunk*

Culture (2020) edited by Anna McFarlane, the most integrated analysis of the genre up to this date. In addition to this, the Routledge publications such as *Neoliberalism and Cyberpunk Science Fiction* (2021) by Caroline Alphin and *Cyberpunk Culture and Psychology: Seeing Through The Mirrorshades* (2022) by Anna McFarlane have also examined particular elements of cyberpunk.

The second category consists of sources which deal with video games and their narratives. Although the cyberpunk genre received a significant amount of academic attention, cyberpunk video games were generally not in the centre of it. Some chapters of *Cyberpunk 2.0; Cyberpunk and Visual Culture* and *The Routledge Companion to Cyberpunk Culture* focus on cyberpunk video games, yet they usually consider only specific aspects of these games. This is the reason why other academic works, which examine video games in terms of the most common video game categories, are also used in this thesis. These include some chapters of *The Routledge Companion to Video Game Studies* (2014), edited by Mark J. P. Wolf and Bernard Perron, in addition to academic articles dealing with the video game narratives, such as *From Narrative Games to Playable Stories* (2009) by Marie-Laure Ryan or *Game Design Narrative for Learning* (2006) by Michele D. Dickey. Since there are only a few sources which focus on *Cyberpunk 2077* as of yet, specific pieces of background information about the game had to be gathered from conference papers and news articles.

1. Brief History of Cyberpunk Genre

To describe a genre, it is important to understand its roots as well as the influences which affected its development. These are quite often conditioned culturally. Every artistic movement is a reaction to certain events. As such, art is able to react to certain developments much more hastily than science. It owes this immediacy to the fact that it is able to draw from the human unconscious on one hand, and to no need to ask for verification on the other. Instead, art is sustained by the contributions from the artists and the community's receptions. Many movements often went beyond that. This chapter aims to describe the emergence of cyberpunk in the 1980s and its subsequent development up to 2020 not merely as a genre, but as a cultural formation. The purpose of this chapter is to provide a general context for different types of cyberpunk media and their interconnectedness. Since some of its elements enter or blend in other genres rather easily, the boundaries of cyberpunk are often unclear. This overview thus serves as a background for analysing specific cyberpunk elements, which are introduced in chapters 2 a 3.

The term *cyberpunk* first appeared in Bruce Bethke's novel *Cyberpunk*, which was published in 1983 (McFarlane et al. 2020, 1). Prior to this, a small group of writers, who would later be known as *cyberpunks*, already began forming a movement, called plainly *the Movement*. While their works were not familiar to readers outside the sci-fi community, cyberpunk influence, notably its imagery, was felt in pop-culture films of 1982, such as Walt Disney's *TRON* or Ridley Scott's *Blade Runner*. In 1984, the word *cyberpunk* was already established in the media (Elias 2009, 13). In the collection of short stories called *Mirrorshades: The Cyberpunk Anthology* (1986), the editor, Bruce

Sterling, defined cyberpunk as a genre (McFarlane et al. 2020, 1). The anthology comprised works by William Gibson, Greg Bear, Pat Cadigan, Rudy Rucker, Lewis Shiner and more, including Sterling himself. In the preface, Sterling described what he considered a new movement in science fiction. Listing the previous labels these writers were given (such as *Radical Hard SF*, *the Outlaw Technologists*, *the Eighties Wave*, *the Neuromantics* or *the Mirrorshades Group*), Sterling settled with the term *cyberpunk*. He acknowledged that although "typical cyberpunk writer does not exist" (Sterling 1988, 9), some defining traits may be identified. Among these, Sterling emphasized the roots of this movement, which can be traced back to the 1960s and 1970s, chiefly the New Wave science fiction. On one hand, the aforementioned writers were returning to the roots of the Sci-Fi genre, while on the other, they were the first generation to live in the "truly science-fictional world" (Sterling 1988, 11). Their works were one of the first to react to the crumbling of the gap between the sciences and humanities. Instead of placing technology outside of people, these writers situated it next to them. "For the cyberpunks … technology is visceral" states Sterling (1988, 13). Other important aspects of their work included reaching for a global point of view, visionary intensity and strong imaginative concentration (Sterling 1988, 15).

1.1 New Wave Inspiration

Although Sterling admits the influence of the New Wave on cyberpunk, he ventures only so far to list some of the authors. According to Latham (2020, 26) there are; however, four specific works of the New Wave era, which foreshadowed key cyberpunk themes. These include works of John Brunner, James Tiptree Jr., Daniel F. Galouye and Robert Silverberg.

The Shockwave Rider (1975) by John Brunner is the first work to feature the concept of *running the net*. In the novel, there is an integrated-data net made of linked desk computers. While the web should democratize access to information, it merely reinforces the inequities. The protagonist, Nick Haflinger, uses his programming skills to create fake identities, which allow him to gain an advantage over his enemies. Halfinger's hacking is, in a way, an act of freeing the information.

The Girl Who Was Plugged In (1976) by James Tiptree, Jr. is set in a dystopian, capitalist future, where control of data transfer constitutes the main mechanism of social power. The protagonist, P. Burke, a lowly urchin, is able to remotely control Delphi, a robot celebrity, which allows her to live her dream life. Doing so; however, she unknowingly promotes luxurious commodities provided by Global Transmissions Corporation, becoming a subject of capitalist exploitation. The story thus explores the gap between virtual life and flesh-bound existence. The gender aspect also is significant in the novella, as in the virtual life the protagonist seeks to escape her imagined deficiencies into a cosmetic fantasy of perfected femininity (Latham 2020, 10).

The novel *Simulacron-3* (1968) by Daniel F. Galouye also explores simulated reality, though in a form of virtual city, which is populated by virtual subjects for purposes of marketing research. Being unaware of the fact they are computer constructs, these entities are virtually indistinguishable from real personalities. Through a technique of *emphatic coupling*, one is able to link with a simulation entity and control it. This; however, also allows such entities to leave the simulation. Interacting with both worlds, the protagonist starts to question whether the world he considers real is truly genuine or yet another simulation (Latham 2020, 11–2).

Although Robert Silverberg is not the first one to explore the possibility of a person's memory being re-embodied into clones after death of their original incarnation, in his novel *To Live Again* (1969) this practice is commercialized. Archived identities may be bought and sold. Through the *Scheffing process,* the wealthy are able to have their memories stored periodically. After their passing, these personality profiles are transplanted into the minds of other wealthy subjects, sharing the body while also gaining new experience. If the host is not satisfied with a personality, it is possible to have it erased, creating space for a new one to be purchased. Although most hosts manage to coexist with the transplanted personalities, known as *carnates*, some minds may end up being overridden, resulting in the host's body being hijacked by the transplanted personality. Carantes may also carry remnants of personalities which were implanted into their original body (Latham 2020, 12–3).

In all of these cases, technology ends up being used for commercial ends and as such becomes a tool of exploitation. Thus, the assumption that information technologies would result in commodification and commercialization, heavily employed in cyberpunk fiction, was already established in the New Wave fiction (Latham 2020, 14).

1.2 Other Influences

The cyberpunk authors often drew from other literary trends besides the New Wave fiction. Cyberpunk characters and settings are frequently influenced by hard-boiled detective fiction, which developed in the United States in the 1920s and 1930s. The hard-boiled school represented a radical break from the tradition of the Golden Age, straying from the elaborate investigations taking place in closed settings to the sleazy practices of open urban scenes (Cavallaro 2020, 8). The two novels which influenced

cyberpunk authors the most are *The Red Harvest* (1929) by Dashiell Hammett and *The Big Sleep* (1939) by Raymond Chandler. Both of these books featured an isolated and rootless, albeit tough, hero finding his way through a corrupt system (Cavallaro 2000, 9).

Another major influence of cyberpunk writers came from dystopian narratives, such as *Limbo* (1952) by Bernard Wolfe or *A Clockwork Orange* (1962) by Anthony Burgess, in addition to the postmodern fiction, notably *Naked Lunch* (1956) by William S. Burroughs or *The Crying of Lot 49* (1966) by Thomas Pynchon. All these works depict worlds with no certainties to cling to (Cavallaro 2000, 10).

The roots of cyberpunk; however, are not purely literary. Introduction of cybernetics in science had a substantial impact on how technology is dealt with within the genre. The word *cybernetics*, introduced by Norbert Wiener in his book *Cybernetics, or Control and Communication in the Animal and the Machine* (1948) and derived from Greek *kibernetes* (steersman), refers to a control in a form of steersmanship. Wiener divides the history of machines into four stages. The last of them is the age of communication and control. According to Wiener, provided that the human body can be conceived as a machine, it should be possible to design a machine which would simulate a human organism (Cavallaro 2000, 12). Another incentive to how cyberpunk would approach technology came from Alan Turing and his concept of Turing machine, postulating the possibility of artificial intelligence. The question of human-machine interaction and the difference between human and artificial was further explored in *Androids Dream of Electric Sheep?* (1972) by Philip K. Dick, one of cyberpunk's most important predecessors (Cavallaro 2000, 13–14).

1.3 Establishing of the Genre

As far as the literary emergence of the genre is concerned, William Gibson, Bruce Sterling, Lewis Shiner, John Shirley, and Rudy Rucker are considered the most influential authors. These five authors were in contact with each other, discussed their work and shared their outlooks on the future. During the first half of the 1980s, a considerable number of their stories was published (Murphy 2020, 16). The key moment for the group arrived after Gibson published his first novel *Neuromancer* and received the Philip K. Dick Award in 1984, the Nebula Award in 1985, and the Hugo Award in 1985, thus earning what is called the Triple Crown of Sci-Fi. This granted the movement attention of the media. Owing to the supply of works from the five authors as well as the efforts of their editors Ellen Datlow and Gardner Dozois, the genre was prepared to tackle the mainstream.

In 1986 in the *Mirrorshades* collection (see Chapter 1), the five original authors had been already joined by Cadigan and Bear as well as newcomers Tom Maddox, Marc Laidlaw, James Patrick Kelly, and Paul Di Filippo. With the new writers; however, the genre was becoming more diverse and less coherent, a fact noticed by both some of the writers and their fans (Murphy 2020, 17). When the movement went mainstream, its rebellious attitude was swiftly replaced by an urge for acceptance and commercialization. Thus, towards the end of 1980s, many members attempted to distance themselves from cyberpunk and the future of the genre was uncertain. Despite this the *Mirrorshades* group had provided enough materials for new generations of authors in the 1990s as well as a variety of visual motifs to be adopted by films, television shows, comic books, and video games (Murphy 2020, 22).

1.4 Subsequent Development

1.4.1 Prose

The previous chapter illustrated how cyberpunk came into prominence in 1980s. In the following years, the genre sprawled in many directions. Having been a member of the original group, Pat Cadigan continued publishing cyberpunk novels throughout the 1990s, although with one significant change. In her stories, the protagonist is typically a woman and manipulation of bodies and identities for the sake of fashion and entertainment is questioned. Cadigan was not alone in efforts to portray female protagonists, as other authors, such as Candas Jane Dorsey, Gwyneth Jones, or Lisa Mason, experimented with this premise. And while in the 1990s, with the rise of cyberpunk-themed Hollywood films and development of the internet, many male authors relinquished their efforts in the genre, new female and non-binary writers started experimenting with cyberpunk themes (Yaszek 2020, 33–5).

As cyberpunk was gaining a label of marketable product towards the end of 1980s, some authors gathered under a new label: *post-cyberpunk*. The premise of the new genre, a defined by James Patrick Kelly and John Kessel in their collection *Rewired: The Post-Cyberpunk Anthology*, was that while some authors extend the genre's themes, some may react against them; and what some had been taking for granted, others would push into new territories. One of the most significant figures of the movement was Neal Stephenson, whose novel *Snow Crash* (1992) earned a lot of popularity for the genre. While employing typical cyberpunk tropes, the work was more ironic and parodic on one hand, and corrective of the original visions on the other. Instead of cyberspace composed of basic geometrical shapes, Stephenson uses much livelier metaverse, along with presenting new outlooks on subjectivity and virality (Kilgore 2020, 48–51). Besides

Stephenson, other authors such as Marge Piercy, Stephen Hall, Richard K. Morgan, or Marcel Theroux presented new treatments to original cyberpunk themes (Kilgore 2020, 52–3).

1.4.2 Comic Books and Manga

The growing popularity of European and American comic books in the 1980s had a significant influence on cyberpunk aesthetics. Some particular works include *The Long Tomorrow* (1976) written by Dan O'Bannon and illustrated by Jean Giraud, which takes place on the street level of the urban environment, or *RanXerox* (1978) by Stefano Tamburini and Tanino Liberatore, which follows a story of a mechanical antihero. Frank Miller's *Ronin* (1983–4) is considered the first mainstream popular cyberpunk comic, presenting many cyberpunk elements, while also being influenced by manga and samurai films. Opposed to the noir atmosphere prevalent in *Ronin, Tank Girl* (1988) by Jamie Hewlett and Alan C. Martin steers more towards punk attitude, being unconventional in the narrative techniques as well as the portrayal of the female protagonist (Higgins and Lung 2020, 91–3). Unlike the *Tank Girl*, comic series *Hard Boiled* (1990–2) by Frank Miller and Geof Darrow relied on a masculine protagonist, situated in a violent dystopian world controlled by corporations. Rather than the plot of this comic; however, it were its visual and stylistic qualities (especially attention to detail) that influenced many cyberpunk comics and films, including *The Matrix* trilogy (Higgins and Lung 2020, 94). Cyberpunk themes soon began to influence established superhero comics, notably the *2099* series by Marvel (*The Punisher 2099, Doom 2099, The Spiderman 2099* and *Ravage 2099* published in 1992–5); or *The Hacker Files* (1992) by DC Comics, written by Lewis Shiner, member of the original cyberpunk movement (Higgins and Lung 2020, 95).

Although Japan had its own sci-fi tradition, some of proto-cyberpunk themes appeared in their writing and manga. While post-war manga was oriented on young readers, since the 1950s, manga was slowly turning to older audiences. Similarly to North America, cyberpunk themes started to emerge in Japanese fiction in 1980s. The three major milestones in this respect were Japan's transformation into post-industrial society in 1970s, the technocultural shift, and growth of youth subculture groups (Suzuki 2020, 108–9). Themes, motifs, and tropes employed by cyberpunk manga authors were not unlike those of their western prose counterparts: impact of new technologies on subjectivity, boundaries between human and machine, and artificial intelligence explored through noir stories set in dystopian societies. *Akira* (1982–90) by Katsuhiro Ōtomo is set in Neo-Tokyo after World War III and portrays generational divide as well as antipathies to US militarism. *Ghost in the Shell* (1989) by Masamune Shirow or *Battle Angel Alita* (1990–95) by Yukito Kisihro, on the other hand, are set in worlds characterized by class division. Cyborg characters often appear and with reckless use of robotic augmentations arises the question of human identity. Compared to North American cyberpunk; however, female protagonists are much more common. This is due to the beautiful female fighter stereotype, which had already been established in Japanese manga by the 1980s. From the visual perspective, cyberpunk manga is dense and devotes more attention to the background than traditional manga (Suzuki 2020, 111–4). Japanese cyberpunk peaked in the 1980s and 1990s, when many Japanese cyberpunk manga, including the examples mentioned in this paragraph, were made into anime series. Japanese contributions to cyberpunk; however, still have a significant influence on the genre, as many narratives keep receiving Hollywood live-action adaptations up to this date (Suzuki 2020, 116).

1.4.3 Television and Film

Even before the group of writers, later known as cyberpunks, was fully formed (see Chapter 1), first films exploring cyberpunk themes appeared. *Blade Runner* (1982) directed by Ridley Scott quickly became a cyberpunk icon. The film was based on Philip K. Dick's *Do Androids Dream of Electric Sheep?* (1968) and portrayed a conflict between the police (*blade runners*) and renegades (*the replicants*), genetically engineered beings produced by the Tyrell corporation (Elias 2008, 58). The plot put forward the question of the value of (human) life. In addition, it laid foundations to cyberpunk's iconography with its "never-ending cityscape, continuous rain and night, neon lighting, and teeming crowds" (Butler 2020, 121). As for visual depiction of virtual reality, Disney's *TRON* (1982) was the first film to present an integrated image of it. The Master Control Program, which appears in the film, can be considered one of the earliest cinematic representations of AI (Butler 2020, 122–3). In Hollywood cinema, the transition from 1980s to 1990s was marked by the presence of cyborg characters as in *Terminator* (1984), *Robocop* (1987), and their sequels, in addition to many other action films. It was at the start of 1990s, when the hypermasculine cyborgs started to be replaced by slim men and women jacked into cyberspace, as in *The Lawnmower Man* (1992) by Brett Leonard; and reinforcing the stereotype of evil corporations versus the good hacker kids, as in *Johnny Mnemonic* (1995), an adaptation Gibson's short story (1981) of the same name. Towards the end of 1990s, *The Matrix* (1999) pursued the themes of the virtual world and humanity controlled by an AI (Butler 2020, 124–5).

Despite not being central to cyberpunk culture in the 1980s and 1990s, television often played an important role in the development of cyberpunk for several reasons. As a form of medium, television had to assert (or at least reflect on) its place among new

forms of entertainment. The themes cyberpunk television operates with include depicting virtual reality, exploring mediated reality and representation, displaying posthuman characters and portraying economic inequality. From the times of a VCR to the age streaming services, a wide range of both book adaptations as well as original series have fulfilled these functions (Vint 2020, 169). As far as Japanese contributions to the genre are concerned, the previous chapter focused on manga and its anime adaptations. In anime; however, cyberpunk does constitute a coherent genre. Instead cyberpunk qualities appear in many anime categories, such as mecha, horror, or virtual idols; and conversely, cyberpunk often draws from the visual landscape of a futuristic Japan depicted in anime (Sahito 2020, 169).

1.4.4 Video Games

Cyberpunk has always displayed an affinity for computing, and thus it is not surprising that the themes and motifs from other cyberpunk media would eventually be adapted by video games. There are many methods of classifying video games (see Chapter 5.2). Thematic and aesthetic preoccupations; however, are generally not the decisive factor. Therefore, classifying video games solely on a premise of being a cyberpunk video game, based on a loose set of parameters derived from the original cyberpunk literature, would yield imprecise results. Frelik (2020, 184) outlines three approaches of analysing and grouping cyberpunk games. The aesthetic approach treats cyberpunk as a visual aesthetic, which may extend beyond narrative media. The historical approach would outline the games' genealogy, including game adaptations of other cyberpunk media and original game entries to cyberpunk culture. As for adaptations, the games from the *TRON* franchise (1982–2010), two *Blade Runner* games (1985, 1997), *Neuromancer* (1988), the *Shadowrun* series (1993–2015) or *Ghost in the*

Shell (1997) may be considered. Original game entries would include games such as *Syndicate* (1993), *Beneath a Steel Sky* (1994), *BioForge* (1995), *Deus Ex* series (2000–16), *Hard Reset* (2011), *Frozen Synapse* (2011), *Remember Me* (2013), *Watch Dogs* (2014) and *Watch Dogs 2* (2017). Within the video game classification, these would represent a vast array of genres: a real-time strategy game, two adventure games, a series of first-person shooters with role-playing elements, a turn-based tactical game, and two open world explorative action games, respectively. Other games may simply utilize some of the tropes popularized by cyberpunk. Using this less strict definition allows to list games such as *System Shock* (1994) and *System Shock 2* (1999), *Tacoma* (2017) of the *Mass Effect* franchise (2007–12) by Bioware, some games of the *Metal Gear* series (1987–2018), but also MMO games, such as *Sindrome* (1997), *Anarchy Online* (2001), and *Matrix Online* (2005–9). Although some exceptions exist, three genres are the most prevalent in cyberpunk video games. These are first and third person shooters, RPGs, and point-and-click adventures. As Frelik (2020, 186) states, these genres have two similarities. They tend to focus on detail-rich narratives. Furthermore, they frequently "simulate agency through attention to individual protagonists", since they present the player with a single character to control and build the narratives around it. The individualist hero, as well as the question of subjectivity in the technoscientific world, are the staples of the original cyberpunk literature of 1980s. As in a great deal of cyberpunk books, the video game protagonists are masculine, with the masculinity based on their capability of using technologies. On this account, Frelik (2020, 187) claims that "a tendency to favor the male American hero myth that persists in both big-budget and independent productions".

29

Besides the aesthetic and historical perspectives, Frelik (2020, 188) suggests one other way of considering cyberpunk games, the meta-approach. In this perspective, the games are to be considered as "a meta-medium of cyberpunk at large", rather than merely narratives. Firstly, this would include the interaction between the player and the game. When the player controls an avatar, his subjectivity becomes functionally extended. In this particular sense, the player comes closer to one of the most iconic cyberpunk figures: the cyborg. Another area where the meta-approach can be applied are hacking simulations, such as *Uplink: Trust is a Weakness* (2001), *Hacknet* (2015), *Quadrilateral Cowboy* (2016), *Exapunks* (2018), or *else Heart.Break* (2015). Not only do these games tend to have cyberpunk settings, but they also allow the player to perform the very same activity as the in-game avatar. In this manner, the fourth wall is effectively broken (Frelik 2020, 188–9). Lastly, the meta-approach may be used to analyse cyberpunk games on the basis of institutional structures in which they are developed. A degree of dissonance can be perceived between the political message of the game and the interests of the gaming industry, as corporations are typically cyberpunk antagonists (Frelik 2020, 189).

1.4.5 Tabletop Games

The previous chapter illustrated some of the ways in which cyberpunk influenced the world of video games. But since *Cyberpunk 2077* is a video game based on a series of tabletop RPGs, the attention in this chapter will turn to the latter. Having been influenced by the expanding body of cyberpunk literature, the earliest cyberpunk TRPGs started to emerge at the end of the 1980s. The first to adhere to the cyberpunk settings carried the genre's label in its name: *Cyberpunk: The Roleplaying Game of the Dark*

Future (1988). Written by Mike Pondsmith and published by R. Talsorian Games, the game combined traditional TRPG elements with cyberpunk motifs.

The first iteration of Mike Pondsmith's *Cyberpunk* became known as *Cyberpunk 2013.* The game introduced a world controlled by corporations, in which the players took up the role of Cyberpunks, individuals refusing the oppressive control, who were adapting to the new technologies to persevere. These cyberpunks include, for example *Rocker-boy/girl,* character archetype often portrayed in the literary cyberpunk; *Solo,* acting as bodyguard or hired gun; or *Netrunner,* a character navigating through cyberspace. Obtaining mechanical enhancements is the most common way of empowering these characters, although they come at a cost. Raising the number of cybernetic enhancements can influence the characters in a form of a disease: the cyberpsychosis (see Chapter 7.2.4) (Carbonell 2020, 201). A second edition of the game, *Cyberpunk 2020* (1990), included bioware upgrades, although they were functioning within the boundaries of cyberware mechanisms. In 2005, *Cyberpunk V3.0* pushed the storyline further. In the 2030s, after a series of cataclysmic events plaguing both cyberspace and real space, new alternative cultures arise. This not only allows the players to define their characters in new ways, but also moves the focus from the "rebellion against globalized capitalist culture [towards] surviving a post-apocalyptic world populated by diverse posthumanity saturated by traditional technological enhancements and supertech" (Carbonell 2020, 202).

Although not crucial for the purposes of this thesis, two other TRPGs of particular importance to the genre will be addressed shortly. *Eclipse Phase: The Roleplaying Game of Transhuman Conspiracy and Horror* (2009) focuses attention to transhumanism, as the two central concepts are *ego,* an analogy of the mind or soul; and

morph, a substrate in which nothing as mind exists, which can be biological, robotic, or merely digital (Carbonel 2020, 222). The difference between the literary cyberpunk and TRPGs, which often experiment with elements of other genres, such as fantasy or horror, is even more evident in *Shadowrun* (1989). Published only a year after *Cyberpunk 2013*, the game combined the cyberpunk genre with high fantasy themes, featuring supernatural beings and magic (Carbonel 2020, 206).

2. Cyberpunk Video Games

In the previous chapter, part of the attention was directed to cyberpunk video games in general and ways of defining them. This section of the thesis will therefore focus on several particular titles, especially those which have received academic attention, to provide a larger framework for assessing what constitutes a cyberpunk game. This section does not analyse to the platforms on which the games were published, since in most cases it usually was the most widespread of the time: AMIGA or ATARI computers in the 1980s, MS-DOS or PS1 in the 1890s, and newer consoles and personal computer operating systems after 2000.

2.1 Early Cyberpunk Video Games

Early cyberpunk video games were often original game entries inspired by cyberpunk literature. To illustrate the themes and settings of these games, this chapter describes cyberpunk video games such as *Interphase* (1989), *Another World* (1991), *Cyberspace* (1993), *Delta V* (1993), *Syndicate* (1993), or *Beneath a Steel Sky* (1994).

Published in 1989 by Image Works, *Interphase* was one of the games which attempted to capture the virtual landscapes of the 1980s. The gameplay includes action, adventure, and puzzle elements. The story follows a hacker who attempts to retrieve his dream from a corporation which is using fabricated dreams to convey subliminal messages. The protagonist guides his girlfriend through cyberspace, as she is climbing the floors of an information building, while they are opposed by computers, which are serving as its defensive measures (Elias 2008, 117). Although the aesthetic approach might be utilized when analysing this game, the other two approaches are also viable. The meta-approach for analysing the player's endeavours in cyberspace and the

historical one for comparing the game's concepts to other games and the book *Neuromancer*.

The platform game *Another World,* published in 1991, was developed by Delphine Software. It quickly became acclaimed for its aesthetic and gameplay qualities. The 3D animations, cutscenes, characters, and landscapes were so well designed, that they evoked rather cinematic qualities, which was uncommon for the games of that time (Elias 2008, 107). The story follows Lester Knight, a knowledgeable but rebellious scientist, who finds himself on an alien planet. Since the story does not carry many cyberpunk elements, *Another World* is tied to cyberpunk by its aesthetics, rather than the plot.

The game *Cyberspace* was developed by Empire Software in 1993. The title of the game, is self explanatory as far as the setting of the game is concerned. The game follows the vision of cyberspace developed by William Gibson. It utilizes an RPG play style, first person perspective. It is set in a virtual city, which provides a virtual haven for inhabitants of a destroyed world (Elias 2008, 113). Since the cyberspace is set in an actual cyberspace of the game itself (a game within a game), the meta-approach would be the most beneficial when analysing this game, although the other two approaches might be used as well.

Delta V was published in 1993 by Bethesda Software. Its rough and simple geometrical gamescape featured races and dogfights in corridor styled architecture. In the game, the vehicles operate in cyberspace while being controlled by hackers, who can suffer the real consequences of the virtual damage. The goal is not simply to win the competition, but to extract virtual data, which serve as a trade currency in virtual spaces (Elias 2008, 124). Although the portrayal of cyberspace is different, *Delta V* is similar to

Cyberspace in this respect and could be analysed in a similar manner, which the meta-approach.

Syndicate was released by Bullfrog Software in 1993. The game was followed by *Syndicate Wars* in 1997. In these strategy games, the player views the game from the isometric perspective. Set in a futuristic city of promotional screens and aerodynamic automobiles, the narrative follows street fights among criminal organizations. These organizations, known as syndicates, consist of outlaws augmented by prosthetics to improve their combat capabilities (Elias 2008, 124–5). The game can be analysed through the historical perspective, focusing on the punk characters, or through the aesthetic perspective, stressing the urban settings but also the futuristic game interface.

Released in 1994 by Revolution Software, the adventure game *Beneath a Steel Sky* is set in a future landscape full of skyscrapers and machines, heavily resembling the horizontal architecture portrayed in *Blade Runner* (1982) film. This futuristic dystopia is surveilled by omnipresent CCTVs, which are controlled by machines. While not much is known about the protagonist of the game Robert Foster nor the environment he finds himself in, the narrative unfolds as the player progresses the story (Elias 2008, 109). When *Beneath a Steel Sky*'s ties to the cyberpunk genre are in question, both aesthetic and historical approach may be adopted.

2.2 Film Adaptations

Many cyberpunk video games appeared in a form of film adaptations. This trend started in 1995, but continued up 2005. Some of these adaptations adhered closely to the plots established by the films, while others allowed the player to explore different storylines and settings than those featured in the films. This chapter will cover video

game adaptations of the films *Ghost in The Shell* (1995), *Blade Runner* (1982), *Terminator 2: Judgement Day* (1991) and *The Matrix* films (1999–2003).

Two years after the anime adaptation in 1995, the *Ghost in the Shell* manga (see Chapter 1.4.2) received its video game version developed by Exact/Ultra. The protagonist of this action game is a member of the public security bureau, who pilots a cybernetic armour suit. The game takes place in futuristic cityscapes and the action accompanied by techno music. The storyline is very simple, since the player only battles terrorists and mechs (Elias 2008, 116). In this case, all three approaches may be used: historic approach to tie the game to the anime and manga, aesthetic for analysing the cityscape and the machines, and meta-approach to examine the player-pilot-robot interaction.

Released in 1995 by Bethesda Softworks, the arcade video game *Terminator 2: Judgment Day* followed the story the film of the same name from 1991. The first person shooter game genre was gaining popularity at the time, but *The Terminator: Future Shock* was one of the first games to offer a story behind the action. For its time, the game displayed outstanding qualities in both graphic and sound design (Elias 2008, 128). Set after a nuclear war, the main goal of the game is defeating the machines using various weapons. The sequel to *Terminator: Future Shock*, called *SkyNet*, was released by the same studio in 1996. In this first person shooter, the conflict between machines and human resistance fighters continues, once again drawing from the future scenes of the film (Elias 2008, 124). Since the games expand the narrative set by the films, the historical approach would be the most appropriate tool to analyse them within the cyberpunk genre.

The video game version of Ridley Scott's film was released in 1997 by Westwood Games. The *Blade Runner* game drew heavily from the film's visuals and conveyed the story in a form of point-and-click adventure. Similarly to Rick Deckard in the film, the main character of the game Ray McCoy is a blade runner. His task is to investigate a murder of animals in a pet shop, which is problematic since organic animals are exceedingly rare. The game allows the player to switch between the perspectives of the blade runners and replicants. As the investigation progresses, McCoy is prompted to question his own human condition. There are several endings where McCoy can join the replicants, eliminate them, or not take any sides; yet the question of his origin remains ambivalent (Elias 2008, 110–1). As in many other cases, both aesthetic and historical approach can be used when examining this game.

The first game inspired by *The Matrix Trilogy* was released by Shiny Entertainment in 2003. In *Enter the Matrix*, the narrative adheres closely to the films. The player can choose to control either Ghost or Niobe, supporting characters from the films. Viewed from a first person perspective, the story of the game intersects with those of the films at times, while the player fights against the SWAT and cloned agents within the *Matrix*, using the same techniques as were displayed in the films, such as martial arts or bullet time (Elias 2008, 115). Since the game draws heavily from the film, the historical approach is the one most appropriate to link the game to the cyberpunk genre.

The Matrix: Path of Neo was released by Shiny Entertainment in 2005. Unlike in the previous game, the player is able to control the main protagonist of the films, Neo. Using cutscenes and third person shooting sequences, the game follows the plot of the films, particularly the action scenes (Elias 2008, 127). The most fitting approach to link

this game to the cyberpunk genre is the historical one, since it does not introduce any other concepts than the films.

The final instalment of *The Matrix* video game universe, *The Matrix Online*, came in the form of an MMO RPG in 2005. The servers were shut down in 2009. Similarly to the protagonists of the films, the players were able enter simulated virtual reality of the *Matrix*, using their customized avatars (Elias 2008, 126). The two main approaches to this game would be historical and the meta-approach. As for the historical approach, the connection to the films is indisputable. On the other hand, the meta-approach would focus on how the game's virtual reality is constructed.

2.3 Resurgence of Original Titles

Although in the late 1990s and the first half of 2000s game adaptations of cyberpunk films were popular, towards the end of 2010s many original, albeit cyberpunk inspired, titles emerged. The most notable examples include *Mirror's Edge* (2008), *Deus Ex: Human Revolution* (2011), *Watch Dogs* (2014), or *Deus Ex: Mankind Divided* (2016). Although many other cyberpunk video games were released in the meantime (see Chapter 1.4.4), this chapter will focus on the aforementioned titles for two reasons. Firstly, they represent the most popular contributions the genre and secondly, their gameplay is similar to that of *Cyberpunk 2077* in certain aspects.

The action-adventure game *Mirror's Edge* was developed by Digital Illusions Creative Company in 2008. Despite the fact that the game utilizes the first person view perspective, combat is not a cornerstone of the gameplay. The goal is not to eliminate the enemies, but to evade them performing parkour-style acrobatics. The setting is also unusual, as the game is set in a bright and luminous city during daytime, much unlike of

dark and rainy cityscapes inspired by *Blade Runner*, where the only sources of light are neon signs and billboard screens. The protagonist, Faith Connors, was one of the most original video game protagonists of that time: a short haired Asian girl, clad in athletic sportswear, with tattoos on her face and arm. Faith is a courier, a Runner, who conveys private messages, as most of the data flow in the city is heavily surveilled. After her sister is framed for a murder, Faith finds herself on the run (Elias 2008, 117–9). Being original in many ways, *Mirror's Edge* can be considered in respect to the cyberpunk genre using the aesthetic approach, since it attempts to redefine the urban landscape. The historic approach, focusing on other entries to cyberpunk culture, would tie the game to other media featuring similar concepts, notably the short story *Johnny Mnemonic (1981)* or the film *Strange Days* (1995).

Watch Dogs is an action adventure released by Ubisoft in 2014. From the third person view, the player controls a hacker named Aiden Pearce. The game is set in 2012 in Chicago, where the Central Operating System (ctOS) was implemented by Blume Corporation, a technology company. This system connects all devices into a single network. Aiden is a prototype of an individualistic cyberpunk hero who exploits the system for his personal gain, rather than standing up to oppressive corporate practices (Frelik 2020, 187). In *Watch Dogs 2*, which was released in 2016, the protagonist Marcus Holloway is wrongly accused of being a criminal by the system. Holloway then joins a hacker collective to fight corporate exploits. Thus, the message of the game is more political than in the first part of the series (Frelik 2020, 188). For comparing the goals of both protagonists to other cyberpunk figures, the historical approach is the most appropriate one, since in aesthetic terms, the game's visuals are not as prominent as in other titles.

2.3.1 *Deus Ex* Series

Among cyberpunk video games, the *Deus Ex* series games belong to those which shaped the genre the most, both aesthetically and thematically. Its popularity among the players can be substantiated by the fact that the series received six entries up to this date: four main games for personal computers and consoles, in addition to two spin-offs for mobile devices. The four games which constitute the series were developed in two eras. *Deus Ex* (2000) was followed by *Deus Ex: Invisible War* (2003). Both games were developed by Ion Storm. Their prequels *Deus Ex: Human Revolution* (2011) and *Deus Ex: Mankind Divided* (2016) were developed by Eidos Montréal. While both of these couples are distinct from each other due to changes in game technology and design over time, they follow a continuity in both narrative and gameplay (Knöppler 2020, 193). Within the video game genres, these games stand as hybrids between the FPS, stealth, role playing, and adventure games. Thus, unlike many other combat-based games, the player does not simply follow orders, but is forced to contemplate the meaning of their actions, as there are social, technological, and violent solutions available (Knöppler 2020, 193).

As far as the narrative of the games is concerned, the first game, *Deus Ex*, is set in 2052. The protagonist, JC Dennton, is a technologically enhanced agent, who serves international anti-terrorist organization UNATCO. When his brother opposes UNATCO, JC starts questioning the origin of Grey Death, a mysterious virus. He discovers that the virus is man-made and he himself was genetically engineered to play a part in the conspiracy by a secret society called the Illuminati. After discovering this, JC attempts to prevent Bob Page, a former member of the Illuminati, from spreading the virus. In the final confrontation in Area 51, Page attempts to merge his mind with an AI to gain

control over global communications and JC is faced with three choices: killing Page and siding with the Illuminati; destroying Area 51 and plunging world into chaos; or merging with the AI himself, becoming transhuman being able to shape the new world order.

The sequel, *Deus Ex: The Invisible War*, is set in the year 2072. Despite the fact that the player was to choose one of the options at the end of the first game, the story continues as if their combination would occur. The protagonist Alex Denton finds himself in a world controlled by two power blocs: World Trade Organization and Order. Both of them are; however, only facades controlled by the Illuminati. Towards the end of the story, the player is once again given a choice: Alex can join either the Illuminati or one of the opposing factions: anti-augmentation crusaders or ApostleCorp, lead by JC Denton, who intends to transform humanity through technology into a transhuman collective consciousness. Alternatively, the player can refuse to help any of the factions (Knöppler 2020, 193).

The story of the prequel games takes place in 2027, when the augmentation technologies are being introduced. In *Deus Ex: Human Revolution*, the protagonist Adam Jensen, who works as a security chief of a company developing augmentations, is severely injured and his life is saved by augmentation. Subsequently, as he investigates the attack, he discovers that many scientists who researched augmentations were abducted by the Illuminati, who intend to use augmentations as a tool of control. While Jensen intervenes too late to prevent the plan from happening, the player can choose how to handle the information about the event, effectively taking a political stance towards transhumanism. The options are disclosing the truth to the public, which would most likely result in banning augmentations; or placing the blame elsewhere. Blaming

anti-augmentation terrorists would allow corporations to continue developing them, while blaming a drug used by those who were augmented would result in more regulations. As in the previous games, Jensen can refuse all three possibilities, leaving mankind's fate in its own hands (Knöppler 2020, 194).

In *Deus Ex: Mankind Divided*, which takes place two years after the conclusion of the previous game, the player assumes control of Jensen once again. It is not explicitly stated which of the narrative paths from the previous game occurred, yet the distrust against the augmented people is rising. Jensen is working for Interpol, while also secretly investigating the Illuminati. During the conclusion of the game, the player is once again presented with a choice, this time determining whether an initiative aimed at restricting augmentations and monitoring augmented people would pass (Knöppler 2020, 195).

The narratives of all four games follow a similar arc: an augmented agent reveals corruption behind the scenes and he is given an opportunity to take a side. This is a common story of many cyberpunk protagonists. In aesthetic terms, the protagonists are also stereotypical, usually wearing trench coats and mirror shades, while being equipped by robotic augmentations. Furthermore, the aesthetic aspect of these games includes the cities. Their architecture reflects socio-economic division. The story takes in gloomy cityscapes or high-tech compounds, while natural settings are nearly absent (Knöppler 2020, 195). From the political point of view, transnational organizations hold most of the power at the expense of national governments. Corporations are on the rise, but so are the underground and counterculture. Technology is the main transformative power in the world, especially in two areas: human enhancement through augmentations and artificial intelligence (Knöppler 2020, 196). Building on established cyberpunk narratives, the

Deus Ex series utilizes conspiracy elements recursively in the series, although they are less prominent in the two prequels. As a result, there are two competing forces which drive the history: technology and conspiracy; and while the player has to make choices between the two, there is also an option to reject both (Knöppler 2020, 198).

3. Cyberpunk Themes

In the previous two chapters, it was emphasized that cyberpunk narratives come in many forms and employ various tropes. As the genre develops in time, the authors are forced to react not only to other contributions, but also to the social and technological development. In the case of cyberpunk, technological development is particularly relevant, since the authors' predictions of the future are tested as the time passes. Some tropes; however, remain the same across various cyberpunk media. While their significance may vary from serving as purely aesthetic elements to being a cornerstone of the narrative, the tropes described in this chapter appear to be the most prevalent in cyberpunk fiction.

3.1 Technology

In cyberpunk narratives, technology plays a fundamental role in many areas. Some of the examples may include information networks or virtual realities. What is more significant than the technology itself, though, is how people interact with it. William Gibson envisioned a possibility of direct neural link between the human and the machine. The fusion of the human mind with the machine allows it to enter virtual environments (Cavallaro 2000, 27–8). And with the advancement of technology, arises the question of human subjectivity, perhaps the most apparent in the two concepts further described in this section.

3.1.1 Cyborgs

As one of the most illustrious cyberpunk icons, cyborgs are a junction of the natural and artificial. The term cyborg is a blend of the words cybernetic (see Chapter

1.2) and organism. Despite being a staple of cyberpunk, the term appeared much sooner. In 1960, Manfred E. Clynes and Nathan S. Kline used it to describe "a self-regulating man-machine system" (Cavallaro 2000, 45). The early studies in science examined the notion of an enhanced human for space program purposes, as they pondered over human survivability in hostile, possibly extraterrestrial environments.

The objectives of using cyborg technologies can be various. Some of them can have restorative functions, for example, they can serve as replacements for lost organs and limbs. On the other hand, some can be transformative, enhancing the body for military, industrial, cosmetic, or entertainment purposes (Cavallaro 2000, 45). The notion of cyborg carries a certain contradiction, representing both a pure and impure body. While the cyborg body may be viewed as striving for perfection (for example by being stronger, relieved of biological needs, and immune to illnesses), the same traits may invoke fear or contempt. Since the cyborg is inherently a hybrid, it may appear to some as an impure being (Cavallaro 2000, 47).

In a way, the cyborg is a being which exceeds the world of binary opposites of the cultural and natural; the reality and appearance; or male and female (Cavallaro 2000, 47). The gender aspect is particularly relevant to the genre. While the early cyberpunk authors is the 1980s were rather conservative about gender and sexual politics, they were soon subjected to a feminist critique. Within feminist theories, the cyborg is linked with political identity, as it rejects dualism (Melzer 2020, 291). Yet their portrayals rarely challenged established stereotypes, as they still partially embody the human element. As Lavigne (2013, 83) remarks in relation to 1980s and 1990s cinema, "male cyborgs became invincible while female cyborgs were sexually exploited."

3.1.2 Artificial Intelligence

While the concept of cyborg merges the natural with the virtual, the machines in cyberpunk are able to gain autonomy without the human factor. Early on, artificial intelligence was understood in an anthropomorphic way, with a structure similar to the human nervous system. But the architecture of artificial intelligence is quite different. There is no privileged centre, which would govern the rest of the structure, but rather there are layers of separate units. Each of these units corresponds to specific behaviour of the system (Cavallaro 2000, 173). The shift from this anthropomorphic perspective allows a different approach. In the posthuman perspective, a living system is not defined by its organic body. According to McFarlane (2022, 24), autopoiesis defines life as "a pattern of organization that stands out against a background of randomness", which could also encompass artificial intelligence.

In cyberpunk fiction, artificial intelligence comes in many forms, but perhaps the most notable are robots, computers, or its representations in roaming the cyberspace. It can play various roles ranging from being a humble servant, to an entity controlling human society or acting as its nemesis; enslaving or trying to exterminate humanity. Compared to cyborgs, artificial intelligence lacks the human element. Its representations in the media; however, are often marked for gender and ascribed male or female behaviours (Lavigne 2013, 83).

3.2 Space

For cyberpunk narratives, the setting is substantial. Although they can take place in real space, virtual spaces, or their combinations; some characteristics of these spaces remain the same. The city and cyberspace bear some similarities in both their structure

and aesthetics. Both of them consist of a network of relationships. Furthermore, both can be represented by a grid-like maps. Despite this, there are some notable differences. The cities are material, but cyberspace is virtual. And while cyberspace is perceived through simple representations of data, the city offers much richer sensory stimuli (Cavallaro 2000, 133).

3.2.1 Cityscape

As the human body undergoes changes in the case of the cyborg, the city is also subjected to ceaseless transformation. The city is teeming with people, is full of vehicles, and packed with commodities. Since it can be represented by a map, it carries both concrete and abstract elements (Cavallaro 2000, 134). The technological aspect of the city is apparent in the context of high-tech cyberworld, yet there is also a punk element to it. In the city, the natural and the artificial blend or collapse into each other. The littered streets represent animalistic qualities, while the corporations which govern the world rarely display human qualities. Aside from the junk and debris, the streets are overlaid with graffiti (Heuser 2003, 32). The dark ambience of the city is typically illuminated by neon lights or advertising signs. The gloomy skies, which may be a result of the pollution, add to the noir atmosphere (Heuser 2003, 34). The spatial aspect leans towards borderlines and dark alleys, which mark a rift between the official corporate culture and street subcultures. The width of social differences is reflected in the effective disappearance of the nation-state and welfare, whereas the black market thrives (Heuser 2003, 56–7).

3.2.2 Cyberspace

The concept of cyberspace was first introduced in William Gibson's *Neuromancer*. (Cavallaro 2000, 14). It can be viewed as a transformation of data matrix into

47

a landscape in which narratives can take place. To immerse into the virtual environment, the human body needs to be modified in a certain way. When connected to the net, the human body is no longer an external medium, but is physically involved in the stream of data (Cavallaro 2000, 28–9). The term *space* may be misleading, as cyberspace is more conceptual rather than geographical and as such, it exists only potentially, through communication (Cavallaro 2000, 28–9). As a narrative device, the concept of cyberspace allows for inserting virtual worlds into already established ones, which enables sudden shifts between the locations and even perspectives of the characters (Heuser, 2003, 196).

3.3 World-view and Ideology

Besides its literary and scientific roots, cyberpunk fiction draws from many sociopolitical attitudes. And through their narratives, the authors actively shape them or at least take a stance towards them. Although there are multitudes of positions towards the world of booming technologies, this chapter will focus on three of them, which are quite often present in cyberpunk narratives.

3.3.1 Posthumanism and Transhumanism

Posthumanism and transhumanism are common philosophical foundations of cyberpunk narratives. Posthumanism emerged as a critique of humanism and challenged its definition of human. The cyborg (see Chapter 3.1.1) is an example of this approach, as it neither a human, nor a machine (Cole-Turner 2022, 1100). The central idea of transhumanism is that "human beings should be free to develop and use technology to enhance their capacities and to free themselves from the limits of their biology" (Cole-Turner 2022, 1101). This can be achieved through prosthesis, biotechnologies, or nanotechnologies. The aim is to improve human longevity, cognition, and possibly even

feelings (Grillmayr 2020, 273–4). In the *Shaper/Mechanist* series (1982–5) by Bruce Sterling, there is a rivalry between two factions, each pioneering a different form of transhumanism. The Mechanists use mechanical prostheses and information technologies, whereas the Shapers rely on biotechnology and genetic engineering. Yet both methods are approached critically and alternative attitudes exist in the series (Grillmayr 2020, 274).

Transhumanists usually believe that personal identity can be preserved in posthuman form. Cyberpunk authors tend to be more sceptical when it comes to transferring human identity and not even the concept of cyberspace is able to diminish the importance of the physical body (Grillmayr 2020, 276–7).

3.3.2 Neoliberalism

Cyberpunk settings in general tend to hint towards neoliberal values. They often operate with insecurity, which in the neoliberal context, is a positive condition of individual freedom, as it prompts individuals to maximize their capital. Although the denizens of cyberpunk worlds may often be under surveillance, they are still responsible for their personal choices (Alphin 2021, 27). In many ways, they think and act like neoliberal subjects, as "they assume all life risks, they understand freedom as unhindered choice, and they instrumentalize self-cultivation to maximize human capital" (Alphin 2021, 36).

3.3.3 Religion and Spirituality

Although cyberpunk might seem to take a rationalist approach towards technology, it is not uncommon to find a fusion of mythological and technological motifs in the narratives. These may be represented in cyberspace or may constitute the beliefs of

certain subcultures. Examples may include the appearance of voodoo in Gibson's *Count Zero* (1986) or presence of characters which turn their religious beliefs towards cyberspace (Cavallaro 2000, 52–3). In *Tea From an Empty Cup* (1998), Pat Cadigan attempts to describe racial and cultural differences, especially attitudes to technology and mythology, in approaching an alternative reality (Cavallaro 2000, 59). Furthermore, religion may play a role in narratives when characters or groups are taking a stance towards cybernetic enhancements (see Chapter 2.3.1).

4. Development and Release of *Cyberpunk 2077*

This chapter will briefly cover the development and release of this title, from the point of its announcement up to its release in 2020. It also presents several remarks to subsequent changes, which the game underwent with released patches.

4.1 Announcement and Development

In May 2012, the Polish studio CD Projekt Red announced they were developing the game. The studio was already known for their work on *The Witcher* series, a set of fantasy RPG games, which expanded the world of novels by Andrzej Sapkowski. With the first title released in 2007 and the second in 2011, the third instalment of the *Witcher* video game series was announced for 2015, while *Cyberpunk 2077* was intended to become the studio's next big title (Purchese 2016).

In 2013, approximately 50 people were involved in pre-production and planning of the game (Purchese 2016). The game was inspired by the *Cyberpunk* tabletop series by Mike Pondsmith (see Chapter 1.4.5) and Pondsmith actively participated in the game's development. Moreover, he started working on a new version of the tabletop game to be released alongside the video game (Weber 2017). The budget of the video game was estimated to have been 1.2 billion złoty, about 328 million dollars. The English language version took up 450 hours of dialogue, which was voiced by 125 actors, including the voice and face of Hollywood star Keanu Reeves (Osser 2020).

4.2 Trailers and Plot

The first trailer for the game was released 2013 and had a form of a teaser (*Cyberpunk 2077* 2013). The trailer portrayed a police intervention of a specialized

squad, called MAX-TAC, against a woman who lost control over her cybernetic implants and went on a rampage. Besides the background scenery of dark streets illuminated by neon signs, quite typical for cyberpunk settings, the trailer introduced the concept cyberpsychosis, known from the tabletop games (see Chapter 7.2.4).

In 2018, a new trailer was released during the Electronic Entertainment Expo (*Cyberpunk 2077* 2018). This trailer featured the game's protagonist named V for the first time. But it also depicted the setting of the game, the Night City. In the trailer, V commented on how merciless the city is, regardless of how people tend to view it. In 2019, once again during the Electronic Entertainment Expo, another trailer was released (*Cyberpunk 2077* 2019). This cinematic trailer was perhaps the most problematic, as it revealed a significant part of the game's story, including a plot twist and fates of certain characters. From 2019 until the game's launch in 2020, additional teasers were released on *Cyberpunk 2077* Youtube channel, featuring information about music, weapons, vehicles and other features which would appear in the game.

4.3 Release and Availability

Although the game was originally announced to be released on April 16, 2020 (Robertson 2019), the launch was postponed several times, until the date settled on December 10, 2021 (Chalk 2020). Furthermore, CD Projekt CEO Adam Kiciński admitted that the development team was put on crunch hours, a compulsory overtime during the game development (Hall 2020). In addition to the delays and crunch, the launch of the game was controversial, as many bugs (disruptive functionalities not intended by the designers) were present in the game. This was especially prominent on the Xbox One and PlayStation 4 consoles, which led PlayStation to withdraw the game

from the PlayStation Store, and to provide refunds to those who had purchased the game there (Carpenter 2020). Despite this, 13 million copies of the game were sold by the end of December (CD Projekt Red, 2020). As of September 2022, the company reported 20 million copies of the game had been sold (Koch 2022).

4.4 Patches and Hotfixes

Since the players and reviewers were not satisfied with the final product, the studio started working on reparations. During December 2020, three hotfixes were issued. Hotfix 1.04 resolved issues with several quests and improved game stability (CD Projekt Red 2020). Hotfixes 1.05 and 1.06 followed with fixes of more issues, including UI (CD Projekt Red 2020). The first patch was released on 22 January, 2021. It focused on stability improvements and furthermore fixed issues when certain NPCs would disappear or not communicate with the player (CD Projekt Red 2021). Patch 1.2, released on March 29, 2021, fixed an even larger number of issues than the previous one. One of the most criticized features of the game was the police system, so the spawn radius for police forces was increased (CD Projekt Red 2021). Patch 1.3 from August 18, 2021 was the first one to add new content to the game, such as clothes and vehicles; in addition to balancing the game in terms of perks and crafting systems (CD Projekt Red 2021). Patch 1.5 brought numerous fixes, but also contained a next-generation update, which allowed the game to be run more efficiently on the new generation of consoles: Xbox Series X/S and PlayStation 5. Furthermore, it brought additional content for all platforms: alternative apartments available for rent, a feature to change the main character's appearance during the progression through the game (which was impossible up to that point), and a set of new weapons and their customizations. Other changes of this patch included improvements in AI behaviour, crowd density, and vehicle performance. It also

modified the game's economy, combat system, and available cyberware. In addition, the perk system was rebalanced and some of the perks replaced. To be able to adapt to the changes, the players had their perk points restored (CD Projekt Red, 2022). Although Patch 1.6, released on September 6, 2022 featured additional gameplay, UI, and mission changes; it was primarily focused on new content. This patch provided a wardrobe, a function which allowed players to use different outfit appearances without changing their stats. Furthermore, it added three new missions and several new weapons. In addition, this patch allowed cross-progression, which enabled players to load their saves on different platforms. Lastly, the patch added an arcade mini-game and several secrets related to anime series *Cyberpunk: Edgerunners* (2022), which was released on Netflix and takes place approximately a year before the events of the game (CD Projekt Red 2022). Overall, the patches focused on removing bugs, improving several aspects of the game and adding some new features, while the developer provided a clear overview of the changes. No changes to the main story of the game have been made.

5. Classifying the Game

When classifying a video game, a multitude of aspects can be considered. In Chapter 1.2.4, some specific approaches towards cyberpunk games were introduced. But these are not usually utilized when considering video games from the general perspective. Thus, this chapter will present a rather conventional approach to define *Cyberpunk 2077* as a video game, while the aforementioned thematic approaches to cyberpunk games will be utilized in the following chapters.

5.1 Platform and Controls

In the context of video games, a platform is understood as " a computing system of any sort upon which further computing development can be done" (Schweizer 2014, 41). Conventionally, the platform refers to the hardware and software that run the game. The platforms can be classified based on used microprocessors, graphic processors, storage media, sound processors, controllers, middleware, and application programming interfaces (Schweizer 2014, 43–5). A software that is able to run on a variety of dissimilar hardware is called cross-platform. Such is the case of *Cyberpunk 2077*, which was available for personal computers with Microsoft Windows, Xbox One, and PlayStation 4 upon its launch in 2020. On the day of its release, *Cyberpunk 2077* was also accessible through cloud gaming service Google Stadia (Peters 2020). As was mentioned in Chapter 4.4, since Patch 1.5 the game is also available on Xbox Series X/S and PlayStation 5 consoles.

The supported controllers are another defining feature of video games, as they represent the player's input, which allows for interactivity. Since the players need to touch or hold the controllers, they are fused with the game both psychologically and

physically (Murphy 2014, 19). In *Cyberpunk 2077*, controls correspond to those typical for the platform. This means that on consoles, the game is operated by the console controllers; while on the computer, the player uses the mouse and keyboard. It is possible to use controllers on PC and since Patch 1.6, keyboard and mouse support is also available for consoles. In this respect, the game controls are rather conventional.

5.2 Genre and Perspective

In video games, genre classification is based on the manner in which the game is played, rather than its narrative structure or visual elements. The most common genres include action, adventure, role-playing, shooting, simulation, sport, and strategy games. While each category has its specifics, *Cyberpunk 2077* overlaps many of these categories. Since it is based on a tabletop RPG game, the game carries many RPG elements. In fact, a significant number of RPG video games was derived tabletop games (Burn 2014, 242). What defines RPGs is that the players are given a choice of the avatar they are going to play as. As they progress through the game, they acquire experience points which allows them to acquire specialist skills (Burn 2014, 242). This is true for *Cyberpunk 2077* as the player gains experience points to reach new levels. Each level awards the player with a perk point, which can be used to improve their character's attributes. But the player is not given complete freedom when choosing the avatar. The game's protagonist is a mercenary called V and the player can only edit V's physical appearance and choose one of the three background stories for their avatar, which are called lifepaths. Although lifepaths change some elements, the majority of the game remains the same. This means the player's role is largely prescribed, although the player can make some additional decisions during the course of the narrative. Besides RPG elements, the game often relies on action. Action video games form a broad category

into which many 3D and even 2D games can belong. What distinguishes action games from other genres is the reliance on the player's sensori-motor skills, such as hand-eye coordination and reaction time, when facing the game's challenges (Arsenault 2014, 225). Furthermore, action games rely on short-term action sequences and standardized repertoires of actions (Arsenault 2014, 228). Recently; however, the action game category began to be replaced by an even broader bracket of action-adventure games, which combine the aforementioned action elements with exploration and focus on story. This combination is especially popular since it allows to blend repetitive action sequences with the progression logic of adventure games (Arsenault 2014, 229–30). *Cyberpunk 2077* is able to fit in both of these categories, as it features repetitive action sequences and puzzles, but also story driven narratives of the main and side missions. Since the simulation, sport, and strategy elements are not prominent in the game, the last primary category to examine are shooting games. Shooting is a mechanic present in many types of games, yet for a game to be classified as a shooting game, shooting has to be an integral core mechanic of the game (Voorhees 2014, 249). This is not entirely the case of *Cyberpunk 2077*, as there are some shooting sequences, but they are scarce, mainly limited to a few shooting competitions and car chases. In most of the fights, shooting is possible, but enemies can be eliminated by other ways, such as melee combat, stealth takedowns, or hacking. In addition, many fights can be avoided altogether by sneaking past guards and disabling surveillance systems. Thus *Cyberpunk 2077* cannot be strictly considered a shooting game. As its core mechanics combine several aspects, the most most approximate classification would define *Cyberpunk 2077* as either an action RPG or action adventure with RPG elements. This classification brings *Cyberpunk 2077* close to the hybrid gameplay of the *Deus Ex* series (see Chapter

2.3.1), with which it also shares the cyberpunk setting. Furthermore, both games feature the possibility of solving situations by various means, be it through combat, technology, or diplomacy.

Chapters 1.4.4 and 2 have described how cyberpunk games often utilize first or third person perspective to place focus on their individual protagonists. *Cyberpunk 2077* is no exception in this respect. Yet it is important to distinguish between the narrative perspective and the view perspective. The narrative perspective refers to the filter through which the story is told. This perspective can be the first person, second person, third person, or omniscient. On the other hand, the view perspective refers to how the player sees the game world. It may include the first person, second person, or third person perspectives. For clarification, these perspectives are described in the table below (Sharp 2014, 109–12).

Table 1: Narrative Perspective versus View Perspective

Narrative perspective		View perspective	
First person	The narrative is told from the perspective of one of the characters in the story world.	First person	Seeing the game world through the character's eyes.
Second person	The player is placed in the story through the use of the *you*.	Second person	Seeing the player's avatar through another character's eyes.
Third person	The narrative is presented by someone outside the story, who observes or knows about the happenings in the storyworld.	Third person	Seeing the character in the context of the play space. There are several ways of achieving this: over the shoulder view, rear view, axonometric, top-down, and front view.
Omniscient	A variation of the third person perspective. The narrator knows everything about the storyworld and yet still resides within it.		

58

The gameplay of *Cyberpunk 2077* is predominantly based on the first person in both the narrative and view perspectives. The story is told by the protagonist V and partially Johnny Silverhand. Accordingly, the player observes the world through the eyes of these two characters. There are some exceptions. For example, when V hacks a camera or observes a BD (see Chapter 6.2.3), the view perspective shifts to the second or third person, although in such instances the narrative structure effectively remains in first person. The majority of gameplay and the cutscenes; however, take place in first person view. The only exception to this are final cutscenes at the end of the story (see Chapter 5.3 and Table 3). At the E3 conference in 2018, Kyle Rowley from CD Projekt Red stated: "to really immerse the player in that world we decided the first-person perspective was the best way to do it" (Faller 2018). On one hand, immersion benefits the most from the first person perspective. On the other hand, the first person perspective causes several problems. First of them is a reduced field of vision on 2D screens. In third person perspective, part of the view is blocked by the character, but peripheral vision is extended. This might be the reason, why in *Cyberpunk 2077* the player is allowed to switch to third person perspective when driving vehicles. Yet there is an advantage to first view perspective for the developers. If the game relies solely on first person perspective, there is no need to animate the main character's facial expressions or to animate the avatar's movements precisely, as only some parts of their body can be seen. Furthermore, there is a slight contradiction between some of the RPG elements. For example, editing the avatar's appearance is in contrast with the fact the player is not able to see the character for the majority of the game. The players are able to see V's face and attire only in the inventory interface, in mirrors, when driving vehicles, and in the final cutscene; which renders the option of appearance customization of the character at the

59

beginning of the game quite useless. To summarize, first person perspective enhances immersion, but is also in contrast with some of the RPG elements of the game, which possess immersive qualities of their own.

5.3 Levels and Progression

A level can be understood as "a unit of place (and time) in the progression of a game" (Picard 2014, 99). Each level may differ from the previous by various characteristics. Notable examples include different environment, typography, enemies, objectives, or difficulty. Level design; however, heavily depends on the genre of the game. In the case of action adventure games, the purpose of the level is to open new areas for the player to discover and to open new narratively separated chapters. On the other hand, in RPGs, the term *level* frequently refers to the amount of strength and experience that that character possesses (Picard 2014, 101).

Cyberpunk 2077 combines both of these systems. The character's level can be increased by gaining experience points, which are awarded for eliminating enemies and completing missions. The maximum level is fifty. During the progression through the game, each level of the character grants the player an attribute point, which can be used to increase one of the character's attributes: Body, Reflexes, Technical Ability, Intelligence, and Cool. The player is also allowed to allocate up to 22 points into the attributes at the start of the game, although the minimum number of points for each attribute is 3. Every attribute improves different stats of the character, such as health, stamina, resistances, or hacking capabilities. Furthermore, increasing attributes gives the player access to perks from its skill trees. The maximum level of the skills is twenty, which corresponds to the maximum of the points the player can invest into each

attribute. The skills focus mainly on melee or ranged combat using specific types of weapons, stealth, crafting items, and hacking. Each skill requires its own experience to level up. This skill experience is gained by using the skills in combat, to overcome obstacles, or other purposes they are intended for. With more attribute points and skill experience, the character becomes more proficient in corresponding activities.

Table 2: Overview of Skills and Abilities in Cyberpunk 2077

Attributes	increase	**Skills**	are used for
Body	Health, stamina, and melee damage	Athletics	Physical activities
		Annihilation	Heavy weaponry
		Street Brawler	Blunt weapons
Reflexes	Mitigation chance (reducing incoming damage) and chance to deal critical damage	Assault	Bladed weapons
		Handguns	Pistols and Revolvers
		Blades	Bladed weapons
Technical Ability	Armour and number of items available for crafting	Crafting	Creating new items
		Engineering	Smart weapons, Tech weapons, or grenades; manipulating with technical devices
Intelligence	Efficiency of quickhacks	Breach Protocol	Breaching protocol of enemies and breaking into access points
		Quickhacking	Using quickhacks
Cool	Critical chance, resistances, and stealth efficiency	Stealth	Performing stealth takedowns, remaining undetected
		Cold Blood	Temporarily gaining increased stats for defeating enemies

Figure 1: The Attributes

The combination of attributes and skills represents a crucial role-playing element, as it allows the player to specialize the character in certain activities. This specialization is critical for completing missions, especially with higher difficulties of the game.

So far, this chapter has covered the term level only in relation to the player's avatar. Now it will deal with the concept of level as a spatial and narrative structure of the game. While the game does not use the term level to reflect this, the progression is divided into five parts: the prologue, three acts, and the epilogue.

In the prologue, the player is not able to access the open world of the game and fulfils a set of three missions. The first mission is based on a lifepath the player chose in when creating the character. The three lifepaths: nomad, street kid, and corpo; refer to V's origins. Regardless of the player's choice, V becomes a mercenary who provides services to clients in the Night City. The second mission called *Practice Makes Perfect* is optional and serves as a tutorial to the game. In virtual reality, V may undergo four combat modules, which teach the player the basic methods of fulfilling objectives in the

game. Completing the third mission *The Rescue*, which revolves around retrieving a mission person, concludes the prologue.

Act 1 is composed of 5 main missions, which are compulsory for the player to complete to progress further. The story of these missions consists of preparation of a heist to steal an experimental biochip. The player is also able to roam freely in the area of Watson, one of the six districts of Night City. In this area, the player may complete various side missions (see Chapter 6.2.2). This act ends with the final mission *The Heist*. After this mission, there is a short interlude played from the perspective of Johnny Silverhand (*Cyberpunk 2077* 2020).

Act 2 follows the aftermath of the heist. After V was shot and saved by the biochip, there is a risk the biochip will overwrite his personality and memories with those of Johnny Silverhand, whose personality construct is stored on the chip. The main missions of this act focus on V's endeavour to remove the biochip, while they also form a relationship with Silverhand through interacting with his engram and reliving his memories. In Act 2, the player is able to explore the open-world of the game, as well as finish many side missions. During this act, the main missions split into two branches. One of them investigates the disappearance of Evelyn Parker, who commissioned the heist. This investigation leads V to Voodoo Boys, a secretive gang, which had intended to use the biochip to get in contact with Alt Cunningham, a former netrunner, whose consciousness currently inhabits the Net. In the second branch, V tracks Andrew Hellman, a scientist who participated in the development of the biochip. Subsequently, V attempts to contact Hanako Arasaka to reveal the truth about her father's death, which he witnessed during the heist, in hopes of receiving help in removing the biochip. These

two storylines converge in a mission called *Nocturne OP55N1*, where the player is to make a decision which will affect the ending of the story (*Cyberpunk 2077* 2020).

Act 3 starts when the player initiates the mission *Nocturne OP55N1*. After starting this mission, the player is no longer able to access the open world of the game and cannot complete side missions. Instead, the player is faced with the final decision about V's fate. Some choices are available only if the player has completed specific side missions. An option to ask Hanako Arasaka to help V is always available. In the end, the Arasaka Corporation is unable to cure V, and gives them a choice to either become an engram or to spend their last months in Night City (*Cyberpunk 2077* 2020).

There are; however, alternatives. If the player completed enough missions with the side character Panam Palmer, V may ask her for help. The third option is to allow Johnny Silverhand to take control over V's body and attack Arasaka headquarters with Rogue Amendiares, a common acquaintance of both V and Johnny. With the help of either Panam or Rogue; V or Johnny, respectively, are able to reach Mikoshi, an Arasaka data fortress, and ask Alt Cunningham for help. Cunningham is; however, unable to help V from having their personality erased by the biochip and offers them to stay in cyberspace, allowing Johnny Silverhand to take permanent control of their body. If the player refuses this option, Johnny stays in cyberspace and V returns to their body (*Cyberpunk 2077* 2020).

Alternatively, the player may choose not ask anyone for help and instead, V commits suicide. In addition, there is a secret ending in which Johnny attacks Arasaka headquarters alone in V's body. Except for the suicide, which concludes the game, each of these paths includes additional choices. These can result in four endings described in the table below (*Cyberpunk 2077* 2020).

Table 3: The Four Main Endings of Cyberpunk 2077

Name	Outcome	Prerequisites
The Devil	The Arasaka Corporation tries to remove the biochip from V's head, but the damage is irreversible. V either chooses to have their consciousness uploaded to Mikoshi or to spend their last months in Night City.	All the main missions of Act 2 have to be completed to access this ending. The player has to choose to trust Hanako at the start of Act 3.
The Sun	V becomes a renowned mercenary and owner of the legendary club Afterlife. Yet their fate is uncertain in spite of the damage caused by the biochip.	In addition to the main missions of Act 2, the player must also complete side missions for Rogue. During Act 3 the player must choose that V will keep the body.
The Star	V leaves Night City with the nomad clan Aldecaldos. V's fate remains uncertain, although the Aldecaldos claim they know someone who could help.	In addition to the main missions of Act 2, the player must also complete side missions for Panam. During Act 3, the player must choose that V will keep the body.
Temperance	Johnny Silverhand takes permanent control of V's body, while V's consciousness remains in cyberspace.	In addition to the main missions in Act 2, the player must also complete side missions for either Panam or Rogue. During Act 3, the player must choose that Johnny will keep V's body.

The story of the game concludes with an epilogue. There are four main versions of the epilogue based on the player's decisions during Act 3. Each epilogue consists of one short mission and final cutscene, with the exception of the suicide ending, which includes only a short cinematic sequence, where the camera zooms out before a gunshot is heard by the player. The final cutscene is followed by the credits. As the credits roll, V receives several voicemails from the characters of the game. Which characters will

contact V and the contents of their message message depend on specific missions V completed and choices the player made during those missions (*Cyberpunk 2077* 2020).

As can be inferred from this description, player choice is crucial for the course of the narrative. Despite this fact, there are only several choices which impact the game's ending. On the other hand, when undertaking individual missions, many choices have immediate outcomes, such as additional rewards for the player. In terms of decision making, the concept of decision space is particularly relevant in video game theory. Decision space refers to how many decision points are available in the game. There is a number of factors which influence how the player approaches the game's decision space. One of them is the distinction between perfect and imperfect information. In games with perfect information, the player has all information about the game and its state. In games with imperfect information; however, the player has only some information (Sharp 2014, 96). In *Cyberpunk 2077*, the player can use a map for navigation and a scanner to learn about V's surroundings and enemies. Despite this, many interactions in the game are so complex that the player has to make a decision without sufficient information.

Another factor related to decision making in games is the difference between games of progression and games of emergence. In games of progression, the player moves along a set path. In games of emergence, the player moves through the game in more open-ended ways and the player's actions influence how the story of the game unfolds (Sharp 2014, 97). *Cyberpunk 2077* represents a game of emergence, as it allows the player to solve many missions in various ways. Depending on the mission, examples could include combat, stealth, or persuasion. Some choices; however, are dependent on

V's attributes. For instance, in the mission *Epistrophy*, V is tasked to deal with divergent AIs. At the end of the quest, the player may choose to either liberate them or to reset the system to restore the original program. If V has 10 or more points in the Intelligence attribute, another option is possible — merging the AIs together. Similarly, if V has more points the Body attribute, facing opponents in melee combat will be significantly easier for the player in other missions, such as *Beat on the Brat* side missions, where the player has to fight in a series of boxing matches. Regardless of the attribute point allocation, at least two choices are usually available for the player during the most missions. This is exemplified in the mission *I Don't Wanna Hear It*. In this mission, V needs to attend a concert. The player can choose to buy the tickets, steal them, or look for another way in. While the first two options are known to the player, the eventuality has to be discovered, which is a trait of imperfect information games as well.

To summarize, *Cyberpunk 2077* features two aspects of progression. First of them is increasing the level of the main character and its attributes. The second is progressing through the game's narrative. Both of these aspects are complementary, as completing missions rewards the player with experience points, while higher stats allow the player to complete missions in various ways. The player is allowed to allocate attribute points freely and complete missions in various ways. Yet the missions must be completed in a designated order, which follows the game's narrative structure divided into three acts.

5.4 Violence and Death

Violence is a common aspect of many human games. Video games are not different in this respect, although the amount and kind of violence depends on the game's genre and actions the player is allowed to perform in the game (Krapp 2014,

345). This subjected many games, especially first person shooters, to a considerable amount of criticism. Despite this, it is not clear if violent games incite violent behaviour. The results may vary based on observed period and research in this field is further complicated by depictions violence in other media (Cunningham et al. 2016, 1261). The danger of video games lies rather in excessive play at the expense of other social or physical activities (Krapp 2014, 349). When playing a video game, the player usually feels little empathy for non-human figures of the game, especially if they serve merely as obstacles for the player to overcome. In *Cyberpunk 2077*, violence is ubiquitous, as gangs fight in the streets and many characters display violent tendencies. Despite this, the player is able reject violent solutions of many situations. In some missions, fighting may be substituted by diplomacy or persuasion; and in others, fighting may be avoided altogether. In many missions, V is tasked with eliminating a certain person, yet the player may choose to make them unconscious by using non-lethal weapons or quickhacks, instead of killing them. Even in the final confrontation with the game's final boss, Adam Smasher, the player may choose to spare his life. Although violence is an integral part of the game, the player is able to actively influence its amount.

In modern action games, representations of death and killing are often graphic and photorealistic. Death of certain characters may influence the game's storyline. In relation to the player's avatar, it has a didactic function, but it does not generally occur on the narrative level of the game, as the player is able to re-enter and replay the game (Wenz 2014, 313). In *Cyberpunk 2077*, the player's progress is restored to the point of the last game save. The story thus continues as if nothing happened. According to Wenz (2014, 314), despite adding to the experience of a game as a world, death of the avatar can be "a disruptive factor for the player's immersion". This is due to the fact, that the player's

identification with the avatar breaks down at the moment of its death, as it is the player who gets punished by having to go back to the last save point, losing points or items. *Cyberpunk 2077* attempts to mitigate this loss of immersion in several ways. Firstly, automatic quicksaves back up the player's progression frequently. Secondly, there are in-game perks and items, which allow the player to regain health after being damaged, or even reviving the player after losing all health points.

6. Narrative

In video games, a structuralist approach to a game's narrative is known as narratology. In the broadest sense, two types of narrativity can be distinguished. First of them, extrinsic narrativity, deals with the game's narrative content. The other, intrinsic narrativity, is defined by the means of expression (Arsenault 2014, 479). As for *Cyberpunk 2077*, the structure of the game's story was outlined in Chapter 5.3 and some particular elements will be examined in Chapter 7. This chapter will thus deal with the narrative dynamics of the game as well as the main narrative strategies implemented in the game.

6.1 Narrative Dynamics

What differentiates narratives in video games from those of classical texts, such as novels, is that in video games, the narratives are produced through a collaboration between the machine and the user (Ryan 2009, 43). As a result, video games entail two aspects: narrativity and interactivity. Based on this two-dimensionality, categories of narrative games and playable stories can be distinguished. In narrative games, narrative meaning is subordinated to the player's actions. Conversely, in playable stories, the player's actions are subordinated to narrative meaning. This means the story is produced by the gameplay (Ryan 2009, 45–6). *Cyberpunk 2077* can be considered a narrative game. Through the gameplay, the player is able to beat the game and conclude the story. There is a certain goal for the main character to achieve set by the game and the player cannot complete the game without pursuing it. Despite this, the player is able to shape the narrative to a certain extent, as was described in Chapter 5.3.

When analysing interactive narratives, Ryan (2009, 51) establishes two broad categories: bottom-up systems and top-down systems. In bottom-up systems, the narrative emerges as the player interacts with the program, while in top-down systems, player's progression leads to a fixed destination, although the system may offer branching points (Ryan 2009, 52). Both systems; however, are not mutually exclusive, as one system may utilize elements from the other. Despite the fact that the player is often given a choice in *Cyberpunk 2077*, all of these choices are pre-scripted and lead designated ends. As a result, the game's narrative can be classified as a top-down system.

6.2 Narrative Immersion

Regardless of the narrative system of the game, the player is actively rewarded by participating in the game. Narrative pleasure achieved in this way stems from immersion into the fictional world. Ryan (2009, 54–6) differentiates between four types of immersion, which relate to different facets of the storyworld. These are spatial, temporal, emotional, and epistemic immersion. Spatial immersion is achieved by navigating through and exploring the game's world. Epistemic immersion stems from the player's curiosity, as the player investigates mysteries in the game. Temporal immersion is similar to epistemic, but focuses on events in the future instead of those in the past. The player follows the story to discover what will happen next and whether their expectations will actualize in the game. Lastly, the emotional immersion arises from interpersonal relations between the player and computer-operated characters. Although many characters in video games play only functional roles, such as helping or hindering the players, some characters may generate player's interest and empathy through their

own personality. In *Cyberpunk 2077*, all four types of immersion are present. These types of immersion are accessed through the game's missions.

6.2.1 Spatial Immersion

Spatial immersion is especially prominent in video games based on three-dimensional graphic engines, which allow for a kinetic experience of the player travelling from one point to another (Ryan 2009, 57). *Cyberpunk 2077* takes place in Night City, which is composed of six districts; and Badlands, an arid region of vast plains located east of the city. Each district of Night City has slightly different aesthetics (see Chapter 7.1) and is inhabited by different populations and gangs. Once Act 1 is concluded (see Chapter 5.3), the player is able to roam freely, exploring the urban setting of Night City and its surroundings. For transportation, the player can use vehicles, such as cars and motorbikes. These can be either purchased or obtained as a reward for completing missions. The performance and controls of each vehicle vary slightly based on its model. Additionally, the player may use fast travel points known as dataterms. After discovering a dataterm, the player can use it to transport to any other previously discovered one. These give the player the convenience of traversing greater distances almost instantly.

The premise of open world game is in the case of *Cyberpunk 2077*; however, limited in several ways. Firstly, the player is able to access only a minor portion of the city's buildings, as nearly all doors and entrances are locked. Secondly, at the edges of the game world, the player is stopped by invisible walls, teleported back, or blocked without any explanation (Maj 2022, 55–61). While this may be disruptive for the spatial aspect of immersion, the narrative immersion benefits from this, since it forces the player to follow the game's missions.

6.2.2 Temporal Immersion

Temporal immersion arises from the suspense, which is created by an intense desire to know what will happen in the game's story (Ryan 2009, 57). In *Cyberpunk 2077*, several types of missions appear: Main jobs, Side jobs, Gigs, and NCPD Scanner Hustles. Each of these missions relates to temporal immersion differently. Main jobs are missions required to complete the game. These follow the game's main storyline and ultimately reveal V's fate. Completing Side Jobs is not required to complete the game, but they often encompass engaging subplots and side characters from the main missions, which could stimulate the player's interest to complete them. Gigs and NCPD Scanner Hustles carry the least narrative elements. Their primary purpose is to allow players to earn money or items through repetitive combat sequences. Although there is a story behind each mission, these are generally independent of the main story line.

6.2.3 Epistemic Immersion

Epistemic immersion draws from the player's curiosity when solving mysteries (Ryan, 2007, 55). The capacity for this must be included both in the game's narrative and its game mechanics (such as picking up objects or extracting information). In *Cyberpunk 2077*, a significant number of missions includes investigations. In some cases, the player can use a scanner built in V's optical implants to look for clues; in others, information can be obtained from dialogues with NPCs.

The functions of the scanner in *Cyberpunk 2077* are to a certain degree similar to Aiden Pearce's smartphone in *Watch Dogs*, as it allows the player to see certain elements of the game's data world (Ng and Macdonald 2018, 179). In *Watch Dogs*, Pearce is able to see the data collected from citizen's real-life activities stored by the

ctOS, whereas in *Cyberpunk 2077*, the player can scan NPCs to see their cybernetics enhancements and their criminal records from a police database.

Figure 2: Using the Scanner to Investigate

Furthermore, the game utilizes a special narrative device, known as braindance editing. In the world of *Cyberpunk*, braindance (abbreviated as BD) is an entertainment device based on streaming digital recording of a person's experience into the neural system of the viewer (Batylda 2020, 62). This means the viewer is re-living the particular scene and feeling the original person's emotions. This is a unique way of engaging the player in another character's perspective. The recordings need to be edited before being used in BD. In several missions, such as *The Information* or *The Hunt*, V enters the BD in editing mode, to search parts of persons' memories for clues. In editing mode, there are three layers: visual, audio, and thermal (see Figure 3); among which can the player switch to search for respective clues.

Figure 3: The Thermal Layer of the BD Editor

6.2.4 Emotional Immersion

Although there are many classifications of immersion, emotional immersion is among the most significant ones. Despite the fact that individual differences exist, emotional immersion is preferred to spatial immersion by a significant number of players (Zhang et al. 2017, 7). While spatial immersion relies heavily on the representation of virtual environment, which is severely limited on 2D screens, emotional immersion is free of such hindrances, as it may stem from the narrative itself (Zhang et al. 2017, 1).

In real life, a person experiences two main types of emotions: emotions towards self and emotions towards others through empathy. Narratives are often able to generate emotions towards others, although in video games, the emotions the player experiences are predominantly self-directed ones, as they reflect their success or interest in playing the game (Ryan 2007, 56). Despite this, empathy towards the game's characters can still

be established, as the players may develop attachments to the game's characters. In *Cyberpunk 2077,* Act 1 culminates in a mission called *The Heist,* where V's best friend dies and V is subsequently betrayed by Dexter DeShawn, a fixer who assigned them the job. During Act 2, the player may affect how V develops a relationship with Johnny Silverhand, although the biochip known as the Relic, on which is a copy of Silverhand consciousness stored, threatens V's life. As V and Silverhand share the same body, they may either become hostile toward each other or develop mutual understanding, allowing the player to control V from Silverhand's perspective during some missions. Furthermore the player is able to decide whether V will enter romances with certain characters. These romances can be accessed through completing certain side jobs and include intimate scenes. Based on which combination of V's gender and body type they selected during character creation, the player is able to enter a relationship with one or two characters out of the total four characters, which may be romanced in the game.

In terms of animation of the characters, particularly the quality of facial animations can influence trust and empathy the player has with the character (Edwards et al. 2020, 1). Using JALI software, the developers of *Cyberpunk 2077* were able to incorporate facial animations to adjust to specific speakers, even in different language versions of the game (Edwards et al. 2020, 2). This is another feature which allows the player to build emotions towards the characters in the game.

7. Genre Analysis

After classifying *Cyberpunk 2077* in terms of certain background, gameplay, and cultural characteristics in chapters 4 to 6, the focus of this chapter will shift towards defining the game within the context and categories of cyberpunk media, alluding to the various works described in chapters 1 to 3. This chapter will adopt the approaches outlined in Chapter 1.4.4. Although this thesis examines which elements of the cyberpunk genre can be observed in the video game and what role do they play in its narrative, it should be noted that due to its popularity, the game also has a major influence on how people outside the sci-fi community perceive the genre (Sun and Zhou 2021, 642).

7.1 Aesthetic Approach

Frelik (2018, 185) notes that there have not been any significant changes to cyberpunk aesthetics in video games since the 1990s. The majority of the games, along with other cyberpunk media, still relies on the same visual signifiers since the release of the film *Blade Runner* in 1982, which featured a vision of a near-future nocturnal metropolis decorated with neon lights. The primary setting of *Cyberpunk 2077*, Night City, is no different in this respect, although it is most prominent in the centre of the city, since each district has its distinct look. Unusually for cyberpunk settings, the player is also able to enter natural spaces, such as Badlands. Although in comparison to *Blade Runner* films or the video game, natural light is present in Night City during daytime, it's still much darker than the white cityscape of *Mirror's Edge* (see Chapter 2.3). Furthermore, many visual aspects highlighted in Chapter 3.2.1 are also present in the game: littered and graffiti decorated streets, dark alleys, and architecture reflecting the

differences between corporate culture and street subcultures. Manifestations of light are a crucial visual element, as in many other cyberpunk games (Frelik 2018, 93), such as the *Deus Ex* series.

Figure 4: View of Westbrook District at Night

There is one particular aspect of cyberpunk game aesthetics, which relates to how data and cyberspace are depicted. The earliest cinematic depiction came from *TRON* in 1982. In the film, cyberspace is depicted as a digital world of abstract shapes and vibrant neon colours. The first video game to portray cyberspace was *Neuromancer* (Interplay, 1988), which attempted to transform Gibson's novel into playable experience. Its grid based aesthetics were followed by many other games. In addition to the grid-like structure of cyberspace, cyberpunk games, such as *Shadowrun* or *System Shock,* often used colours blue and red, as their contrast could convey various meanings, for example danger or proximity. Finally, in terms of shape, cyberpunk games usually utilize smooth and sharp geometric shapes, as well as representations of real world objects (Johnson

2018, 140–52). In *Cyberpunk 2077*, the player enters cyberspace only briefly during two missions. It is represented by flickering particles, which form a grid. Data fortresses (representations of computer systems) have neon blue colour, while representations of people, AI, and Blackwall (a representation of firewall program) are red. The data fortresses have rectangular shapes, whereas the people in cyberspace are represented by avatars shaped akin to their real appearance. The only AI encountered in the game's cyberspace, Alt Cunningham, bears its former human shape. The Blackwall is composed of strips of data which represent an actual wall. Thus, *Cyberpunk 2077* adheres to representations of cyberspace, which were established in cyberpunk video game in the 1980s and 1990s, since it uses the typical wireframe grid, familiar shapes and colours.

Figure 5: The Cyberspace

Despite the small amount of time the player spends in cyberspace, the flow data may also be partially observed when the player uses a scanner, albeit this function is limited only to the occasions when the V is being hacked by enemy netrunners. The flow

of data is then represented by a set of orange dotted lines (see Figure 6) leading from the attacker or its proxy towards the player (*Cyberpunk 2077* 2020).

Figure 6: Being Hacked by an Enemy

One other aesthetic aspect, no less significant in cyberpunk narratives, is fashion. In works of William Gibson, stylistic contrast is present in clothing styles of the characters (Cavallaro 2000, 193). Dark, sharp, and tightly fit minimalistic clothes often stand in contrast to extravagant, colourful, and oversized outfits. Focus on outfits can be further observed in *The Matrix* series or the *Deus Ex* video game series. This makes the characters instantly identifiable. In *Cyberpunk 2077*, four fashion styles are established: Kitsch, Entropism, Neo-Kitch and Neo-militarism (Currit 2020). Each of these contrasting styles is used by different social classes, gangs and factions in the game, although the player can combine particular clothing types freely.

Overall, *Cyberpunk 2077* aesthetics fit well within the established visual aspects of the genre. The urban design, representations of cyberspace and fashion styles are similar

to those already present in other cyberpunk media. It should be emphasised, that *Cyberpunk 2077* does not bring anything new to cyberpunk aesthetics, adhering rather strictly to visual signifiers set by its predecessors. Despite this, some of these signifiers exceed their visual role and play a part in the narrative. For example, advertisements often refer to actual game objects, locations, or characters; instead of being purely decorative. Another example includes nearly omnipresent television screens, which in addition to short clips and advertisements feature news reports related to events in the game and as such play a supportive role in the game's narrative.

Figure 7: Advertisements

7.2 Historical Approach

Cyberpunk video games include a long series of diverse titles ranging from game adaptations of other cyberpunk media to original game entries. Both categories; however, encompass games with various play styles (Frelik 2020, 185–6). Since *Cyberpunk 2077* is based on tabletop role-playing game *Cyberpunk: The Roleplaying*

Game of the Dark Future, this chapter will examine the video game's connection to its tabletop predecessors, as the game's classification within video game categories was described in Chapter 5.2.

7.2.1 Role Playing Elements

The role-playing game of *Cyberpunk* has four instalments, but since the last edition was released alongside the video game, this chapter will primarily focus on the previous three, which were partially described in Chapter 1.4.5. First edition of the game takes place in 2013, second in 2020 and third in the 2030s (Carbonell 2018, 201–2). As the video game is set in 2077, it pushes the story considerably further than previous editions of the tabletop game. Since the first edition, embracing cybernetic implants has been one of the most important aspects of the game (Carbonell 2018, 201–2). The tabletop game is played in groups, which include the game master and at least one player, although play in groups of three to five players are preferable. Though a maximum number of players is not set, very large groups would complicate management of the game. While in the tabletop game, the process of creation of a custom character and the choice of its class and background is crucial, in the video game, the player is given a character, and is able to only customize their appearance and attributes. In *Cyberpunk 2013* and *Cyberpunk 2020*, the player is able to choose from several classes when creating a character. In the video game, the player does not get to choose the avatar's class and has only limited options for defining their background. Although there are three lifepaths to choose from, V becomes a mercenary regardless of those. In the tabletop versions, the concept of lifepaths is also present, but is much less limiting, as the game's rulebook offers only ideas from which the player can draw when generating their own character's backstory and personality (Atteberry and Pearson 2018, 66).

7.2.2 Combat

In the tabletop games, a specialized combat system, called Friday Night Firefight is present. In this turn-based system, the player rolls a die and applies situational modifiers to determine whether he was successful. In *Cyberpunk 2077*, success in combat depends on the player's motor skills. The combat system of the tabletop games also features martial arts, which are not available in the video game (*Cyberpunk 2020*), (*Cyberpunk 2013*).

7.2.3 Story and Setting

The game features an alternative timeline for the 2000s. Many of the characters from the video game, such as Johnny Silverhand, Alt Cunningham, or Rogue Amendiares, were present in *Cyberpunk 2013*. So were concepts of some of the game's factions; including gangs, nomad tribes, and Trauma Team, a private paramedical force. Another defining feature of the tabletop game is that although the it establishes categories of race, class, and gender, the characters are not confined in them (Atteberry and Pearson 2018, 66). This is less true for the video game, as V is not able to explore different subcultures, as most of the gangs and factions in the game serve as adversaries. Regardless of what V wears and how the player bids them to act within the constraints of dialogue options, V still remains a mercenary, a gun for hire.

7.2.4 Transhuman and Posthuman Accents

Transhumanist ideas were frequently present in cyberpunk narratives, although many cyberpunk authors were more sceptical about them than traditional sci-fi authors. In *Cyberpunk 2020*, cybernetic augmentations have penetrated all aspects of life and often are a matter of style. Yet the player's access to them is limited by the mechanic of humanity cost. This is linked to the statistic of empathy, one of the nine basic stats,

which the player determined when creating a character. Humanity cost represents the toll cybernetics take on the human body and mind. Cybernetic devices have varying levels of humanity cost. The amount of empathy a character possesses allows it to use a specific number of cybernetics devices. Falling to low levels of empathy due to the humanity cost of cyberware limits the character's social skills. If the empathy stat becomes zero or less, the character starts exhibiting cyberpsychosis and is removed from the player's control, as it falls under the control of the game master. Symptoms of cyberpsychosis may include lying, kleptomania, sadism, brutality, or violent mood swings. This simple system of limiting the player's access to cybernetics has three effects. Firstly, it served as an inspiration for similar mechanisms in many other tabletop games, including *Shadowrun* or *Cyberspace*. Secondly, it shifts the player focus from power gaming towards posthuman dynamics. And thirdly, it encourages the players to think to only about what they can accomplish through cybernetics, but what they are willing to sacrifice (Atteberry and Pearson 2018, 71–4). In *Cyberpunk 2077*, there are only five character stats known as attributes (see Table 2). Empathy stat is not among them. Instead, most cybernetic implants, known as cyberware, require a certain number of points in one of the attributes in the game. For example, to use Synth-Lungs, which increase the character's stamina, the character requires a certain number of points in the Body attribute; whereas the Visual Cortex support implant, which improves perception and targeting, requires a certain number of points in Intelligence attribute. The only limit for the number of enhancements is given by the total number of slots available for them (see Figure 8). This means the player's control over the character is not limited by cybernetic implants in any way.
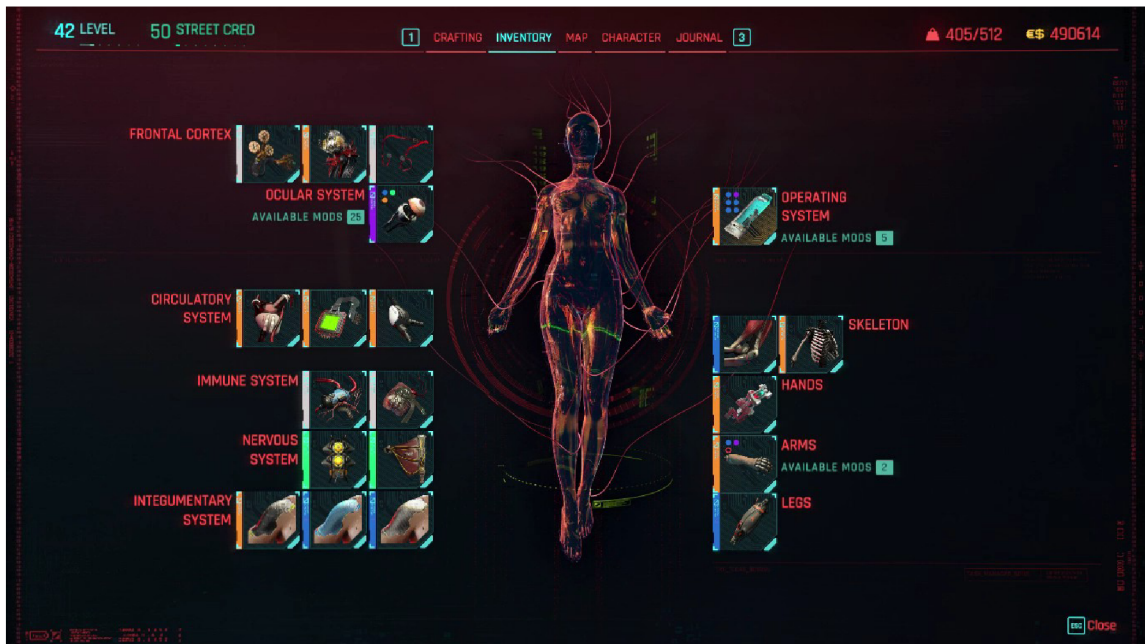
84

Figure 8: Cyberware Slots

The dangers behind attempts to transform humans into cyborgs are a frequent theme in cyberpunk fiction. For example, in Pat Cadigan's *Synners*, paranoia and schizophrenia frequently stem from the human desire for cybernetic enhancements and change in human status, rather than the cybernetics itself (Goicoechea 2008, 9). This vision is more similar to the empathy mechanic of *Cyberpunk 2013*, rather than to how cyberpsychosis is depicted in *Cyberpunk 2077*. In Neal Stephenson's *Snow Crash* (see Chapter 1.4.1), the warning of transforming humans to cyborgs is rather metaphorical, as it can make people vulnerable to a virus, which causes information overload (Goicoechea 2008, 9).

Yet in *Cyberpunk 2077*, the player is never at risk of succumbing to cyberpsychosis or any other dangers related to using cybernetic enhancements. Despite that, cyberpsychosis is present in the narrative during *Cyberpsycho Sighting* missions, where the player faces victims of cyberpsychosis in combat in hope to neutralize them, so they may receive an experimental treatment. Furthermore, during the mission

Violence, a celebrity known as Lizzy Wizzy, who underwent a full body conversion (this means she had most of her body parts replaced by cybernetics), displays cold attitudes and violent tendencies (*Cyberpunk 2077* 2020).

Since the player is spared of potential risks of using excessive amounts of cyberware and the concept cyberpsychosis is featured only in side quests, transhumanism focused on the cyborg is not an integral part of the main story. On the other hand, the main missions challenge the player's attitudes towards posthumanism through the artefact known as Relic. At the end of Act 1, the biochip containing an engram personality of Johnny Silverhand saves V's life, but the chip becomes irremovable and V's personality starts merging with Johnny's. From that point, V starts seeing Johnny's memories. V is able to see and hear Johnny in their head and the player is occasionally able to interact with him. Furthermore, there is a risk that Johnny's personality will permanently replace V's consciousness. Despite the fact that Johnny acknowledges he is only a copy and his true self is dead, the player may at the end of the game choose to allow him to stay in V's body. This is where the game differs dramatically from the *Deus Ex series*. In *Deus Ex* games, the final ending choice has consequences for all of humanity (see Chapter 2.3.1), while in *Cyberpunk 2077*, it is a personal choice about V's fate. The consequences of the player's choice in *Deus Ex* are political, yet in *Cyberpunk 2077*, they are rather individual. This makes the choice less impactful, yet more immersive in the emotional aspect described in Chapter 6.2.4.

7.2.5 Faith and Beliefs

The world of *Cyberpunk* directs a great deal of attention towards technologies and fashion when establishing identity (Atteberrry and Pearson 2018, 56), but religion and spirituality also play a significant role in cyberpunk narratives (see Chapter 3.3.3). In

Cyberpunk 2077, spirituality is mainly explored in side missions, although in the main missions, the player encounters a netrunner gang known as Voodoo Boys. The gang consists Haitian refugees, yet despite their name, religion is not an essential part of their culture anymore (Batylda 2020, 165). For the Voodoo Boys, voodoo represents an aesthetic, rather than actual set of practices. According to Mr. Hands, one of the characters in the game, Voodoo Boys left their gods at Haiti. The gang is; however, derived from the tabletop game. In *Night City Sourcebook* for *Cyberpunk 2020*, Voodoo boys are described as an enigmatic terrorist gang of drug dealers engaged in weird magic rituals (Pondsmith 1991, 56). Voodoo Boys are most likely inspired by AIs which take the interface of different Haitian voodoo gods from Gibson's novel *Count Zero* (see Chapter 3.3.3). In this novel black characters are able to understand cyberspace through their religious and cultural heritage, rather than being excluded from the cyberspace (Farlane 2022, 154). This aspect is not present in the games; however, as it is not hinted that Voodoo Boys would experience cyberspace in a different way than other netrunners.

Although the Voodoo Boys do not, many other characters in the game adhere to religious practices. The player can encounter Bhikkus, Buddhist monks who refuse cybernetic enhancements. The player can encounter them inside the mission *Sacrum Profanum*. Despite their views on cybernetics, they claim that transferring consciousness, as in the case of the Relic, is not against their faith, as long as the subject is at peace with it (*Cyberpunk 2077*, 2020). Movements against augmentations can also be observed in the *Deus Ex* series (see Chapter 2.3.1).

Another set of personal beliefs is confronted by the player in the side mission *Sinnerman*. V is tasked with killing a murderer named Joshua Stephenson, but if the player chooses to spare him, V can follow Joshua and find out he converted to

Christianity. To amend for his sins, Joshua intends to be crucified while being recorded on braindance (see Chapter 6.2.3). Regardless of the player's choices, the crucifixion takes place and it is up to the player whether they will see Joshua as a brainwashed victim of corporate exploitation or a true revolutionary (*Cyberpunk 2077*, 2020).

7.2.6 Protagonists

Although the player is able to choose V's gender and customize their appearance to a great extent, some traits remain immutable. For example, V's body type can be masculine or feminine, but the player is not able to change most of the dimensions or proportions of their body. The body type does not necessarily indicate V's gender. How other characters in the game refer to V is determined by their voice, rather than their looks, as the player is able to choose masculine or feminine voice for their avatar. The combination of the voice and body also influences which characters will be the player able to romance (*Cyberpunk 2077* 2020).

In a certain way, V can be considered a neo-liberal subject (see Chapter 3.3.2), since the game includes an aspect of maximizing V's capital, be it through acquisition of money, cybernetic enhancements, vehicles, or apartments. V's individual freedom of choice and agency is usually not questioned, and if so, it is only in relation to the influence of the biochip. (*Cyberpunk 2077*, 2020).

Although the player can change the sex and skin colour of V, they are still portrayed as a Caucasian male in the game's trailers (*Cyberpunk 2077* 2018 and *Cyberpunk 2077* 2019) and some other promotional materials. In their most frequent depictions, V remains an individualist hero, whose masculinity is constituted by their ability. Such a protagonist is rather typical for early cyberpunk writing (Frelik 2018,

186) and many cyberpunk video games, such as *Watch Dogs* or the *Deus Ex* series. In the case of V, the player is able to choose their gender, yet the "American hero myth" (Frelik 2020, 187) is perhaps even more represented by Johnny Silverhand. While Johnny is not the main protagonist, his role in the main story is significant. His character design should not be surprising, as he represents a rocker boy, one of the original cyberpunk icons of 1980s (see Chapter 1.4.5). Moreover, he acts as a voice of the past, since he is a character from the genre's beginnings in 1980s and as such enables a dialogue between the early cyberpunk and its contemporary comprehension. That is, unless the player chooses to idolize his character, which might not be exceedingly difficult, as he is designed after and voiced by charismatic Keanu Reeves.

7.3 Meta-approach

The third and last approach proposed by Frelik (2020, 188) attempts to perceive cyberpunk video games "as a meta-medium of cyberpunk at large". This means to reflect ontological preoccupations of cyberpunk narratives. The focus is, thus, directed to the technological apparatus itself, rather than to the narrative.

The first area where Frelik (2020, 189) suggests this approach to be applied is too general for the purpose of this thesis, as it aims to explore the player-game relationship while viewing the player as a cyborg. Since this field would examine how the player extends their physicality and subjectivity through operating a computer, it would be better suited to explore a certain gaming platform or a video game genre, rather than a particular game, and would perhaps be better suited for games which also allow player to player interaction.

The second area of applying this research is the sub-genre of micro-hacking simulations (Frelik 2020, 189). For a game to be conceived in this way, the foreground hacking activity should be an element of cyberpunk plot lines. The hacking simulator is one of the rare occasions when the player engages in the same activity as their in-game avatar. While this is also true for *Cyberpunk 2077*, the hacking in the game is represented by a rather simple puzzle activity. There are two types of hacking in the game, Quickhacks and Breach Protocol (see Table 1), both are influenced by V's Intelligence attribute. When quickhacking, the player simply targets an enemy or object with V's scanner and selects desired quickhack. These can be obtained from vendors and have various effects, such as disabling devices, distracting enemies, or damaging them. Each quickhack has a RAM cost and V's total RAM capacity is determined by their Intelligence attribute and type of cyberdeck, a kind of cyberware which allows the player to perform netrunner abilities. The other type of hacking is more interactive. When breaching protocol, an interface which contains a mini-game appears on the player's screen. The player has to select a sequence of characters in the Code Matrix to determine whether the hack was successful (see Figure 9). Maximum length of the character sequence depends on the type of cyberdeck V's is equipped with. Breach protocol can be used on enemies to make them more vulnerable to other hacks or attacks; disable their networks; to breach access points, physical ports in the game world; or to decrypt shards and view encrypted messages. While breaching access point rewards the player with money and crafting components, decrypting shards is usually tied to unlocking additional dialogue options in missions, such as in the side mission *Full Disclosure*, where encrypting a shard can provide the player with additional rewards for its completion (*Cyberpunk 2077* 2020). Hacking mini-games are also present in *Deus Ex:*

Mankind Divided, where they fulfil a similar role: opening doors and accessing data through specific objects (Ng and Macdonald 2018, 188).

Figure 9: Breach Protocol Interface

In conclusion, although hacking is possible in *Cyberpunk 2077,* it takes the form of a rather simple mini-game and despite the fact it can yield additional rewards for the player, as such it is not essential for completing the game.

The last field where the meta-approach might be applied is the self reflective potential of cyberpunk narratives (Frelik 2020, 189). In the case of video games, this means discerning the difference between the meaning emerging from their narrative and institutional structures in which they are created. The game's political message may be in clash with the interest of the corporations which produce them. This was the case in *Watch Dogs 2* or *Deus Ex: Human Revolution.* In *Cyberpunk 2077,* criticism of corporations is embodied in the character of Johnny Silverhand, who holds a personal grudge against the Arasaka Corporation and in general detests corporate greed as well as

those who attempt to climb the corporate ladder. This may be in stark contrast with the reportedly harsh conditions the CD Projekt Red's employees had to work under prior to the game's delayed launch, which quickly drew attention of the media (Kolakowski 2020 or Lee 2020).

8. Pedagogical Practicality

As befits a thesis directed under the Faculty of Science, Humanities and Education, the attention of the last chapter will turn towards pedagogical implications and opportunities of cyberpunk genre and video games. In the case of *Cyberpunk 2077*, applications in teaching methodology should be rather dismissed, as the game has a PEGI rating of 18+ (PEGI 2020). It features use of drugs and alcohol, violence, nudity, and strong language. Although many of these modes of behaviour can be avoided almost entirely by the player, they still remain an integral part of the narrative and occur frequently in the streets of Night City. If it wasn't for these aspects, the game would still be too expensive, reliant on powerful hardware and time-demanding to be used in classrooms.

According to Anderson and Bushman (2001, 357), who analysed over 30 research reports from various studies regarding video games and violence, there was a correlation between playing violent video games, displays of aggressive behaviour, and temporary decrease in prosocial behaviour. Newer studies, such as Cunningham et al. (2016, 1262), suggest that violent video games may also have cathartic effects. In addition, the amount of exposure is a major factor, along with the player's family background. Such a set of variables is rather troublesome to monitor during classroom work, and thus the attention should be directed towards non-violent games.

An appropriate game would be a short adventure game with an impactful story, as adventure games represent a unique way of constructing narratives. In addition, these games generally support problem solving. Furthermore, they allow for immersion and agency through their complex environments (Dickey 2007, 245–6). Two primary literary

techniques may be integrated into narrative to promote motivation: plot hooks, using backstory and cutscenes; and emotional proximity, originating from identification with the character (Dickey 2007, 251). As the narrative provides motivation for progressing through the game, new pieces of information should be prone to be relatively easily integrated into what is known and plausible in the story (Dickey 2007, 251). The narrative structure may follow the quest structure with a set of archetypal roles regardless of the thematic genre. Although the quest implies some kind of journey, it may be manifested as emotional or metaphorical (Dickey 2007, 254–5). In cyberpunk narratives, the journey could also take place in cyberspace (see Chapter 3.2.2).

Aside from violence, two major questions remain. First of them is balancing video gaming with physical activities. The other is the question of fitting the school's curriculum while improving student motivation (Ferdig 2014, 322). To meet these ends, games could take many forms, but as far as cyberpunk is concerned, except for visual qualities (which could serve as a motivation, but might as well be a question of personal preference), its narratives seem to be its most important aspects. Since violence is commonplace in cyberpunk narratives (Cole 2011, 162), the ideal narrative would have to either dramatically decrease its amount or take a firm stance against it through its characters, while still keeping some of the punk elements.

Although not during its beginnings, cyberpunk has often challenged many stereotypes, including those of gender (see Chapter 3.1.1). Since frequent playing of video games is associated with greater acceptance and less critical evaluation of gender stereotypes (Henning et al. 2009, 192), the proposed game should not stay indifferent towards this aspect.

Such narratives could establish a significant number of topics derived from cyberpunk media, such as the influence of technologies on human subjectivity or commodification of education, for the students to discuss and reflect on. The proposed game is only hypothetical, but with the influx of cyberpunk themed games in recent years, including *Cyberpunk 2077* and other games such as *Stray* or upcoming *The Last Night,* shows that cyberpunk genre is still relevant in the 2020s, the epoch it only dared to envision in its beginnings.

Conclusion

Since video games seem to be a favoured medium of cyberpunk narratives in recent years, the key elements of these narratives need to be examined, should the genre be considered more than an aesthetic. The aim of this thesis was to analyse the game's narrative in the context of other cyberpunk media. The first part of the thesis focused on defining the cyberpunk genre, particularly its genealogy, and presented an outline of possible ways of considering cyberpunk games, along with particular examples. Only a portion of cyberpunk video games has been presented in this thesis, since only a few video game titles have been systematically examined up to this point. The lack of academic attention in this field also reveals why research in this field, such as the one presented in this thesis, might be particularly beneficial for examining the cyberpunk genre across various media.

In terms of gameplay, the game utilizes first person perspective, which is, along with third person perspective, very common for cyberpunk games. Role-playing and shooting elements present in the game are also very common in the majority of cyberpunk video games. Another defining trait is how players can influence the outcome of the narrative. Many cyberpunk games allow the player to reach a specific ending based on their actions or decisions in the game. These choices can often represent the player's attitude or stance towards specific concepts featured in the game. *Cyberpunk 2077* is no exception in this respect.

The conclusion this thesis reached is that the narrative presented by the game *Cyberpunk 2077*, sticks to the themes presented by early contributions to the cyberpunk genre in the 1980s, despite many revisions have been made to these original visions

during the course of the last 40 years. The game presents cyberspace much like the visual media of the 1980s. Cybernetic enhancements are understood in the game as tools of power and although the risks of overusing them are present in the game, the player is never restricted in any way when using them. In Night City corporations are generally understood in exploitative manner, while the subcultures thrive. The main storyline of the game is engaged with the topic of cloning personalities, a subject which can be traced back to New Wave fiction. Lastly, the characters of the game, including the game's protagonist V, consider themselves as a neo-liberal subjects with freedom of choice, as their goal is maximizing their capital, be it through wealth, cybernetic enhancements, or influence.

Despite the efforts pursued in this thesis, the game's content is so vast that many other aspects of the game may be analysed. Examples of these may include analysing the players' behaviour in relation to the choices available in the game or more detailed research focused on the game's development.

References

Primary sources

Batylda, Marcin. 2020. *The World of Cyberpunk 2077*. 1st ed. Milwaukie. Dark Horse Books.

CD Projekt Red. 2020. *Cyberpunk 2077*. Video Game, Multi-Platform. Poland, CD Projekt S.A., 2020.

CD Projekt Red. 2020. "Disclosure of estimated sales of *Cyberpunk 2077*." https://www.cdprojekt.com/en/wp-content/uploads-en/2020/12/current-report-no-672020-1.pdf

CD Projekt RED, 2020. "Hotfix 1.04." Last modified December 11, 2020. https://www.cyberpunk.net/en/news/37043/hotfix-1-04

CD Projekt RED, 2020. "Hotfix 1.05." Last modified December 19, 2020. https://www.cyberpunk.net/en/news/37166/hotfix-1-05

CD Projekt RED, 2020. "Hotfix 1.06." Last modified December 23, 2020. https://www.cyberpunk.net/en/news/37214/hotfix-1-06

CD Projekt RED, 2020. "Patch 1.1." Last modified January 22, 2021. https://www.cyberpunk.net/en/news/37373/patch-1-1

CD Projekt RED, 2020. "Patch 1.2." Last modified March 23, 2021. https://www.cyberpunk.net/en/news/37801/patch-1-2-list-of-changes

CD Projekt RED, 2020. "Patch 1.3." Last modified August 18, 2021. https://www.cyberpunk.net/en/news/39092/patch-1-3-list-of-changes

CD Projekt RED, 2020. "Patch 1.5." Last modified February 15, 2022. https://www.cyberpunk.net/en/news/41435/patch-1-5-next-generation-update-list-of-

changes

CD Projekt RED, 2020. "Patch 1.6." Last modified September 6, 2022.

https://www.cyberpunk.net/en/news/45280/edgerunners-update-patch-1-6-list-of-

changes

Currit, Travis. 2020. *The Official Digital Artbook of Cyberpunk 2077*. Digital, Online.

CD Projekt RED, 2020.

Cyberpunk 2077. 2013. "Cyberpunk 2077 Teaser Trailer". Video. Uploaded November

10, 2018. https://www.youtube.com/watch?v=P99qJGrPNLs

Cyberpunk 2077. 2018 "Cyberpunk 2077 — Official E3 2018 Trailer". Video.

Uploaded June 10, 2018. https://www.youtube.com/watch?v=8X2kIfS6fb8

Cyberpunk 2077. 2019. "Cyberpunk 2077 — Official E3 2019 Cinematic Trailer".

Video. Uploaded June 9, 2019. https://www.youtube.com/watch?v=qIcTM8WXFjk

Pondsmith, Michael. 1988. *Cyberpunk 2013*. 1st ed., Berkeley, CA, R. Talsorian

Games.

Pondsmith, Michael. 1990. *Cyberpunk 2020 Corebook*. 2nd ed., Berkeley, CA, R.

Talsorian Games.

Pondsmith, Michael. 1991 *Night City Sourcebook*. 1st ed., Berkeley, CA, R. Talsorian

Games.

Pondsmith, Michael. 2005. *Cyberpunk v3.0*. 1st ed. Berkeley CA; R.Talsorian Games.

PEGI. 2020. "Cyberpunk 2077." https://pegi.info/search-pegi?

q=cyberpunk+2077&op=Search&age%5B%5D=&descriptor%5B

%5D=&publisher=&platform%5B%5D=&release_year%5B

%5D=&page=1&form_build_id=form-

6yHwuBPmwuRZ7Xyr6N3da7wY21lpLTNks1nbkpmIzIo&form_id=pegi_search_form

Secondary Sources

Books

Alphin, Caroline. 2020. *Neoliberalism and Cyberpunk Science Fiction: Living on the Edge of Burnout*. S.l.: Routledge,

Cavallaro, Dani. 2000. *Cyberpunk and Cyberculture: Science Fiction and the Work of William Gibson*. London: Continuum.

Elias, Herlander. 2009. *Cyberpunk 2.0: Fiction and Contemporary*. Covilhã: LabCom Books.

Sterling, Bruce. 1986. *Mirrorshades: The Cyberpunk Anthology*. Arbor House.

Heuser, Sabine. 2003. *Virtual Geographies: Cyberpunk at the Intersection of the Postmodern and Science Fiction*. Amsterdam: Rodopi.

Lankoski, Petri, and Björk Staffan. 2015. *Game Research Methods an Overview*. Pittsburgh: ETC Press.

Lavigne, Carlen. 2013. *Cyberpunk Women, Feminism and Science Fiction: A Critical Study*. Jefferson, NC: McFarland & Company.

McFarlane, Anna, Graham J. Murphy, and Lars Schmeink. 2020. *The Routledge Companion to Cyberpunk Culture*. New York; London: Routledge.

Murphy, Graham J., and Lars Schmeink. 2018. *Cyberpunk and Visual Culture*. New York: Routledge.

Wolf, Mark P. J., and Bernard Perron. 2014. *The Routledge Companion to Video Game Studies*. New York, NY: Routledge, Taylor & Francis Group.

Chapters of Edited Books

Arsenault, Dominic. 2014. "Action." In *The Routledge Companion to Video Game Studies*, edited by Mark P. J. Wolf and Bernard Perron, 223–331. New York, NY:

Routledge, Taylor & Francis Group.

Arsenault, Dominic. 2014. "Narratology." In *The Routledge Companion to Video Game Studies*, edited by Mark P. J. Wolf and Bernard Perron, 475–83. New York, NY: Routledge, Taylor & Francis Group.

Atteberry, Stina, and Josh Pearson. 2018. "Today's Cyborg is Stylish: The Humanity Cost of Posthuman Fashion in Cyberpunk." In: *Cyberpunk and Visual Culture,* edited by Murphy, Graham J., and Lars Schmeink, 55–79. New York: Routledge.

Burn, Andrew. 2014. "Role-playing." In *The Routledge Companion to Video Game Studies*, edited by Mark P. J. Wolf and Bernard Perron, 241–250. New York, NY: Routledge, Taylor & Francis Group.

Butler, Andrew M., 2020, "Early Cyberpunk Film." In *The Routledge Companion to Cyberpunk Culture*, edited by Anna McFarlane, Graham J. Murphy, and Lars Schmeink, 119–27. New York; London: Routledge.

Carbonell, Curtis D., "Tabletop Roleplaying Games." In *The Routledge Companion to Cyberpunk Culture*, edited by Anna McFarlane, Graham J. Murphy, and Lars Schmeink, 200–208. New York; London: Routledge.

Cole-Turner, Ron. 2022. "Posthumanism and Transhumanism." In *Encyclopedia of Religious Ethics*, edited by William Schweiker, 1098–105 New Jersey: Willey. https://doi.org/10.1002/9781118499528.ch122

Frelik, Paweł. 2018. "Silhouettes of Strange Illuminated Mannequins: Cyberpunk's Incarnations of Light." In: *Cyberpunk and Visual Culture,* edited by Murphy, Graham J., and Lars Schmeink, 80–100. New York: Routledge.

Frelik, Paweł. 2020. "Video Games." In *The Routledge Companion to Cyberpunk Culture*, edited by Anna McFarlane, Graham J. Murphy, and Lars Schmeink, 184–92.

New York; London: Routledge.

Higgins, David M., and Matthew Iung. 2020. "Comic Books." In *The Routledge Companion to Cyberpunk Culture*, edited by Anna McFarlane, Graham J. Murphy, and Lars Schmeink, 91–100. New York; London: Routledge.

Johnson, Mark R. 2018. "The History of Cyberspace Aesthetics in Video Games." In: *Cyberpunk and Visual Culture,* edited by Murphy, Graham J., and Lars Schmeink, 139–54. New York: Routledge.

Knöppler, Christian. 2020. "Deus Ex (Case Study)." In *The Routledge Companion to Cyberpunk Culture*, edited by Anna McFarlane, Graham J. Murphy, and Lars Schmeink, 193–9. New York; London: Routledge.

Krapp, Peter. 2014. "Violence." In *The Routledge Companion to Video Game Studies*, edited by Mark P. J. Wolf and Bernard Perron, 345–52. New York, NY: Routledge, Taylor & Francis Group.

Latham, Rob. 2020. "Literary Precursors." In *The Routledge Companion to Cyberpunk Culture*, edited by Anna McFarlane, Graham J. Murphy, and Lars Schmeink, 7–14. New York; London: Routledge.

Melzer, Patricia. 2020. "Cyborg Feminism." In *The Routledge Companion to Cyberpunk Culture*, edited by Anna McFarlane, Graham J. Murphy, and Lars Schmeink, 291–9. New York; London: Routledge.

Murphy, Graham J. 2020. "The *Mirrorshades* Collective". In *The Routledge Companion to Cyberpunk Culture*, edited by Anna McFarlane, Graham J. Murphy, and Lars Schmeink, 15–23. New York; London: Routledge.

Murphy, Sheila. 2014. "Controllers." In *The Routledge Companion to Video Game Studies*, edited by Mark P. J. Wolf and Bernard Perron, 19–24. New York, NY:

Routledge, Taylor & Francis Group.

Ng, Jenna, and Jamie Macdonald. 2018. "The Cyberpunk Imaginary of Data Worlds in *Watch Dogs"* In: *Cyberpunk and Visual Culture,* edited by Murphy, Graham J., and Lars Schmeink, 174–90. New York: Routledge.

Picard, Martin. 2014. "Levels." In *The Routledge Companion to Video Game Studies*, edited by Mark P. J. Wolf and Bernard Perron, 99–106. New York, NY: Routledge, Taylor & Francis Group.

Saito, Kumiko. 2020. "Anime." In *The Routledge Companion to Cyberpunk Culture*, edited by Anna McFarlane, Graham J. Murphy, and Lars Schmeink, 151–161. New York; London: Routledge.

Schmeink, Lars. 2020. "Digital Effects in Cinema." In *The Routledge Companion to Cyberpunk Culture*, edited by Anna McFarlane, Graham J. Murphy, and Lars Schmeink, 134–43. New York; London: Routledge.

Schweizer, Bobby. 2014. "Platforms." In *The Routledge Companion to Video Game Studies*, edited by Mark P. J. Wolf and Bernard Perron, 41–8. New York, NY: Routledge, Taylor & Francis Group.

Sharp, John. 2014. "Dimensionality." In *The Routledge Companion to Video Game Studies*, edited by Mark P. J. Wolf and Bernard Perron, 91–8. New York, NY: Routledge, Taylor & Francis Group.

Suzuki, Shige. 2020. "Manga." In *The Routledge Companion to Cyberpunk Culture*, edited by Anna McFarlane, Graham J. Murphy, and Lars Schmeink, 107–18. New York; London: Routledge.

Voorhees, Gerald. 2014. "Shooting.", In *The Routledge Companion to Video Game Studies*, edited by Mark P. J. Wolf and Bernard Perron, 251–8. New York, NY:

Routledge, Taylor & Francis Group.

Wenz, Karin. 2014. "Death." In *The Routledge Companion to Video Game Studies*, edited by Mark P. J. Wolf and Bernard Perron, 310–6. New York, NY: Routledge, Taylor & Francis Group.

Yaszek, Lisa. 2020. "Feminist Cyberpunk." In *The Routledge Companion to Cyberpunk Culture*, edited by Anna McFarlane, Graham J. Murphy, and Lars Schmeink, 32–40. New York; London: Routledge.

Conference Papers

Edwards, Pif, Chris Landreth, Mateusz Popławski, & Robert Malinowski, Sarah Watling, & Eugene Fiume and Karan Singh. (2020). "JALI-Driven Expressive Facial Animation and Multilingual Speech in *Cyberpunk 2077*". *Special Interest Group on Computer Graphics and Interactive Techniques Conference Talks (SIGGRAPH '20 Talks):* 1–2. New York: NY. https://doi.org/10.1145/3388767.3407339

Sun, Jialu, and Zhaotong Zhou. 2022. "Impact of the Game *Cyberpunk 2077* on Cyberpunk Culture". *Advances in Social Science, Education and Humanities Research*. Atlantis Press.

Journal Articles

Anderson, Craig, and Brad Bushman. (2001). "Effects of Violent Video Games on Aggressive Behavior, Aggressive Cognition, Aggressive Affect, Physiological Arousal, and Prosocial Behavior: A Meta-Analytic Review of the Scientific Literature." *Psychological science*. 12: 353-9. https://doi.org/10.1111/1467-9280.00366.

Cole, David. (2005). "Education and the Politics of Cyberpunk." *The Review of Education. Pedagogy.* 27: 2 (April) 159-170. https://doi.org/10.1080/10714410590963839

Cunningham, Scott, Benjamin Engelstätter, and Michael R. Ward. 2016 "Violent Video Games and Violent Crime." *Southern Economic Journal* 82, no. 4: 1247–65. https://www.jstor.org/stable/26632315.

Dickey, Michele D. 2006 "Game Design Narrative for Learning: Appropriating Adventure Game Design Narrative Devices and Techniques for the Design of Interactive Learning Environments." *Educational Technology Research and Development* 54, no. 3 (June): 245–63. http://www.jstor.org/stable/30221219.

Goicoechea, María. 2008 "The Posthuman Ethos in Cyberpunk Science Fiction." *CLCWeb: Comparative Literature and Culture.* 10.4. https://doi.org/10.7771/1481-4374.1398.

Maj, Krzysztof. 2022. "On the pseudo-open world and ludotopian dissonance: A curious case of *Cyberpunk 2077*". *Journal of Gaming & Virtual Worlds.* 14: 51–65. https://doi.org/10.1386/jgvw_00051_1.

Ryan, Marie-Laure. 2007. "From Narrative Games to Playable Stories: Toward a Poetics of Interactive Narrative." *Storyworlds: A Journal of Narrative Studies* 1 (2009): 43–59. http://www.jstor.org/stable/25663007.

Zhang, C., Perkis, A., & Arndt, S. (2017). "Spatial immersion versus emotional immersion, which is more immersive?". *Ninth International Conference on Quality of Multimedia Experience (QoMEX).* Erfurt, Germany. https://doi.org/10.1109/qomex.2017.7965655

News Articles

Carpenter, Nicole. 2020. "CD Projekt has blown years' worth of goodwill in a week." *Polygon.* December 18, 2020. https://www.polygon.com/22178913/cyberpunk-2077-launch-controversy-cd-projekt

Chalk, Andy. 2020. "*Cyberpunk 2077* has been delayed until December." *PC Gamer*. October 28, 2020. https://www.pcgamer.com/cyberpunk-2077-has-been-delayed/

Faller, Patrick, 2018. "E3 2018: CD Projekt Red's *Cyberpunk 2077* Is A First-Person RPG With Shooter Elements." *Gamespot*. June 13, 2018. https://www.gamespot.com/articles/e3-2018-cd-projekt-reds-cyberpunk-2077-is-a-first-/1100-6459777/

Hall, Charlie. 2020. "Cyberpunk 2077 has involved months of crunch, despite past promises." *Polygon*. December 4, 2020. https://www.polygon.com/2020/12/4/21575914/cyberpunk-2077-release-crunch-labor-delays-cd-projekt-red

Koch, Cameron. 2022. "Cyberpunk 2077 Crosses 20 Million Copies Sold As It Rides Edgerunners Wave." *Gamespot*. September 28, 2022. https://www.gamespot.com/articles/cyberpunk-2077-crosses-20-million-copies-sold-as-it-rides-edgerunners-wave/1100-6507888/

Kolakowski, Nick. 2020. "'Cyberpunk 2077' Raises Concerns of Game Developer Burnout." *Dice*. December 9, 2020. https://insights.dice.com/2020/12/09/cyberpunk-2077-raises-concerns-of-game-developer-burnout/

Lee, Jonathan. "Former Cyberpunk 2077 developer speaks out about brutal 'crunch' working conditions." *Yahoo!life*. 2020 October 16, 2020. https://www.yahoo.com/lifestyle/former-cyberpunk-2077-developer-speaks-192734667.html

Osser, Bernard. 2020. "Cyberpunk 2077 Launches To Global Acclaim Despite Seizure Warnings." *Barron's*. December 9, 2020. https://www.barrons.com/news/cyberpunk-2077-launches-to-global-acclaim-despite-seizure-warnings-01607594103

Peters, Jay. 2020. "*Cyberpunk 2077* will launch on Stadia the same day as console and

PC." *The Verge*. October 15, 2020.

https://www.theverge.com/2020/10/15/21517711/cyberpunk-2077-google-stadia-

launch-day-release-console-pc-november-19

Purchese, Robert. 2016. "I was there when The Witcher 3 launched." *Eurogamer*.

August 30, 2016. https://www.eurogamer.net/inside-the-witcher-3-launch

Robertson, Adi. 2019. "*Cyberpunk 2077* will be released April 16th, 2020 and feature

Keanu Reeves." *The Verge*. June 9, 2019.

https://www.theverge.com/2019/6/9/18646261/cyberpunk-2077-trailer-microsoft-xbox-

e3-watch-2019-release-date

Weber, Rachel. 2017. "How 'Cyberpunk,' the 1988 Tabletop Adventure, Is Inspiring

the Blockbuster Game Creators of 2017." *RollingStone*. February 1, 2017.

https://www.rollingstone.com/culture/culture-news/how-cyberpunk-the-1988-tabletop-

adventure-is-inspiring-the-blockbuster-game-creators-of-2017-191675/