BETWEEN THE REAL AND UNREAL: EXPLORING IMMERSIVE AND INTERACTIVE EXPERIENCES IN THE SELECTED 21st CENTURY GAMELIT FICTION

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Between the Real and Unreal: Exploring Immersive and Interactive Experiences in the Selected 21st Century GameLit Fiction

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ABSTRACT

Title: Between The Real and Unreal: Exploring Immersive and Interactive Experiences in The Selected 21st Century GameLit Fiction

GameLit is a rising subgenre of science fiction, which originated as a mix of tabletop games and Cyberpunk fiction and consists of a plot built around games. This study aims to analyze the creation of hyperreal immersive and interactive experiences of the characters in virtual reality games set in the 21st century GameLit fiction. The primary texts taken for this purpose are Warcross (2017), Otherworld (2017). The study uses the framework of Hyperreality by Jean Baudrillard given in his book Simulacra and Simulation (1981) as the foundational theory and the concept of "Immersion" and "Interactivity" given by Marie-Laure Ryan's in her book *Narrative as Virtual Reality* 2: Revisiting Immersion and Interactivity in Literature and Electronic Media (2015) as the main theory for the research. The research design of the study is qualitative interpretive. The analysis for the research is conducted after using the method of narrative inquiry to analyze the immersive and interactive techniques from a narratological viewpoint. The findings generated after the analysis suggest that the VR games played by the concerned characters' result in their deep immersion aided by the characters' avatar's internal-ontological interactions within the game-world resulting in their rising hyperreal experiences. The above-mentioned research framework and method develop the significance of this research as it provides an understanding of how 21st century virtual simulations overshadow real experiences.

Keywords: Cyberpunk, GameLit. Hyperreality, Narrative Inquiry.

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LIST OF ABBREVIATIONS

OW Otherworld

WC Warcross

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DEDICATION

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CHAPTER 1

INTRODUCTION

Speculative fiction (SF) is a term that embraces varying array of imaginative narratives and therefore has been subjected to numerous scrutiny and diverse interpretations by different scholars, and critics over the course of its history (Gill 71; Oziewicz 1). For instance, the 19th century saw the creation of works such as Mary Shelley's *Frankenstein* (1818) and H. G. Wells *The War of the Worlds* (1898) which are now considered under the domain of speculative fiction. *Frankenstein* blended the elements of science and fantasy, and Wells' 1898 work portrayed a bleak future for humanity in context of alien invasion. Other classical examples from the 20th century include *Dune* (1965) by Frank Herbert, *Star Wars* (1977) directed by George Lucas, *Brave New World* (1932) by Aldous Huxley, among others.

It is these debates that prompted Robert A. Heinlein in his 1947 essay "On the Writing of Speculative Fiction" to state that, "there are at least two principal ways to write speculative fiction — write about people or write about gadgets" (Heinlein 1). Heinlein defined speculative fiction as a narrative where the imagined new realities are created and possible challenges in future are speculated to envision, "how humans cope with those new problems" (1). Science fiction (Sci-fi), a genre under speculative fiction, also focuses on futuristic settings and exploration of the consequences of evolving technologies on humanity. David Seed in his book *Science Fiction: A Very Short Introduction* (2011) defines science fiction as being, "about the writer's present in the sense that any historical moment will include its own set of expectations and perceived tendencies. The futures represented in Sci-fi embody its speculative dimension" (Seed 15). Seed emphasizes that science fiction can be considered as a kind of thought experiment with power to either change or suspend certain parts of the known reality in order to explore innovative ideas.

However, science fiction has also evolved over the past century. For instance, the 20th century saw science fiction experiment with themes heavily influenced by hard sciences, but with the passage of time it also began to incorporate works which raised issues of feminism, class disparities and civil rights (Tymn 55; Seed 47). Then the 21st century witnessed the rise in themes related to a wide spectrum of various modes and subgenres like fantasy, thriller, gothic, and others (Oziewicz 18).

1.1 Cyberpunk and GameLit Fiction

Historically, the elements of Cyberpunk fiction such as the high-tech and low life setting in a dystopian world charged with advanced technological innovation and cybernetic augmentation of human body have existed in literature even before Cyberpunk existed as a separate genre (Elias 3). Classical examples which incorporated above-mentioned themes and laid the foundation for Cyberpunk novels include, Alfred Bester's The Stars My Destination (1956), Philip K. Dick's Do Androids Dream of Electric Sheep? (1968), and Samuel Delany's Nova (1968) among many others. Furthermore, in the 1980s Bruce Bethke in his short story *Cyberpunk* coined it as a term for the first time. He created it by combining the words cybernetics and punk to present the story of a hero stuck in a high-tech and low-life world (Elias 13). However, it was after the publication of William Gibson's Neuromancer (1984) where Gibson created the concept of cyberspace, an interconnected digital world, that Cyberpunk as a genre gained prominence. The themes central to Cyberpunk genre of 20th century include blurring of boundaries between human and machine. It was also categorized by its gritty, and dystopian urban settings ridden with shady people in every corner and an anti-hero kind of protagonist (Hollinger 35). Cyberpunk mainly focused on the dark side of technological advancements, for instance, surveillance done by powerful corporations, and loss of human autonomy, as can be seen in novels like Neal Stephenson's Snow Crash (1992). Other works in Cyberpunk of 20th century include Rudy Rucker's Software (1982), Bruce Sterling's Schismatrix (1985). However, in the context of the 21st century new themes have been brought to the forefront of Cyberpunk genre such as the concept of virtual reality, as can be seen in novels like Ernest Cline's Ready Player One (2011). It also focuses on themes like the nature of humanity in an age of digital virtual reality (Patra 1658). Furthermore, 21st century Cyberpunk evolved to take in new trends, conceiving subgenres like Techno-cyberpunk or Posthuman Cyberpunk.

This subgenre worked in the intersection of posthumanist theory and Cyberpunk and explored ideas like humans transcending their biological limitations with the help of technology (Zhang 511). The themes central to it included mankind's struggle to find new ways of merging man and computer by either uploading one's consciousness in a computer system or more contemporarily creating tech augmented humans, (Jason 19) as was the case with the protagonist Ruth Law, in Ken Liu's 2016

short-story *The Regular*, who uses various technological implants in her body to function like a superhuman. It also raises ethical questions about how much technological integration is too much before humanity loses its humanness.

GameLit can be classified as a subgenre under speculative fiction that blends the features of gaming and storytelling. GameLit novels include plots which revolve around characters' playing a game and can be either set in real world or a fantastical game-like world. It rose to prominence in the 2016 – 17 owing to the popularity of LitRPG (literature role playing games) which includes narratives strictly adhering to the game mechanics of progression, leveling, quest completion and abiding by the rules of the games as central elements to the narrative's plot. However, not all LitRPG narratives firmly follow these elements but instead present a plot devoid of the serious crunch of gaming mechanics like character stats, and their numeric leveling. Therefore, such narratives begin to be placed in a separate genre termed as GameLit. Francis Butterworth Parr describes GameLit in his dissertation as only requiring three things: "immersion in a game-world, this world to have rules, and an interest in exploring the nature of video games" (Parr 198). Later on GameLit developed as a broad category including LitRPG as its subgenre. James G. Patton defines LitRPG as, "a subgenre to a genre that does not exist yet" (Tigner). If GameLit's plot is written around a game, LitRPG focuses more on the game mechanics also while being set in a game. Therefore, the chief difference between both lies in the detailed game mechanics which are part of LitRPG but not GameLit. Dustin Tigner, a popular GameLit author in his blog post defines LitRPG and GameLit as, "LitRPG is a story with RPG mechanics. GameLit is a story with game mechanics from any game genre" (Tigner).

The roots of GameLit can be traced back to the origins of table top games and role playing games like Dungeon and Dragons. However, in the 21st century with the publication of works like *Ready Player One*, GameLit begin to experiment with new features such as narratives set in a highly detailed virtual world of a computer or a video game, enabling the characters to experience the virtual world as a simulation of reality. The themes explored in these narratives are diverse and may include elements of science fiction, fantasy, detective fiction, thriller, and others. The latest novels published under GameLit also work with dystopian themes of blurring of lines between reality and its virtual simulation achieved through the hyperreal immersion and interaction of characters with the GameLit worlds. Therefore, both immersive and

interactive experiences of characters are core features of GameLit texts, not only as a genre defining characteristics but also as narrative devices, because they define how the characters engage with the game-like environment. Therefore, it can be stated that within GameLit genre characters' experiences are an essential feature. Furthermore, narratives which blend complex storytelling elements with video game structure are of much value as they reflect our 21st century generation's growing obsession with game culture. Famous works in this genre include *Awake Online* series (2016 – 21) by Travis Bagwell, *Ascend Online* series (2018 – 2024) by Chmilenko Luke, *The God Game* by Danny Tobey among others.

Intersection of the genres of GameLit and Cyberpunk reveals that GameLit contains many of the features and themes similar to Cyberpunk genre. For instance, Cyberpunk's focus on digitally created virtual worlds and themes of merging of human and machine intersects with GameLit's portrayal of highly immersive virtual landscapes. For instance, Ernest Cline's novel *Ready Player One* (2011) which is considered as a hallmark of Cyberpunk fiction is set in a game's landscape, thus intersecting both the genres due to the presence of virtual world of a game OASIS. Other examples where one can observe the intersecting theme of fluidity of boundaries between game and reality are the novels *Warcross* duology (2017 – 2018) by Marie Lu, *The Last Reality* trilogy (2017 – 2019) by Jason Segel and Kirsten Miller. These novels can be cited as examples of narratives sitting at the crossroads of both the genres and brought together by the existence of virtual realities which are more real than reality, and the implications of advancing technology.

1.2 Selected Authors and Works for the Study

This study will include the works of three authors as its primary samples: *Warcross* (2017) by Marie Lu and *Otherworld* (2017) by Jason Segel and Kirsten Miller.

Kirsten Miller is an American novelist of works including *Kiki Strike* series (2006–13), *The Eternal Ones* (2010) and *How to Lead a Life of Crime* (2013) among many others. She has also worked as a cowriter with Jason Segel, who is an American actor known for his roles in television series like *Freaks and Geeks* (1999 – 2000), *Undeclared* (2001 – 2002) and sitcoms like *How I Met Your Mother* (2005 – 2014). Segel's creative repertoire also includes being a screenwriter for works such as

Forgetting Sarah Marshall (2008). In 2014 he paired up with Kirsten Miller, an American YA writer, to coauthor adventure and fantasy-based *Nightmares!* Trilogy (2014 – 2015) and later *The Last Reality* trilogy (2017 – 2019) centered on VR technology and its effects on human's perception of reality.

Segel and Miller's The *Last Reality* trilogy which includes novels *Otherworld*, *OtherEarth*, and *OtherLife* details the adventures of protagonist Simon who is at first drawn to the VR MMORPG¹ game 'Otherworld.' Then an unforeseen tragedy in his life, where he loses his childhood friend Kat, forces him to open his eyes to the dark side of the game. The game happens to be a way to entrap people within its dimensions, just like it has trapped Kat. The narrative then focuses on Simon's journey as he enters the Otherworld's game-world to find his friend before she is killed by the evil corporation responsible for creating the game. The trilogy explores themes central to the Cyberpunk and GameLit genre such as human autonomy in a highly simulated world.

Similarly, Marie Lu is a Chinese American novelist, known best for her science fiction dystopian *Legend* series (2011 – 2013). She graduated from the University of South California and began her carrier in the video game industry. She also worked for Disney Studios as a Flash artist. She has experience in the creation and elements of video games. Her other works include *The Young Elites* (2014 – 2016) the *Warcross* duology (2017 – 2018), *The Kingdom of Back* (2020) among many others. Her duology which includes the novels *Warcross* (2017), and *Wildcard* (2018) is set in dystopian times where a VR MMORPG game named 'Warcross' has created quite a buzz globally. The narrative focuses on the life of a young and destitute Emika Chen, who living in New York City spends her life working as a bounty hunter for the game. Then one day she is whisked from her desolate life by billionaire Hideo Tanaka, the creator of game Warcross, to work as a hacker and a spy for him. He also introduces her to the next generation of the eyewear that she used to access the game – a revolutionary piece of technology called NeuroLink lenses. Using these lenses, the players can access the virtual reality game-world from anywhere. However, Emika soon learns the sinister

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¹ MMORPG stands for Massively Multi-Player Online Role-Playing Game.

plans behind the creation of NeuroLink's technology— to control human minds into Hideo's bidding.

What makes the primary samples as significant works of 21st century includes their ability to reflect the growing dependence of this century on digital platforms using virtual reality games as a medium to mirror such technological evolution and challenges to human agency. For instance, the characters in these novels are shown to be living in a world where reality is impacted by the hyperreal virtual and immersive technologies present in the form of a game, thus influencing the perception and experiences of the characters.

1.3 Thesis Statement

Immersive experiences, led by virtual technology, are becoming progressively widespread and sophisticated in today's world, which makes it imperative to understand their impact on our perception of identity and reality more than ever. By exploring how narrative techniques like immersion and interactivity impact gamer-characters' identity, behavior and decision-making skills in a virtually simulated game-world that is both hyperrealistic and immersive; the study examines the unique narratological features of the selected GameLit texts i.e. *Warcross* and *Otherworld*, in terms of how virtual simulations can potentially overshadow real experiences.

1.4 Research Questions

- 1. What are the narrative techniques utilized within the game-worlds to create immersive experiences for the characters of the selected GameLit texts?
- 2. How do the hyperreal experiences overshadow the real world and influence the characters' behavior and decision making in the selected texts?
- 3. How do the innovations in immersive and interactive strategies of VR technologies depicted in the selected texts raise concerns about human agency and identity?

1.5 Significance & Rationale of the Study

The significance of this study lies in its exploration of the issues which are of social importance in 21st century, for instance, the understanding of how living in a world propelling towards technologically amplified virtual and digital future will shape

human interactions with digital worlds. This is of utmost eminence especially contemporarily as our lives are exceedingly becoming a part of digital forums of social media platforms like Instagram, X, and TikTok, especially to such an extent that our digital existence has become more important than real world existence. Another related issue to digital existence which this study aims to examine is that of virtual reality and other immersive technologies, such as virtual avatars, AR eyewear like Meta's Orion and Apple's Vision Pro, and HMD headsets like Oculus Quest 2, Oculus Rift and PlayStation VR, the use of which is prominently increasing in contemporary times. Furthermore, the upcoming generations of 21st century are growing up in a continuously evolving digital world and are much reliant on digital media such as anime, video games, VR and AR games as their past-times and prefer to learn through interactive games. Therefore, this research focuses on a very significant genre—GameLit which revolves around characters playing a game. The reason this genre is significant, especially when tied with Cyberpunk, is because it highlights the possible outcomes of our quest of technological evolution.

The issues of impact of technology on human societies, corporate control, artificial intelligence, and the nature of humanity in an artificial world have already been discussed in various studies. Nevertheless, there remains a gap in context of examining the narrative techniques related to immersive and interactive experiences with virtually created digital worlds. This study bases its rationale by using the framework made by including the Baudrillard's Hyperreality – a real without origin – a broad concept which in current times can be used to discuss digital spaces, and the concept of Immersion and Interactivity by Ryan to focus on the themes and narrative techniques used in the game-worlds of the concerned GameLit novels. This framework, from a narratological viewpoint, will provide an understanding of how virtual simulations overshadow the real experiences and impact the characters' identities, behaviors and decision-making skills in a hyperrealistic and immersive virtual game-world.

1.6 Structure of the Study

This research study is organized into six chapters. The first chapter, Introduction, deals with defining the fundamental concepts central to the current research, along with delineating the Thesis Statement, Research Questions, Research Objectives, Significance and Rationale of the study as well as the Delimitations

employed on the study. The second chapter, Literature Review, deals with gathering the research done on the concerned topic till date, as well as highlighting the gap left by past literary researches which the current study aims to fill. The third chapter, Research Methodology, details the Research Method and the Conceptual Framework utilized for the research. The fourth and fifth chapters – Analysis of novels, entails with breaking down and examining the concerned samples of the study in light of the provided research questions. Lastly, the sixth chapter, Conclusion, sums up the findings of the research, presents implications of the study and proposes recommendations for the future researches.

1.7 Delimitation

This study delimits its scope to the novel *Warcross* and the character of Emika Chen from *Warcross* duology by Marie Lu, and the novel *Otherworld* and the character of Simon Eaton from *The Last Reality* trilogy by Jason Segel and Kirsten Miller. The study is qualitative interpretive in nature and will use Jean Baudrillard's concept of Hyperreality given in his book *Simulacra and Simulation* (1981) as the foundational theory and the concept of "Immersion" and "Interactivity" given by Marie-Laure Ryan's in her book *Narrative as Virtual Reality 2: Revisiting Immersion and Interactivity in Literature and Electronic Media* (2015) is used as the main theory for the research. The study also delimits its focus to interpreting the impact on the concerned characters' identity, behavior and decision-making skills produced through the narrative techniques of Immersion and Interactivity.

CHAPTER 2

LITERATURE REVIEW

The topic of technological integration into daily human lives has gained much traction over the past century, therefore a vast body of literary texts exists concerning this topic. For instance, Jonathan Taylor in "The Emerging Geographies of Virtual Worlds" (1997) explores digital technology creating 'new worlds' for application in various areas such as, literature, art, military, and others. Similarly, Marguerite R. Waller in "If "Reality Is the Best Metaphor," It Must Be Virtual" (1997) discusses the advancement of digital technology in evolving our understanding of our identities and relationships with others. Both the researchers focus on digital technology's creation of new worlds and humanity's growing reliance on such worlds. However, they fail to point out the existence of virtual reality in terms of its complex relation with the real world and its ability of immersion and how virtual simulations overshadow the real experiences. Moreover, in the 21st century technology has acutely woven itself into the fabric of everyday human lives. This is evident from the prevalence of our everincreasing reliance on such electronic gadgets like smartphones which accompany us wherever we go to the smart home devices that automate our living spaces. In fact, it will not be wrong to say that technological integration has become a dominant characteristic of modern societies (Saniotis 5; Asaad 2). Furthermore, among the fundamental developments in the technological landscapes, the rise of virtual and augmented reality takes the cake, with its characteristic immersive experiences which blurs the boundaries between the real and digital worlds.

This is also the core concern of the current research study, as it tries to explore the prevalence of virtual realities in the human lives, and the subsequent blurring of boundaries between the digital and real worlds, by using the novels *Warcross* by Marie Lu, *Otherworld* by Jason Segel and Kristen Miller as the primary texts. Both the novels come under the genre of Cyberpunk and GameLit and show characters striving against a blend of virtual and real world presented to them in the form of a game. Hence, this section of literature review will work to explore the past body of research done on the relevant areas of Cyberpunk and GameLit, in general to specific, to delineate the gap for the current study.

2.1 Review of Literature on Cyberpunk Texts

Cyberpunk, a genre under science fiction, known for its blend of high-end technology and dystopian settings, gained acknowledgement in 20th century (Elias 13). As such it inspired the production of a wide body of literary works which do not only include written literature but can also be found in visual media with movies like Tron (1982), RoboCop (1987), The Terminator (1984 - 2019), Akira (1988), The Lawnmower Man (1992), Ghost in the Shell (1995) among others. Each of the abovementioned movies explores the themes central to the Cyberpunk genre, such as technological evolution and its impact on human autonomy within a digital landscape (Allison 254; Dyens 1; Huereca 2). Another movie which comes under the same group is Ridley Scott's directed Blade Runner (1982), based on Philip K. Dick's 1968 novel Do Androids Dream of Electric Sheep? The movie presents a world riddled by replicants (artificial humans) and 'blade runners', who are tasked to exterminate them, explores themes of corporate control, and artificial intelligence. The researcher W. A. Senior in his article titled, "Blade Runner and Cyberpunk Visions of Humanity" (1996) considers *Blade Runner* to be a founding piece in the film medium of Cyberpunk genre due its exploration of the above mentioned themes and states that it "insinuates a wide range of constantly metamorphosing humanities" (Senior 1). Senior focuses on the movie's exploration of complex moral questions, such as what it means to be human in an increasingly technological world, which blurs the boundary between humans and machines. Another movie which is a significant milestone in Cyberpunk genre is *The* Matrix (1999) directed by Lana and Lilly Wachowski. According to the researcher, Alex E. Blazer in, "The Matrix Trilogy and the Revolutionary Drive through "The Desert of the Real"" (2007) the movie shows how advanced technology has isolated humanity by imprisoning humans in a false reality. Blazer's main focus in the article is to emphasize mankind's journey to self-discovery and resistance against oppressive regimes. While both the researchers focus on themes which lie at the heart of Cyberpunk genre, they however fail to shed light on humankind's blurring perception of virtual experiences or how interaction which such hyperreal virtually created landscapes are changing our perception of real and unreal.

Furthermore, the novel which became an inspiration for future Cyberpunk works owing to its concept of cyberspace and focus on impacts of technology on human societies, digital world and hacking is William Gibson's *Neuromancer* (1984) The

researcher Shuchi Agrawal in her article, "William Gibson's Sprawl Trilogy: Connection between Humans and Artificial Intelligence" (2023) discusses how Gibson's works present the blurring of boundaries between human and technology, which results in human enslavement and lack of autonomy. She also argues that "the question of what we are producing as AI becomes more human—and possibly superhuman" (Agrawal 1) is of pertinent importance in the contemporary world. By focusing on advancements in the field of robotics, Agrawal strives to create an understanding of AI and its consequences for humans. However, she does not focus on the ever-increasing human dependence on virtual platforms like digital media or virtually created spaces, which is a very contemporary dilemma.

Since its inception the genre of Cyberpunk has evolved to a considerable degree and it can be observed in researcher Weiyi Zhang's article, "The Transformation of Cyberpunk from Resistant Subculture to Popular Style" (2023). She outlines the three key stages of transformation: the growing stage where the "classic Cyberpunk inherits the resistance of punk culture", the changing stage where "the resistance of post-cyberpunk culture reflects the cultural qualities of postmodernism" and the merging stage where the "commercial cyberpunk has become a popular style, gradually losing its resistance to the mainstream culture" (Zhang 511). According to Zhang innovation in technology has profoundly impacted cultural significance of Cyberpunk genre over the decades, and it has transitioned from a genre that critically mirrored social anxieties of humans regarding technological innovations to one that has developed into a highly commodified entity, "although cyberpunk originated as a subculture to reflect the reality of "high tech, low life," it has since been condensed into a popular style and lost its critique of the abuse of technology" (Zhang 518). Zhang traces the history of Cyberpunk to its beginning and presents that the earliest members of the genre presented it as a dystopian picture of the future as a way to respond against technology that exacerbated social injustice and condemned humans to personal and social alienation. However, as the world entered into the postmodern era, the narratives in Cyberpunk also evolved to explore the evolving relationship between humans and technology. This era also saw Cyberpunk take on aesthetic features of neon lights and urban decay, a characteristic of many 21st century Cyberpunk narratives. Zhang's observation of the changing trends in the Cyberpunk fiction seems to be on point but she does not mention the evolution in Cyberpunk with respect to the emerging interdisciplinary genres like GameLit, which details the lives of contemporary society stuck in a game like cyberspace.

2.2 Review of Literature on GameLit Texts

Game literature or GameLit emerged as a result of Cyberpunk's exploration of virtual realities and integrated within itself the complex mechanics of video games and traditional narrative structure (Tigner). While Cyberpunk conventionally examined the implications of virtual realities in a chaos ridden dystopian future, GameLit on the other hand uses the rules and structure of games as the foundation for its narrative. Furthermore, GameLit operates in a more flexible manner and is not only bound to science fiction but also brings in elements like fantasy, horror, and others ("What are the best GameLit books?). It is, however, a new genre with many literary works but a limited amount of sufficient scholarly research.

Among the pioneering works of GameLit are novels such as *Warcross* (2017) and *Wildcard* (2018) by Marie Lu, *Ascend Online* series (2018-2024) by Chmilenko Luke, *Awaken Online* (2016 – 21) series by Travis Bagwell. However, the literary texts which are celebrated as the hallmark of GameLit are Ernest Cline's *Ready Player One* (2011) and *Armada* (2015). Both novels are paramount examples of GameLit due to their integration of video game elements into their narratives. For instance, in *Ready Player One* Cline creates the virtual reality system OASIS runs on game mechanics which people use to escape from their reality by immersing themselves in a virtual world.

The narrative of the novel also progresses like a game, for instance the protagonist completes quests to reach the final prize. The researchers Susan Aronstein and Jason Thompson in article, "Coding the Grail: "Ready Player One's" Arthurian Mash-Up" (2015) explores the novel in context of its Arthurian references and their impact on the overall narrative. They argue that Cline's innovative take on King Arthur's legends in form of a video game world, "provides the novel with its narrative and generic structure," (Aronstein & Thompson 52) and allows young readers to see the legend in a new light while simultaneously engaging with a narrative that blends medieval story with digital culture.

Similarly, researcher Justin Nordstrom in his article, "'A Pleasant Place for the World to Hide": Exploring Themes of Utopian Play in Ready Player One" (2016) examines the virtually constructed game world OASIS through the framework of "Bernard Suits' philosophical approach to defining games and utopia" (Nordstrom 238) and considers it as an instance of the "overlapping functions of gaming and utopianism". For Nordstrom, the novel is not only an exploration of humanity trapped in a high-tech – low-life, dystopian world, rather it is also an examination of how games can also be means of creative and social outlet for people stuck in crumbling future and chaotic realities.

Dr. Indrajit Patra in "To Immerse is to Escape: Analyzing the Power of Simulacra and Simulation in Ernest Cline's Ready Player One and Ready Player Two" (2021) examines Cline's use of virtual reality from the point of view of Baudrillard's hyperreality and explores hyperreal-immersive VR setting of OASIS as an environment where distinctions between virtual and real simply subside resulting in the victory of the virtual over the real. Patra states, "In such a hyper-immersive virtual environment, the virtuality does not merely serve as an alternative mode of existence where one logs in to escapes from reality, rather it becomes the dominant shaping force that begins to mold the reality after its own pattern" (Patra 1658). Another novel where Cline also talks about blurring the boundaries between reality and game world is *Armada* (2015). The novel details the story of the character Zack Lightman who finds the objects of his game world cross the boundary and land into his real world, thus creating a hyperreal world.

Keerthana and Ramya in, "Hyperreality In Ernest Cline's Armada" (2023) study the above mentioned theme of blurring of boundaries in *Armada* and observe that virtual reality video games have this profound feature of providing realistic experiences through simulations and state that, "it can be easy for people to forget that they are playing virtual simulation games in a world that is simply an artificially manufactured replica of the actual thing" (Keerthana & Ramya 32). The article focuses on simply exploring how virtual reality has turned into hyperreal experiences for the characters in the novel. Though Cline's novels capture the essence of what makes GameLit and Cyberpunk compelling genres in contemporary world and some of the abovementioned research studies like Patra's come very close to filling the gaps left by the earlier research due to their focus on rise of digital culture and the blurring of boundaries between real and virtual. However, they still leave some gaps, such as, they do not shed light on the social implications of the use of AI generated virtual reality.

For instance, *Armada* by Cline is simply an adventure narrative of a teenager who plays a video game which was constructed by the military to train selected youth. Thus, still connected to reality and *Ready Player One* though distorting the line between real and virtual and might even mold the real according to it, as Patra mentions, however it is limited in its theoretical framework, as it simply applies Baudrillard's theory to explore hyperreality. Therefore, it does not take into account a wider viewpoint on immersive and interactive techniques. Also, in the 21st century with rise of AI simulated world, where what was considered, imaginary is slowly becoming possible, works like *Armada* and *Ready Player One* or the research done on them successfully mirror the contemporary dilemma of 21st century society.

2.3 Review of Literature on Selected Texts

The novel trilogy *The Last Reality* (2017 – 2019) by Segel and Miller has managed positive critical reviews by prominent organizations like *The Guardian* which has termed it as, "an engaging near-future dystopia playing with ideas of ethics, artificial sentience and virtual reality" (Williams). While Melanie Kirkwood in her review of the novel *Otherworld* published in the "Bulletin of the Center for the Children's Books" volume 71 lauds the work as not only thrilling and suspenseful but also appreciates the authors' skill of weaving an "elegantly build alternate universe, complete with the governing systems and rising internal tensions" (Kirkwood 176).

Likewise, *Warcross* has also managed to garner wide acclaim from the onset of its publication. For instance, Chicago Review of Books compliments *Warcross* as not only a, "beautifully diverse book" with the plot peppered with characters' belonging to different genders but also as a, "completely plausible and realistic" tale (Cutaia). They praise Lu's skillfully nuanced writing style where she seamlessly weaves code and technology with everyday life as the chief reason of the novel's success. Furthermore, Lu, in various interviews with independent media organizations like NPR and online journalists like Paul Semel, has shared the inspirations that led to the conception of *Warcross*. For instance, she has stated the modern technology especially the, "current wave of innovation in VR, AR, and artificial intelligence" (Semel) along with the rising video game culture like the world championships of video games like *League of Legends* as a huge influence on the creation of *Warcross* (Barco).

Similarly, Jason Segel and Kirsten Miller in multiple interviews have also shared their rationale behind the creation of their *The Last Reality* (2017 – 2019) trilogy. Segel stated that in 2015 at the Sundance Festival he was offered an opportunity of a live demonstration of the newly released Oculus Rift VR hardware and felt as being transported to several realistic dimensions (Lodge; Chai). Such real-life interactions with the evolving capacities of the VR technology tremendously impressed him and forced him to ponder on the consequences of VR on human interactions if it were ever made widespread. Segel shared that after the life demonstration he mused that, "if we can be anything we want [there], why would we ever want to leave?" (Lodge) and this led to the foundation of his ideas for their cautionary tale. In an interview to the Publishers Weekly while discussing the potential of VR technology Miller expressed her reservations regarding the ability of the 21st century's technology to rapidly blend together the, "reality and what's not real". She stated that "what is real is getting harder and harder to judge" to the extent that one of the main concerns in the coming time will be "how do we draw the line between what's real and not?" (Lodge).

The selected works for this study *Warcross* by Marie Lu and *Otherworld* by Jason Segel and Kirsten Miller further work to broaden the scope of GameLit and Cyberpunk by focusing on the very issues raised by the authors involving the advancement in VR and AR technologies of the 21st century world. Lu, Segel and Miller efficaciously engage with such themes like the evolving nature of real and digital by using their narrative innovation and deftly nuanced writing style to materialize a near future world, in their novels, where the very interaction of one human with another will be dependent on the use VR and augmented technologies. Though, there may not exist any mentionable scholarly work to *Otherworld*'s name but *Warcross* has managed to garner a handsome amount of scholarly attention. Following are some of the notable academic researches done on *Warcross* where the researchers have critically examined the text from various angles.

In a 2025 scholarly article, "Surveilled Selves and Silenced Voices: A Linguistic and Gendered Critique of Privacy Invasion in Marie Lu's Warcross" Bhat et al. investigate how the digital technologies such as NeuroLink are used as a double edged tool initially retailed to enable empowerment among the masses and then becoming a mechanism of surveillance, systemized silencing and mental subjugation. The researchers by focusing on Emika Chen's experiences as a Chinese-American

female hacker in a male dominated digital space highlight the struggle for agency faced by women and marginalized groups of society. The qualitative study by using a combined model of narrative discourse analysis and critical feminist linguistics parallels the fictional technological systems like NeuroLink with real world algorithm driven and masculine dominated infrastructures responsible for facilitating linguistic erase and gender inequality. Bhat et al. concludes their study by advocating for a need of inclusive policy frameworks that critically examine algorithmic biases and ensure "transparency in data governance", educational initiatives to promote digital literacy among the marginalized groups and AI development embedded in "intersectional feminist perspectives" (446).

Likewise, Francis Butterworth-Parr in his 2024 PhD dissertation "Machphrasis: Video games as metaphor in contemporary literary culture" takes on a unique approach focused on the video game side of Lu's Warcross and draws on the past of video game culture to explore how literature has used video game elements as literary devices since the 20th century. For this Butterworth-Parr proposes a new framework 'Machphrasis' a way of literary writing that reflects on the evolving ability of video games to shape 21st century's way of thinking, acting and telling stories. Among the many key ideas discussed in his thesis is the flexibility of GameLit genre to move beyond the rigid rules of game mechanics like number crunch, character stats and leveling and shed light on the more contemporary issues relating to gaming and hacking ethics, gender power dynamics, and resistance against the unjust systems. For instance, Emika challenges the conventional literary portrayal of hackers and gamers as she is not only a Chinese-American female hacker navigating a White male-oriented digital landscape but also, "makes available new forms of reparative justice that expose clumsy institutional systems" (16) by using her hacking skills to hit back on any instances of online female harassment. Furthermore, she through her gaming literacy and hacking skills is able to hold her own against the unjust system by resisting control over her digital interaction in a gamified society. Butterworth-Parr concludes his work by stating that due to the production of works like Warcross machphrasitic writing may mature in the future to include more inclusive and ethical stories to present that video game elements can enhance literary writing.

Furthermore, Lindsay Burton in her 2022 article, "Virtually Grown Up: Posthumanism and Artificial Intelligence in Fiction for Young People" brings in another unique perspective through her posthumanist analysis of Lu's *Warcross* by inspecting how artificial intelligence (AI) is presented in Youth Literature and Media (YLM). According to her humanity harbors a kind of discontent towards AI, believing it to be less than them in intellect, thus, not-yet-human. Burton builds her ideas by intersecting the concepts of semiotic square by N. Katherine Hayles and aetonormativity by Maria Nikolajeva to explore the changing boundaries and power dynamics among the binary relationships of adult vs. child, human vs. machine, and body vs. information. Burton argues that in the technologically evolving world bodily security has become a main concern and quotes examples from the novel where body security was put at risk due to mishandling on the adults' part which forces the young people to rise against and challenge the adult authority and technological control. She concludes her study by stating that novels like *Warcross* enable us to explore the potential of AI in the near future and what it means to grow up in a world shaped by evolving AI technologies.

Similarly, Laura Brooks in her 2020 dissertation titled "Failure is the Name of the Game: Queer Failure in Video Game Novels" explores the way Lu's work deviates from the conventional game narratives. Brooks terms it as queer potential and contrasts Lu's created gameworld in *Warcross* with a game like *League of Legends*—a MMORPG known for its rigid and standardized gameplay rules and non-representation of marginalized identities—to examine how Lu by introducing a position of "Architect" in her e-sport (Warcross) "refutes the possibility of a fixed and unchangeable game environment" (Brooks 54). Thus challenging the conventions of what should be considered a game. In fact, according to Brooks the very character of Emika Chen, who enters the tournament in an unorthodox way—by hacking, rejects the normative standards of gameplay. Not only this, but the narrative is further made queer when Emika deviates from the dominant plot conventions by refusing to help Hideo, the male lead, in his quest of global mental subjugation. Brooks concludes her dissertation by stating that Lu's *Warcross* opens new avenues for envisioning the potential of video games to include unconventional and more inclusive ways of structuring digital spaces.

Kevin Moises Suarez in article "Lit Trends" (2020) praises Marie Lu's use of soundtracks, posted on her X account, in creation of *Warcross* as a contemporary way of blending music with literature to provide the 21st century audience with an innovative way of enjoying literature. He terms *Warcross* as an example of, "music acting as an

artistic medium" where the authors can convey their message because, "sometimes ...[message] can't be fully described with words but can be felt through music" (Suarez 8).

While the reviewed academic works mentioned above offer valuable contribution to the exiting body of research on the primary text Warcross because they highlight issues of great relevance, especially contemporarily as they shed light on the very serious concerns of our era such as the power imbalance in the modern-day world, perpetuating marginalization of female and minority groups in male dominated digital spaces, resistance against the digital surveillance systems, struggle for mental and bodily autonomy, ethical use of technology and hacking and crafting new possibilities by disrupting gaming norms. However, there obviously remain areas underexplored, for instance, the fact that one of my primary novels Otherworld has not been deemed as subject matter of any academic study even after receiving academic recognition is quite disappointing. Furthermore, as much of the above quoted research body focuses on the subjects of critiquing systems of control whether they exist in form of adult authority over the youth as discussed by Burton or normative power structures in video gaming culture as discussed by Butherworth-Parr and Brooks, or overriding control of algorithmic driven social systems as discussed by Bhat et al. in her work, or the struggle for female and minority autonomy in digital spaces as discussed by Burton, Brooks and Bhat et al. Naturally, there some gaps left by these studies which future researches can work to fulfill. Among such research gaps is the focus on the genre GameLit itself. As discussed elsewhere GameLit is a unique genre as it includes a plot built around characters playing in a game. Often times these characters are spatially and emotionally immersed in the game-worlds to such an extent that the present plot of the game becomes their new reality which often clashes with their real world understanding to make sense. This is increasing becoming a custom with the evolution in the VR games such as 69 Ways to Kill a Zombie, A Haunting Witching Hour, Batman: Arkham Shadow, Walking Dead: Saints and Sinners and thousands others. Since the games which my concerned primary novels' plots are revolve around are also VR games, I aim to examine the immersive and interactive tendencies of the game-worlds from a narratological point of view and their subsequent effect on the gamers, such as, the interactive and immersive features which make the game-world hyperreal and manipulate the perception of the characters.

2.4 Research Gap

While the above body of research adds valuable knowledge regarding the genres of GameLit and Cyberpunk, their scope is limited to only a few thematic issues chief among them is impact of technology on human societies, corporate control, artificial intelligence, and the nature of humanity in an artificial world. Hence, they fail to cater to the evolving dynamics of the GameLit and Cyberpunk genre. For instance, in 21st century, with the evolution in AI technology, things we considered to be permanently in fictional worlds are in fact becoming our reality, such as the creation of AR eyewear connected to internet and smart clothing which can monitor body health. Also, in contemporary times the recent advancements in AI and virtual platforms, such as the creation of virtual avatars have opened new avenues of potential for digital interaction in virtual world. Consequently, there are certain themes which are gaining much traction due to evolution in AI technology such as the hyperreal nature of immersion and interactivity in virtual environments.

However, what remains underexplored is the scholarship merit these hyperreal experience of immersion and interactivity afford. For instance, much of the modern attention to hyperreality is fragmented, with technologists focusing on the technical potential, or popular culture romanticizing its futuristic appeal. Similarly, literary studies, especially of Keerthana, Ramya and Patra, as mentioned above, though producing bodies of works emphasizing the hyperreal experiences in virtual settings do not sufficiently examine how the narratives in GameLit fiction employ immersive strategies to reshape perception of reality and human autonomy. This research study, therefore, aims to fill this gap by intervening at the narratological level and addressing the gap existing in literary scholarship by analyzing how the narrative VR games in concerned GameLit texts such as OW and WC employ immersive and interactive techniques that create hyperreal experiences and consequently blur the boundaries between the characters' perception of what is real and virtual (unreal).

Furthermore, after analyzing the existing body of research that exists on the primary novels it can be stated none of the novels have been explored in detail from the narratological perspective Thus, this study aims to investigate the use of narrative strategies of immersion and interactivity as presented in the game-worlds of concerned GameLit texts from a narratological point of view. The study also aims to explore how

these employed narrative techniques by the characters' perception also impact their identity, behavior and decision-making skills.

The significance behind the choice of both these novels for this research study lies in their representation of 21st century society. For instance, many media theory scholars, like Ryan, consider the 21st century as a videolised society, where the video format either in form of YouTube shorts, Instagram and TikTok reels, online videogames like MMORPGs and even Podcasts have become a dominant medium for people to gain information, access entertainment and enable social interaction. This cultural trend can especially be seen in the 21st century's youth, as they navigate the increasingly digitalizing world dependent on digital platforms that prioritize video formats, consequently, influencing their learning skills. Among the literary genres Cyberpunk and GameLit effectively capture this heavy reliance of 21st century's youth on video content either in form of passive consumption of social media content or interactive gameplay intended to enable digital interaction.

Therefore, the texts chosen for this research study can be deemed as great representatives of 21st century GameLit fiction because not only they seamlessly embed gaming mechanics in their narratives but also mirror the 21st century's growing digital anxieties, such as, what possible harms such virtual technologies can create, if they are left unchecked, by using their immersive simulations to blur the line between what is real and what is merely a simulation. These texts foreground hyperreal digital environments in which the simulated often feels preceding the real, reflecting a key preoccupation of 21st century society with digital experiences that overshadow lived ones. At the same time, their treatment of themes like the power imbalance of peoples' decision making agency and corporations' control over them through technological systems perpetuating digital surveillance and influencing the dominant narratives, both in case of WC in form of Hideo Tanaka's NeuroLink system which through lenses connects global populace to one system and in case of WC, Company's visor disks created to exploit VR for capitalism, mirror the contemporary society's dominant themes. This makes both novels important representative of 21st-century GameLit fiction.

CHAPTER 3

RESEARCH METHODOLOGY

The mode of this research is qualitative interpretive paradigm. This research uses a conceptual framework based on the concepts of 'Immersion' and 'Interactivity' by Marie Ryan and the theory of 'Hyperreality' given by Baudrillard. Therefore, Ryan will be the main theorist while Baudrillard will be used as a supporting theorist since the theory of Hyperreality will work as a base while Ryan's concepts will be the main focus. Hence, the story investigates from a narratological viewpoint the immersive and interactive technique of the VR game-world, which result in hyperreal experiences for the characters, impacting their identity, behavior and decision-making skills, in the concerned literary texts *Warcross* and *Otherworld*.

3.1 Research Design

Qualitative interpretive paradigm or qualitative research is an approach which is used to comprehend and interpret experiences and meanings of from an idiosyncratic perspective. It gathers subjective data related to the respective research being conducted such as data related to analysis and observation of "people, places and conversations" (Bogdan & Biklen 2). It rejects objectivity and embraces the understanding and interpretation of the complex and subjective aspects of human behavior and experiences of living in society. As Cohen et al. states, "Interpretive paradigm....is concerned by a concern for the individual......to understand the subjective world of the humans (21). It works to explore the complex and multifaceted aspects of human reality which cannot be quantified using tools, but which need to be discerned using a very different set of faculties as compared to quantitative research (Pather & Remenyi 5). The goal of the qualitative interpretive paradigm is to uncover hidden meanings from its research matter (Gichuru 1).

3.2 Research Method

The method applied for this research is narrative inquiry explored by John W. Creswell and Cheryl N. Poth in their book *Qualitative Inquiry & Research Design Choosing Among Five Approaches* (2018). Narrative inquiry is a method in qualitative research and focuses on comprehending and analyzing narratives to gain insights into people's world experiences. Clandinin and Connelly define narrative inquiry as "stories

lived and told," (Clandinin & Connelly 20). It is useful in research where the aim is to explore intricate narratives based on human experiences. It also aids in exploring how narratives are structured, and their content and context. Creswell and Poth in their book not only define but also explain how to implement it in qualitative research. This approach will enable the research to delve into the narratives and uncover the techniques that create immersive and interactive experiences from a narratological viewpoint.

The method proposed by Creswell and Poth in carrying out the procedure for narrative inquiry uses the approach taken by Clandinin and Connelly as the general guide according to which, "the methods of conducting a narrative study do not follow a lockstep approach but instead represent an informal collection of topics" (Creswell & Poth 71). The following are the steps proposed by Creswell and Poth in conducting a narrative inquiry:

- Determine if the research question(s) best fit narrative since this
 method is suitable for analyzing the lived experiences of a small
 number of individuals.
- Select life narratives of one or more individuals and gather their stories by either journals records, diaries, or field notes.
- Situate each participant's stories within their individual personal experiences, culture, and historical contexts.
- Analyze the participants' stories by organizing them into a framework called restorying. It means reorganizing collected stories according to the main elements of a story like plot, time, setting and then rewriting them chronologically so that they are easier to comprehend.
- Embed a collaborative approach in the collection and telling of stories so that accuracy of the narrative being recorded can be ensured by both parties.
- The final report must be written and should include an introduction,
 explanation of research methods, participant's story presented

accurately, important patterns or themes and a final interpretation of the meaning of the story.

3.3 Method of Analysis

After defining the narrative inquiry method of research, the following are the steps taken for applying the narrative inquiry method for this research:

Though Creswell and Poth's method of narrative inquiry focuses on the lived experiences of animate beings like humans and is best suited for capturing detailed stories of a small number of individuals. However, the primary data for this study are characters from selected GameLit novels and not animate humans. Therefore, the research uses narrative inquiry method to focus on the stories and lived experiences of limited characters in the GameLit novels OW and WC particularly the immersive and interactive experiences of the characters within the VR game-worlds. For instance, from the novel WC the character of Emika Chen is focused, similarly from the novel OW the character of Simon Eaton is focused.

In the method of narrative inquiry, the researchers may record the participants' stories in a varied number of ways like journals or diaries. However, based on the research questions and objectives of this research the characters' narratives in the novels are used as field texts and the primary source of extracting information of the concerned characters. All the important narrative passages and scenes from the novels WC, and OW, that illustrate the immersive or interactive experiences particularly where the concerned characters are deeply engaged with the virtual game-worlds are analyzed according to the conceptual framework in the analysis portion of the research.

The procedure of analysis includes selection of a textual reference from the text and its analysis according to the conceptual framework of spatial and emotional Immersion tied with Internal-ontological Interactivity and how do these narrative techniques impact the gamer-characters' (Simon and Emika) identity, behavior and decision-making skills in a virtually simulated game-world that is both hyperrealistic and immersive.

Focus is placed on specific descriptions of setting, characters' first-person actions, thoughts, and emotions by using the framework based on the concepts of Baudrillard and Ryan.

In the method of narrative inquiry, the individual stories are situated within the context of culture, history and personal experiences during data collection and analysis. Therefore, to fully understand the lived experiences of the concerned characters, the highlighted passages are situated within the context of setting, cultural, and technological implications with a focus on how these contexts contribute to the creation of hyperreal experiences of these characters and impact their identity, decision making skills and agency in a simulated world.

In narrative inquiry it is pertinent to arrange the gathered data chronologically (having a proper beginning, middle and end) so that the story makes sense – a process termed as restoring. But since both novels already follow a linear chronology there is no need to restory them. Furthermore, in narrative inquiry researchers also highlight the themes that arise from the story to provide a more detailed discussion of the meaning of the given story. Therefore, the study also aims to highlight and analyze the emerging themes from the lived experiences of the concerned characters such as analyzing themes that reveal how the concerned characters through their experiences in virtual worlds achieve hyperreality with a focus on spatial and emotional immersion and internal – ontological interactivity.

Narrative inquiry lays stress on the collaboration between the researcher and the one being researched to discuss the meaning of the story and provide an accurate account of events. Since this study involves the use of characters in the selected novels, therefore, during the process of highlighting narrative passages and analyzing them I as the researcher considered the interaction between my understanding of hyperreality, and the immersive and interactive experiences created by the plot and by the use of narrative techniques of setting and characters.

This study follows the written reporting structure as directed by Creswell and Poth. It includes an introduction, a methodology that states the research method and framework for analysis, the analysis where the discussion of hyperreal immersive and interactive narrative techniques is presented in written form along with the thematic findings and conclusion.

3.4 Conceptual Framework

As mentioned above, the conceptual framework for this study will be based on the theory of Hyperreality posed by Baudrillard and the concepts of Immersion and Interactivity given by Ryan. Together their concepts convey how contemporary narratives leverage hyperreality to create such immersive and interactive experiences that challenge the perception of reality in a digitally evolving world. The concepts of both the theorists are significant to this study because they both address the consequences of technology on human experiences. As immersive technologies become exceedingly prevalent and advanced it is important to comprehend how they impact human interactions with both virtual and physical realities.

3.4.1 Baudrillard's Concept of Hyperreality

Jean Baudrillard in his book Simulacra and Simulation (1981) pioneered some of the most important concepts that not only shaped the postmodern discussion but continue to impact the contemporary times of 21st century. Among his concepts are related key terms like 'Simulacra', and 'Hyperreality'. In order to define simulacra, Baudrillard quotes Ecclesiastes, "The simulacrum is never what hides the truth - it is truth that hides the fact that there is none." (qtd. in Baudrillard 3) and states that simulacrum is a representation that does not accurately mirror the reality rather it makes its own reality. He also provides the various orders which outline the progression of an idea or an object as it achieves a stage independent of reality. The first order of simulacra that he states is natural simulacra, which presents representations still bearing resemblance to reality. Then comes the second order of simulacra which he defines as productive simulacra because they are associated with the machine age, and it is in this order where the line between reality and representation begins to crack due to mass proliferation of copies which mask the original reality by imitating it. Finally, comes the simulation simulacra associated with the postmodern age. In this order the representation finally precedes reality and begins to function as independent of reality.

The term "hyperreality" is another concept which Baudrillard coined in his book. It takes its roots from the study of semiotics. Baudrillard defines "hyperreality" as "the generation by models of a real without origin or reality: a hyperreal" (Baudrillard 3). In other words, hyperreality is a representation, without an original referent. He believes hyperreality goes further than confusing or blending the 'real' with the symbol which represents it; it rather represents something that does not actually exist. This he calls the 'simulacra of simulation' which is "founded on information, the model, the cybernetic game - total operationality, hyperreality, aim of total control" (81). In other words, hyperreality by blurring the lines that separate the real from the

unreal creates an illusion. It needs to be noted here that while simulacra and hyperreality are different concepts, they are still interrelated, because simulacra contribute to the state of hyperreality. If simulacra are the representations of real objects which proliferate the reality, then hyperreality is the state which rises when these representations become more significant than their real-world counterparts reaching a stage where the distinctions between the two blurs. Also, Simulation simulacra is a key feature of hyperreality because it captures the advancements in the fields of AI, cybernetics, and other information systems, which in the 21st century are increasingly blurring the line between natural and artificial.

It is of major concern to the present research study as it corresponds to the rise of digital technologies of the contemporary era. According to Baudrillard this third order of simulacra ceases to bear any connection to reality, instead it becomes self-referential and exists as a pure simulation lacking any original referent. In the context of GameLit fiction hyperreality offers a strong framework for comprehending its features, since its key features lie in exploring the relationship between humanity and technology. For instance, a characteristic feature of GameLit includes all-controlling VR technology in dystopian and virtual settings. It also highlights dominating aspects of VR technology. The genre of GameLit thrives on the belief of virtual experiences gaining more precedence on real ones.

Furthermore, by combining the understanding of the term of signs and signifier with simulacra and simulation, also discussed in his book, it can be stated that Simulacra are the signs which do not have any origin in reality and simulation is the unreal meaning attached to the simulacra which blurs the line between real and unreal or simulated. This simulation is what gives birth to the concept of Hyperreality. In context of GameLit narratives this can be observed in its exploration of consequences tied with living in societies where simulation is a norm and becomes reality.

Baudrillard has similarly defined the relationship between hyperreality and science fiction. According to him the traditional science fiction was that of exploration, but those days are gone, rather contemporary times are a complex mixture of the real and the hyperreal. It can be proved in these lines, "the imaginary was the alibi of the real, in a world dominated by the reality principle. Today, it is the real that has become the alibi of the model, in a world controlled by the principle of simulation" (82). This means what is considered real is actually a simulation of constructed models, where the

simulated model takes precedence as the primary reference. In short, in the contemporary technologically advanced world, reality can be seen as merely a reflection of simulations. This issue is considered a dilemma of 21st century society and is being strongly mirrored in contemporary literary works such as *Warcross* and *Otherworld*, which are based on the subject of proliferation of artificial reality, as can be seen in advances in AI.

3.4.2 Ryan's Concept of 'Immersion' and 'Interactivity'

Where this research uses the Baudrillard' theory of Hyperreality as the supporting theory, Ryan's concepts of 'immersion' and 'interactivity' are used as the primary theory that are linked with the Baudrillard's hyperreality to create the framework for the present study. Marie Laure Ryan in her book *Narrative as Virtual Reality 2: Revisiting Immersion and Interactivity in Literature and Electronic Media* (2015) explores the concept of immersion and interactivity across varying media forms in context of digital age, such as literature, video games, electronic texts, and others. She compares traditional narratives and contemporary digital media to investigate how these different kinds of mediums generate immersive and interactive experiences for the readers or players. She also discusses the foundations and conceptions of virtual reality, immersion and interactivity.

In her book Ryan states that the term 'virtual' in use in contemporary 21st century is synonymous with the cyberspace experience of internet which has provided people with a platform to digitally interact with others on a global level. However, in 1980's 'virtual' was used interchangeably with the term 'virtual reality—a kind of digital technology which enabled people to interact with multisensory artificial worlds, but the pioneers of this concept failed to provide any concrete material for their fictional ideas resulting in modern world's projection of interactive and artificially created digital worlds on the internet. Etymologically, the term 'virtual' originated from Latin word 'virtus' meaning strength, and potential. Aristotle by giving an example of 'tree in an acorn' referred to it as having the potential to transform in the original object. This highlights that in classical philosophy 'virtual' was similar to 'actual' rather than being in opposition. However, in the 18th and 19th century the concept of using virtual to describe something as fake rose due to development in optical sciences and digital technology working on simulated experiences imitating real ones. Ryan states that in modern times the term virtual now has two contrasting meanings, "virtual as fake and

the other as potential" (19) both of which have influenced the works and theories of two pioneers of French theory: Jean Baudrillard, an advocate of deceptive nature of virtual experiences and Pierre Lévy, who's work focuses on the potential of virtual for creative new spaces and experiences. Ryan further applies these two varying philosophical aspects of virtuality to discuss the nature of literary and especially artistic texts since they present a record of human thoughts and ideals. She states that since medieval times philosophers like Aristotle viewed artistic works as copies of reality and believed that humans had a natural tendency to gravitate towards them for learning and pleasure. It may also be because the work of art provides humans with intellectually satisfying comprehension of reality related to raw sensory experiences like death and disaster. However, Ryan considers modern readers less didactic because they enjoy artistic texts not because they copy or represent reality but because the modern reader thrives in the fakeness of that representation. This aligns with Baudrillard's concept of hyperreality which advocates the superseding of artificial version over the real such as the Disneyland simulations. In context of literature this idea of 'fakeness' can be paralleled with fictional worlds. Fictional worlds in literary texts, though having their self-sufficient world structure, are still imaginary worlds inhabited by imaginary characters, thus they can be considered as virtual versions of reality. However, another way to understand fictional worlds is that they also present the world of possibilities. Levy states that literary texts have always been 'virtual objects' because their imaginary existence is independent of the written medium and vary in interpretation from reader to reader.

However, the chief achievement of Ryan's work lies in her explanation of the concepts of Immersion and Interactivity. She defines immersion as a sense of complete absorption in a simulation in context of VR and in an imaginary world in context of a text. In further explanation of the term immersion, Ryan mainly focuses on the reading experience because even when VR theorists need to explain their concepts of immersion in a simulated world they equate it with the reading experience. This is because the process of immersion in a literary text exists even before the foundations of VR. She further explains her viewpoint by basing them on significant literary theories like 'Immersion and the "World" Metaphor', which states that reading can become an immersive experience if the readers grasp the text as a metaphorical world, inhabited by relatable characters, meaningful setting and most importantly language

because with the help of words the reader can make a mental map of the imagined world aiding in their immersion. However, the proponents of post-structuralism do not support this idea as they view words as a self-sufficient system of signs and the notions of Reader-response theory also fail to provide a sufficient explanation of the experience. Nevertheless, the theory of 'Transportation and Being "Lost in a Book" states that the level of readers' immersion depends on how engaging the text is. Some texts are more immersive like fiction as opposed to non-fiction. Cognitive psychologist Richard Gerrig's equates reading to being transported to another world because he views reading as an active act where the readers have to actively participate in the mental mapping of the fictional world raising their immersion. Similarly, the philosophical theory of 'Possible Worlds' states that reality comprises of multiple parallel worlds. The real world of the reader can be considered as the 'actual world' and the multiple worlds connected to it can be considered as possible worlds. Therefore, possible worlds are the things that can exist, and readers can enter these worlds through a fictional text. This theory may not have any logical existence but for the readers these worlds are very much real like the fantasy worlds of popular fiction books. When a reader enters these possible worlds while reading, a re-centering of the world occurs because that possible world becomes the reader's new reality for the time he spends in reading. This makes the process of reading immersive and engaging. According to Ryan, this re-centering occurs only in fiction texts. She further describes how immersion can be observed in literary texts by dividing it into three types: spatial, temporal and emotional immersion.

Spatial Immersion is established in a literary text when the reader feels like being a part of the story-world's setting. She further elucidates spatial immersion by combining different ways used by varying authors to make their narratives spatially immersive for readers, for instance, the phenomenon of 'Madeleine Effect' by Marcel Proust which works by triggering personal memories. Readers while reading may come across a specific name or an image in the novel which can trigger their personal memories and transport them to a specific part of their lives, similar to how Gregory Ulmer was reminded of the blue lilacs, growing at the back of his house, when he read Michael Joyce's *Twelve Blue*. Another way to invoke spatial immersion is Honoré de Balzac's method of describing his novel's setting which is tying description to a moving character. Balzac's narrators go through the setting, for instance that of manor in "La Grande Bretèche," from his book *The Mysterious Mansion* like a real estate tour, step

by step moving from the road to the street, from streets to the mansions entrance and from entrance to each room and out, painstakingly detailing all minor to major details. This might seem tedious to some readers, but it enhances the novel's atmosphere and form later events. In contrast to this, Emily Bronte integrates the setting with her characters' perceptions and mood and also uses recurring natural motifs instead of tedious details, to anchor her setting in the reader's minds. This can be seen in her use of natural motifs like wind on the moors, soft wavy grass and frozen ground in Wuthering Heights. Similarly, another way to create spatial immersion is by using proper names instead of common nouns because a proper name does not only describe an object's properties but rather instantly brings it to mind. For instance, the use of the city Paris, instead of just the city, will not only instantly bring the very city to mind but will also enable the readers to make personal and cultural connections with that place further deepening their spatial immersion. Similarly, Barthes proposes the technique of "Reality Effect" which supports that small insignificant details also aid in reinforcing the spatial immersion of the setting. An example can be seen in Tolkien's creation of many descriptions for his novels from language to cultures of every race, be it Hobbits, Elves or Dwarves. Finally, spatial immersion increases when the readers' perception of a place is parallel to how they view real-world settings. For a setting to be immersive it must be dynamic, such as in W. G. Sebald's *The Emigrants*, where the setting is presented dynamically, with the road itself becoming the moving viewpoint and shaping the landscape.

Temporal Immersion focuses on reader engagement with the unfolding of time in a story. The three central narrative techniques that create temporal immersion are suspense, curiosity and surprise. Suspense makes readers anticipate the story's progression wondering what will happen to their favorite character. While curiosity keeps readers hooked to the story's plot, making them find as much as they can about a specific character or event. Surprise brings forth the plot twists or unexpected endings of the story.

Emotional Immersion for the readers is created based on their emotions for the characters in a narrative. However, there is a contrast between the emotions readers feel for the characters and the represented emotions of the characters in the narrative. For instance, a reader who has gone through a rocky relationship may sympathize with Shakespeare Othello but will not feel jealousy in the same way as Othello felt in the

play. Ryan divides emotions that enhance reader immersion into three types: Subjective, Empathetic emotions and emotions felt for oneself. Subjective reactions towards characters and their behavior include emotions such as, liking, disliking a character, or feeling admiration, pity, and amusement. Emotional immersion is deepest during to Schadenfreude—when bad characters get a much-deserved punishment, frustration on bad characters getting good endings or likeable characters are given bad endings. Empathetic emotions include feelings we share with the characters like sadness or happiness while emotions felt for oneself includes self-centered emotions horror, disgust, and sexual arousal. (108). Unlike Empathetic emotions self-centered emotions forces readers to place themselves in the shoes of the characters, raising their immersion in the story. But readers do not mourn for fictional characters as they do for real people. This presents a paradox where readers feel but at the same time do not feel empathy for them. Gregory Currie questions this paradox of readers' emotions towards fictional characters while knowing they are not real and proposes that readers experience 'quasi-emotions' caused by make-desires and make-beliefs. This concept is considered flawed because it fails to capture the intensity of emotions some readers may have towards fictional characters.

Interactivity according to Ryan refers to the ways readers and gamers engage with the narrative text and is capable of influencing the story and their experience within it. She defines four types of interactivities which include 'External-Exploratory' found in classic hypertext texts where the reader navigates a narrative space while remaining external to the time and space of the virtual game-world and without affecting its events. External-Ontological interactivity can be observed in games like The Sims or Civilization where the gamers create the game's storyworld from a secluded and godly perspective without identifying with any of the objects present in that storyworld. The third type of interactivity, Internal-Ontological, is most commonly found in immersive computer games like PUBG Battlegrounds and tabletop games like Dungeons and Dragons where the gamers take on a character within the storyworld and can affect the events in the world through their actions. In the fourth type Internal-Exploratory interactivity, the users can experience the storyworld from the inside or from perspective of a character in the narrative but do not possess the ability to change the events of the storyworld through their actions as can be seen in exploratory games like The Manhole.

3.4.3 Significance of Ryan's and Baudrillard's Concepts for the Study

The reason behind taking Ryan's concepts of Immersion and Interactivity along with Baudrillard's theory of Hyperreality for the analysis of the concerned research study lies in the way they treat the very contemporary issues of digital technology and its evolving nature and capture the 21st century's increasing dependence on digital platforms and video content.

Ryan explains Immersion as a process of deep involvement with a fictional world resulting in pleasure for the reader. For Ryan, this involvement is a means of deep engagement within the fictional world they have immersed themselves in and away from the readers' reality. As discussed above, she also mentions three kinds of Immersion among which the study aims to delimit its scope to only Spatial and Emotional Immersion because they discuss the spatial and emotional ability of narratives in immersing readers. Similarly, Interactivity is explained as the degree to which a gamer engages with the system and among the four types of interactivities the study aims to delimit its scope to Internal – Ontological interactivity because it focuses on gamer's ability to embody a character within a storyworld and alter the events of the narrative through his/her first-person actions. Ryan states that:

The system projects a storyworld, and the user impersonates and sometimes creates an individuated member of this world. She may also be able to build objects that become a permanent part of the storyworld. Whether she interacts with NPCs (nonplaying characters), as in computer games, ... the user "writes" the life (or lives) of her character and, by extension, the history of the entire world, since a world's history is the sum of the personal histories of all of its members. (163 - 164)

This aligns very well with the aim of this research as it examines how the characters in the concerned primary texts: WC, OW engage with the virtually constructed environments of the game-worlds of game's Warcross, Otherworld and how their experiences within the game-worlds blur the lines between reality and its virtual simulation. This includes making choices which may change the course of the virtual environment—a dynamic relation between the gamer and the environment. As well as how the narrative techniques of Spatial and Emotional Immersion and Internal-Ontological Interactivity used within the game-worlds of VR games Otherworld and

Warcross impact the concerned gamer-characters' identity, behavior and decision-making skills in a virtually simulated game-world that is both hyperrealistic and immersive. It also aligns well with Baudrillard's concept of hyperreality especially his third order of simulacra the simulation simulacra which chiefly focuses on the fake taking precedence over the real—"more real than the real" (56).

However, one thing that needs to be noted here is that the narrative technique of Immersion given by Ryan, which serves as a major part of the framework being used here for the purpose of analysis, examines the phenomenon of narrative immersion in context of reader's immersion in the setting of a traditional novel. Whereas the narrative technique of Interactivity examines the interaction of gamers with the game-world of video games like first-person shooter games or MMO² quest based games. But the concern of this analysis is to observe Immersion and Interactivity through the perspective of characters Simon and Emika, in the game-world within their respective GameLit novels and their impact on Simon and Emika's identity, behavior and decision-making skills in a virtually simulated game-world that is both hyperrealistic and immersive. Ryan's concepts are still applicable for the purpose of this analysis because though Ryan discusses reader immersion and gamer interactivity, but a feature of GameLit fiction's such as OW and WC, is that here the characters as players take on the position of the reader and gamer. They therefore become gamer-characters and actively, rather than passively – as is the case with reader engagement in traditional novels, explore the game-world through their avatar's actions and first-person interactions as the reader explores the novel's setting. Also, just as a reader mentally steps into the world of the novel, in concerned primary GameLit texts' context the gamer-characters too become emotionally and mentally entangled within the gameworld of the VR games which are presented within these GameLit novels. Moreover, both the concerned VR games are narrative games, therefore, Ryan's concepts of narrative Immersion and gamer Interactivity can be used to analyze Simon and Emika—the gamer-characters' immersion and interactivity in the game-worlds of games Otherworld and Warcross which themselves exists inside the GameLit novels:

² MMO games stands for Massively Multiplayer Online games.

³ Avatars are the visual representatives of gamers within the game-world.

Otherworld, and Warcross. Simply put the use of Ryan's original concept works here because the game-worlds of these narrative VR games actually function as a separate reality within the novels' main story. In other words, the games are like narratives and the characters Emika and Simon are their readers, since the game unfolds similar to a narrative but Emika and Simon as gamer-characters through their active interactions in form of choices and actions can decide the course of the actions. So similar to how a reader becomes immersed in the fictional world of a novel, the VR game-worlds in these GameLit novels add another layer of reality in form of VR games that these gamer-characters interact with. Also, the concept of Internal-Ontological Interactivity also aligns with the goal of this research because it due to the characters' first-person actions and interactions (Internal-Ontological) with the game-world that their process of immersion overpowers their real-world experiences due to which they subconsciously begin to displace the real with the virtual. However, the terms avatar and gamer-character should not be confused here because in order to move around and play the games the concerned characters need to have a virtual identity. So, the avatars are simply virtual representations of the gamer-characters within the virtual gameworlds, and enable the gamer-characters to interact with the game-world through them.

Therefore, applying Ryan proposed concepts of Spatial and Emotional Immersion in context of gamer-characters it can be observed that some changes may occur. Firstly, among the different ways of creating Spatial Immersion that Ryan puts together, Proust's method of 'Madeline Effect' can be observed indiscriminately by either readers or gamer-characters. This is because Madeline effect which works by triggering personal memories when a reader comes across a specific name or image in a novel can be observed in the context of gamer-characters as well, as they navigate the virtual world of their respective VR games. Secondly, Honoré de Balzac's method of creating spatial awareness—tying description to a body in motion can be better observed in the context of gamer-characters because they actively explore the setting through their movements across the various landscapes as opposed to readers who can only imagine them. Thirdly, the method of using proper names instead of common nouns to create spatial immersion can also be clearly observed in the context of gamercharacters because they actively take in their surroundings by making comparisons with their real world counterparts. For instance, they may come across a bar or a restaurant while exploring the landscape of the VR game-world and equate with the real-world

bars and restaurants they have been to. This interaction will increase their spatial immersion in the virtual setting. Furthermore, another immersion technique used to create a vivid sense of place is Barthes proposed 'reality effect' which works by adding realistic details to fictional objects can also be observed in the context of gamer-characters as their virtual game-worlds are crafted to be closer to reality of gamer-characters.

Similarly, the phenomenon of Emotional Immersion can also be observed in the context of gamer-characters through the three types of emotions conducive to immersion namely subjective and empathetic emotions and emotions felt for oneself. Ryan cites some cognitive psychologists who consider that there is a contrast between readers' emotions for characters as compared to real people and revolutionary psychologists who study humans as social beings capable of developing empathetic emotions for others based on their emotional involvement irrespective of the existence of the subject. Ryan's own assessment of the matter is more inclined towards the later as she believes that "once we develop empathy, it does not have to be limited to people we know nor to real people." (109). This highlights that all three kinds of emotions conducive to emotional immersion can be observed in context of gamer-characters who interact with the avatars of other gamer-characters and NPCs⁴.

Similarly, Ryan's concept of Internal-Ontological Interactivity, mostly observed in computer games —can also be applied in the context of gamer-characters. This is because even though the games exist as a second layer of narrative within the novel, they still are VR games structured very much like first person shooter games and require the characters to actively make choices that will change the course of the game (and their lives). Also, the virtual environments of the concerned VR games in these GameLit novels provide a high-level of feedback between them and characters. Also, as discussed above, this works because these novels are GameLit novels and have a characteristic feature of double realities—actual reality in which they exist and another layer of reality presented by games, and VR MMORPG games in context of the concerned primary novels, which give their characters the position of both a character and a gamer.

⁴ NPCs: Non Playing Characters.

As the study aims to focus on not only the immersive and interactive experiences of the characters in a hyperrealistic virtual game-world but also examines how these immersive and interactive experiences impact these characters' identities, behaviors and decision-making skills the study employs narrative inquiry as its method of analysis. This is because the use of narrative inquiry ties everything together because as discussed above narrative inquiry focuses on the individual stories and lived experiences of characters which are situated within their context of culture, history and personal experiences. Therefore, to fully understand the lived experiences of Simon and Emika in a VR game-world that is both hyperrealistic and immersive and to explore how do these immersive and interactive experiences impact these characters' identity, behavior and decision-making skills, narrative inquiry focuses on the specific descriptions of setting, characters' first-person actions, thoughts, and emotions. Also, it needs to be noted here that the variables of characters' identity, behavior and decisionmaking skills are essential in understanding the intensity of their immersive and interactive experiences. This is because these variables are share a cause-and-effect relationship where if one variable changes it will bring change in other variables as well as though in a reciprocal interaction. For instance, the way the concerned characters utilize their decision making ability will indicate their intensity of being immersed in the game-world which will directly affect their behaviors in the game-world and this change in behaviors will directly affect their identities.

CHAPTER 4

ANALYSIS: OTHERWORLD BY JASON SEGEL AND KIRSTEN MILLER

The GameLit novel *Otherworld* (OW), part of the trilogy *The Last Reality* (2017 – 2019) written by authors Jason Segel and Kirsten Miller, narrates the story of Simon Eaton as he braves the challenges thrown in his way while playing 'Otherworld' a VR MMORPG game. As the narrative unfolds, it is revealed that the gaming company called as 'The Company', behind the creation of game Otherworld is a shady corporation hiding dark desires, "The Company is beta testing the disk ... and the beta testers need to be badly injured so the Company could see what the physical impact would be" (Segel & Miller 230). On the one hand they wish to market their game as a groundbreaking creation in virtual reality equipped with the ability to substitute the real experience with highly immersive virtual one and allowing the gamers to achieve whatever they desire. While behind the scenes the Company actually wants to use this game as a means of conducting secret experiments in neural manipulation, testing the ability of the human brain to interact with virtually created immersive environments and eventually trap gamers in the game-world:

Helpless people are being falsely diagnosed with locked-in syndrome, and their families are being tricked into accepting the Company's virtual reality therapy ... The Company is using people's bodies to beta test the disk and work out the bugs. (193)

If successful, the Company will not only be able to control and reshape the reality of the addicted gamers around the world but also gain enormous economic and political control. However, the only hurdles they encounter in their digital aided world conquest are the 'bugs' in their game system and the issue of gamers dying in reality if they are killed in the game-world.

Moreover, the VR game Otherworld not only provides a life like immersive experience but rather it can also be considered as a microcosm of the world itself because similar to the real world it is divided into different realms or cities ruled by

Elementals⁵ and inhabited by NPCs like bugs, Children⁶ and others. It also houses gamers of all kinds and places, all addicted to the game-world of game Otherworld. It can be stated that in the game Otherworld the narrative techniques of Immersion and Interactivity are essential elements in creating exceedingly hyperreal experiences for Simon—the protagonist which also impact his identity, behavior and decision-making skills in the virtually simulated game-world of Otherworld. As discussed in the third chapter⁷, though the concepts of Spatial and Emotional Immersion are originally based on reader immersion and the concept of Internal-Ontological Interactivity on gamer interactivity, still Ryan's original concepts can be applied for the analysis of Simon a gamer-character's hyperreal immersive and interactive experiences within the gameworld of game Otherworld through his avatar because Otherworld's game-world actually functions as a separate reality within the novel's main story. Therefore, the game-world in novel OW adds another layer of reality that the gamer-characters like Simon interact with. The narrative techniques of Immersion and Interactivity are crafted in such a way that they appeal to all the five senses of Simon, drawing him into the hyperreal virtual world of the game and blurring the line between his reality and virtually constructed reality of the game-world, which in turn aligns with Baudrillard's concept of hyperreality.

An example of this blur between the real and virtual can be observed in the first chapter "Otherworld" where Simon for the first time don's the game's headset—a heavy visor with haptic gloves and is blown away by the hyperreal CGI⁸ quality of the game world. Simon, fully drawn to the hyperreal visuals of the game-world marvels, "I know everything is CGI, but my eyes are completely convinced that it's real" (8). Though the feeling of having a visor strapped to his face and haptic gloves sweating his hands keeps him grounded to the physical world, still his brain desires to be fully

⁵ Elementals are the demigod like rulers of different realms or cities of Otherworld.

⁶ Children are the offspring of the Elementals.

⁷ For more details, refer to page number 31.

⁸ Computer Generated Images.

committed to the digital world presented to him through the headset. Linyu Wang⁹ in her 2023 research study, lays out the science behind the extraordinary immersive and interactive experiences conjured by VR games and notes that in the VR games it is the motion tracking technology in HMD headsets that control the player's perspective and, "both simplify the operation and increase the immersion of acting the character in game" (Wang 492). Likewise, in this instance Simon's unwavering immersion keeps him hooked to the game for seventeen hours as he through his avatar explores the digital environment and braves the avalanches and violent polar bear attacks one after another, and finally reaches a cave carved in a glacier and feels his toes numb and eyes burn, "from snow glare" (9). From this instance of Simon's avatar's first-person (internalontological) interaction with the Otherworld's game-world, it is clear that it employs techniques that create hyperreal immersive and interactive experiences for him. According to Ryan this very kind of immersion can be defined as spatial immersion, "the response to setting" (Ryan 86), or simply put the sense of being bodily present within a fictional environment, which in context of the novel is the game-world environment around Simon that employs hyperrealistic simulations achieved through targeting the sensory abilities of the players.

However, it needs to be noted here that Simon's immersion within the gameworld is the result of his first-person interaction with that game-world and the type of interactivity suitable in Simon's context is internal-ontological interactivity, which as defined by Ryan is common in games like Otherworld where players take on a role within the game's storyworld and the narrative unfolds from the first-person perspective of the characters and through their actions as they explore the game-world. Wang further observes that VR games employ features that surpass ordinary games, and place the player, in first-person perspective — in the center of the story, and as an active participant. Due to this the "players are able to better feel the game atmosphere from the whole body to enhance the sense of game substitution, so that players can resonate

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⁹ Linyu Wang's study titled "The Immersive and Interactive Experience in Virtual Reality Games and Films" focuses on the mechanics behind the use of VR technology in modern media. She asserts that as the VR technology is gaining much traction in the current century, its features need to be thoroughly researched.

with the work of the game produce" (Wang 493). This can also be observed in the above-mentioned instance as Simon, using his avatar, explores the polar wasteland and frozen caves, fights off avalanches and wild animals. Simon's first-person interaction with the game-world not only shows his engagement with the narrative world building of the game but also demonstrates how his actions and decision-making skills influence the game-world, for instance, Simon instead of exploring the city of Imra decides to explore the polar wasteland surrounding it, even though Imra, from its cafes, casinos, restaurants, spas and bars with handsome waiters and waitresses, was specifically build to cater to every desire of the gamers (Segel & Miller 8-9).

Furthermore, as can be observed from the above-mentioned instance, the narrative technique of Spatial Immersion in use here is created by detailed worldbuilding and evocative descriptions of the game world's landscapes. Regarding this Ryan suggests in her book that sometimes writers in order to capture the spatial atmosphere and feel of the place in their literary work end up entangling their readers in a descriptive thicket "one solution, proposed by Balzac, is to tie description to a moving body" (Ryan 87). This is helpful because by giving the description through the perspective of a character in motion, it enables the reader to create a mental map of the place. Also, as stated above, Ryan discusses reader immersion but as it is the feature of GameLit fiction that the characters take the position of the reader becoming gamercharacters and explore the game-world through the actions and first-person interactions of their avatars, just as the reader explores the novel's setting. Therefore, using Ryan proposed Honoré de Balzac's approach, it can be stated that the character can also discover the game-world in a similar way, that is through their actions such as by moving through the landscape step by step, unfolding details of the landscape through their interactions with it. As can be observed in the above-mentioned instance from Simon's context as he explores the virtual landscape of a snowy wasteland. In this example spatial immersion is created by detailed descriptions and world-building which become so overwhelming that Simon begins to perceive the virtually created game world as real and concrete.

However, here Simon is using the standard version of the game which can be played using a headset and it is not at all equal in immersive qualities to the Beta version—a lightweight visor with a disk that attaches to the gamers' skull, which the company is secretly testing on the accident crippled and coma patients, like Kat. The

hyperreal immersive and interactive qualities of the beta version are so advanced that the one's wearing it find all five of their senses immobilized by the game as compared to the three senses in the standard version. It can be observed by Simon's experience in chapter 'The Other Side' when he sets foot in the game's White City wearing the headset 'disk' of the beta version, and being hit by the hyperreal CGI quality of gameworld exclaims:

It may not be Earth, but it's no game, either. I inhale deeply as a light breeze ripples the hem of my robe. I'm standing on a balcony ... I can feel the floor beneath my feet. I reach out for the metal railing and it's warm from the sun. (Segel & Miller 91)

Not only this but as he explores the modern sleek architecture of the White City around the building, the transport pods, the smell of the soil, veins on a leaf, taste of a fruit, and the feathers of birds, he marvels at the life like details which despite him knowing that it's all virtual his senses confirm it to be real. In this example again we can examine that Simon's internal-ontological interactivity and spatial immersive quality of the game-world for him arises by his steady exploration of the virtual environment—what Ryan describes as Balzac's technique for creating spatial immersion as tying "description to a moving body" (87)—as he sightsees the entire city, observes the shafts of the bird's feathers and the scales on its feet, observes the ridges on a leaf's surface, and as he plucks the fruit from the nearby tree and lets his teeth sink into the sweet tasting flesh of the plum like fruit. In other words, Simon perception of the White City unfolds step by step as he interacts with the virtual environment around him resulting in an increase in his spatial immersion within the game-world. Moreover, the realness of the inhabitants of the city, which are actually bots, further blurs his perception of reality. For instance, he tests the bot waitress asking her:

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"you're not real, are you?"

Eliza laughs, ... "Real?" she answers. "Of course I'm real."

"Are you an NPC or are you somebody's avatar?" ...

She seems thrown. "I'm a waitress" (92)
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And when Simon tries to push her further by testing her analytical skills, he finds himself stunned by her sense of humor because it's almost as if she knew that her analytical and critical skills were being tested by Simon:

I get the impression that Eliza thinks I'm insane. But to reach that conclusion, she would need to be able to think. She's either the most dedicated human waitress I've ever met—or the most impressive NPC ever designed. The weird thing is, I'm still not sure. (Segel & Miller 93)

Here it can be seen how the hyperreal virtual interactions with the bot waitress through his actions gives Simon the feeling of her being physically real. His avatar's active interaction with the game-world environment further heightens his sense of sensory experiences, such as the texture and feel of metal railing under his fingers and the virtual heat of the sun above him which in turn blurs his distinction between real and virtual realm. Simon's immersive experiences align with Baudrillard's theory of hyperreality. Baudrillard in his Simulacra and Simulation states that hyperreality occurs when, "there is no longer a respective position - the real disappearing to make room for an image, more real than the real." (Baudrillard 94). Similarly, for Simon his spatial immersion takes on such an intense form that he begins to subconsciously displace the real environment with the virtual environment of the game world. Similar examples exist across other GameLit novels such as Cline's Ready Player One, Ready Player Two and Armada where hyperrealistic VR games like OASIS and Armada have similar immersive qualities. Dr. Patra in his article 10 states that, "Inside OASIS, all distinctions between real and virtual dissolves and 3-D objects of cyberspace surpass and supplant the actual physical space" (Patra 1663) of the characters and in this act dissolve their sense of self. The immersive and interactive experiences within OASIS and Otherworld create a powerful attraction for its gamers and gain more value than their real world experiences. By presenting immersive and interactive experiences through such narrative structures such as Ryan proposed Balzac's technique for creating spatial immersion in virtual setting of the game and Simon's avatar's first-person actions to interact with the game-world, the instance highlights the extent to which the boundaries can be obscured through advanced level of VR technology. This instance also highlights how being immersed in the virtual game-world impacts Simon's decision-making skills, behavior and identity. For instance, Simon's above-mentioned decision to use his avatar's first-person actions to interact with the game-world by coming in contact with its many sensations deepens his immersion within the game-world which in-turn

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 $^{^{10}}$ Details of the article are already mentioned in Literature Review.

effects his behavior as he in this interaction feels lost. Furthermore, his decision to first inspect the game-world rather head on enter the quest side of the game transforms him from a mere gamer to a skeptical observer.

Furthermore, another example which presents the collapse of the boundaries between real and virtual through the rise of immersion and interactivity inducing narrative techniques can be observed in chapter 'The Resort of the Future'. When Simon makes his way out of the White City, he encounters a group of people on the way and discovers that they too are the disk players of the game's beta version and are being used by the Company as the guinea pigs to exterminate the game's bugs. On their journey towards the game's exit their group is attacked by a horde of insects (game's bugs) and in an attempt to save themselves they follow a bot named Margot to the nearest place, the city of Imra. While touring Imra, Simon discovers it though lavishly decorated but eerily empty, which makes him wonder about its residents. It is later revealed that Imra acts as a digital Sodom which allows people to live out their wildest and darkest desires like orgies and intoxication, "You are not going to believe what they've got on the lowest level ... It's like a giant orgy down there. I'd bet there's a thousand people at least" (Segel & Miller 131 - 132). Simon however fueled by hunger finds himself lost in the city's buffet, consuming one plate after another and realizes that he can't stop eating, "if anything, the need to eat has only grown." (127) and only after Carole's insistence on recalling his purpose—finding Kat, he musters enough will power to overcome his increasing hunger. This interaction with Otherworld's city Imra enables Simon to ponder on its true nature that, "It gives you what you want." (128) and by bringing people's base desires to the forefront, which are otherwise repressed due to laws and regulations governing the real world, Otherworld twists them into lustful creatures. Also, here it can also be observed the impact Simon's decision making skills, conveyed through his first-person interaction, have on his behavior and identity. For instance, by refusing to show similar behavioral traits as other gamers in the gameworld and identifying himself as a morally conscious human, Simon sets himself apart from the rest of the game-world's populace.

Applying Ryan's concepts of Immersion and Interactivity to this instance it can observe that it is not only the case of spatial—a (reader) gamer-character's perception of the virtual landscape as a navigable space—but also emotional immersion— the (reader) gamer-character's emotional engagement with other characters and events

unfolding in the game world. This example demonstrates both types of immersion through the vivid descriptions of and Simon's response to the city Imra, enabled due to his internal-ontological interactivity as he interacts with the city through his avatar's actions and first-person narration. His movement from the bug infested suburbs to the confines of the glass elevator and finally the grandeur of Imra creates a strong sense of spatial immersion. Applying Ryan's proposed Honoré de Balzac's technique of creating spatial immersion—by tying "description to a moving body" (87)—it can be observed that Imra's setting unfolds gradually as step-by-step descriptions of setting map themselves out and Simon tours Imra's spas, casinos, and dining room, shaping his perception of the city. The use of sensory details such as the taste and "the smell of roasted meat" (Segel & Miller 125) which piqued Simon's hunger, or virtual intoxication "mimic[ing] the effects of [one's] favorite drug" (129) or the ability to get "not just drunk, [but]... absolutely shitfaced." (130) as was the case with Arkan who drank to drown his sorrow, and Simon's movement from the grandiose dining room to the "dimly lit" casino, anchors him (through his avatar)— a gamer-character in Otherworld's virtual game-world by aiding his sense of spatial presence and transforms his identity from a mere spectator to an explorer. Teun Dubbelman¹¹ in his dissertation about the nature of spatial presence in computer games titled "Narratives of Being There Computer Games, Presence and Fictional Worlds" states that the computer games have the ability to make gamers feel as though they physically exist in their fictional game-world aided by the use of specific media objects like haptic gloves, headsets or VR goggles. This aligns well with the VR game Otherworld which by the use of its media objects like headset disk makes Simon feel, "as if another world exists around his own body, even though this feeling is a carefully fabricated illusion." (Dubbelman 4). Additionally, these details also add an element of hyperreality, pointing towards a constructed artificiality of the place that seems tangible.

Moreover, the detailed descriptions of Imra are not the only narrative techniques assisting in spatial immersion, rather according to Ryan "a sense of place" can also be created by using "proper names" because the use of proper names enables

¹¹ Teun Dubbelman's dissertation focuses on how the production of "presence"—a feature which makes gamers feel physically present within the game-world of computer games influences how the stories are told.

the gamer-character to call the object's existence, in real world, to his attention and "conjure a presence [in] the mind." (Ryan 89) resultantly tele-transporting the gamercharacter to the location in context. For instance, when Simon sees Imra, its opulence reminds him of "Monte Carlo" if "ancient Greeks had constructed it" (Segel & Miller 123). Here it can be observed that the similarity between Imra belonging to a virtual world and Monte Carlo belonging to the real world further reinforces Simon's spatial immersion making the place both familiar and strange to him. It also adds a touch of hyperrealness to the setting, blurring Simon's familiarity of a real location with the virtual one. Another instance of the use of proper names tele-transporting Simon to a specific location, by creating a sense of presence of that location in his mind, can be observed when he sets foot in a club to find Arkan. The setting of the club reminds him of the "Harvard Club in Manhattan" (130) which he used to visit with his father. This increases his spatial immersion by anchoring his perception of the virtual club within the familiar cognitive frame of Harvard Club and providing him with a mental benchmark to compare both locations. Furthermore, by comparing the customers in the club with the "Hell Angles" and "Russian gangsters" he perceives the place as a virtual parody of corruption and reckless power. This comparison not only heightens his spatial immersion through sensory details like "Smoke pour[ing] from the entrance like a fastrolling fog." (129) but also through his personal associations with similar real locations and people. Through these references that Simon makes it can be observed that he is not only navigating the place as being potentially physical but also interpreting it through his own experiences which reinforces his immersion in Imra and blurs real with virtual. It can be observed that the VR game-world of Otherworld accurately employs the narrative techniques, mentioned by Ryan in her book, to a Tee by not only showing how Simon step by step explores the game-world precisely as Balzac proposes but also Ryan proposed use of proper names which conjure a very specific picture in his mind.

Furthermore, Simon's emotional immersion can also be observed in this instance because the condition of the resort from its casinos and bars raise strong emotions within him. Ryan defines emotional immersion as the readers' emotional "response to characters" inhabiting a fictional world. However, as discussed in chapter 3^{12} , in context of the GameLit novel OW it is the gamer-character's emotional

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¹² For more details, refer to page number 31.

engagement with other characters and events unfolding in the Otherworld's gameworld. It is achieved in OW through Simon's involvement in high-stake scenarios and his deep emotional connection, either hate, disgust or companionship, with other characters in the game-world. Ryan states that emotions that enhance immersion can be divided into three main categories, "Subjective reactions ..., Empathetic emotions ... [and] Emotions felt for oneself ... (108). The above-mentioned, instance is a mix of subjective reactions—which includes like, dislike, judgement and disgust for other character's behavior—and empathetic emotions—felt for other characters like pity, happiness or sadness—as it expands his engagement with the setting through his avatar's first-person role. For instance, when Simon descends the resort's stairs to reach the club where Arkan is, he encounters drunk disk(headset) gamers with drooling mouths, filth, drug syringes and, "Bottles and Baggies and cigarette butts" scattered everywhere. This degraded state of the resort creates a sense of subjective reactions like disgust for the gamers within Simon. Likewise, Arkan's condition of being completely drunk and slumped over also raises Simon's empathetic emotions of unease by creating feelings of pity for Arkan. Similarly, his amusement at the club's customers power display and comparison with Harvard Club further evokes a sense of personal conflict and fear within him, giving rise to the third category of immersive emotions - emotions felt for oneself or self-centered emotions. This multiple emotional layering enabled by projecting his personal experiences on virtual ones makes the setting feel personally significant for Simon. Another example which shows strong emotional affiliation of Simon with other gamer-characters is when he remembers his initial purpose of playing VR game Otherworld - finding Kat. Kat is not only Simon's childhood friend but also a potential love interest and her becoming the Company's guinea pig fuels Simon's desire to find her in Otherworld's game-world. So, when he becomes sidetracked by the buffet only Kat's memories help him break free from that obsession again giving rise to empathetic emotions of grief and self-centered emotion of love. Simon's display of his fluctuating emotions closely follows Ryan's concepts of emotional immersion as can be observed through his multi-layered emotional portrayal.

Moreover, Simon is emotionally and spatially immersed within Imra's setting due to his internal-ontological interactivity, which can also be observed in the above-mentioned instance through Simon's avatar's first-person interactions with Imra. Internal-ontological interactivity enables the gamer-characters to not just explore the

game-world through their avatars rather actively take part in its mechanics. Simply put, the gamer-characters are a part of the game-world and can shape how the story unfolds. Ryan defines it as, "The system projects a storyworld, and the user ... may also be able to build objects that become a permanent part of the storyworld ... the user "writes" the life (or lives) of her character." (164). This type of interactivity suits the Otherworld's game-world where the gamers' avatars are given much freedom to interact with the game's created virtual world. It can also be observed in this chapter 'The Resort of the Future' which shows how Simon's decision making skills displayed through his avatar's internal-ontological interactions with the game-world immerse him within the dynamics of the virtual world of Imra- that cages people by targeting their base desires. His initial desire to feed his hungry stomach entangles him within the game world. However, the true show of his interactivity with the game world lies in his choice to alter these dynamics and by avoiding the shameless manners commonly found in other gamers. This is shown through his emotional and psychological entanglement with his main goal—finding Kat. This instance shows that the game is like a maze that focuses on the gamer-character's aim to survive, and attain a specific objective, like Simon's objective of finding Kat which becomes his motivation of traversing the game's structure in Imra and keep himself put together. The resort of Imra takes the form of a labyrinth that tests his determination. Also, Simon's choice of resisting the hyperrealistic allure of virtual world—Imra and refocusing his attention to his primary quest shifts the game world's trajectory and showcases the tension between the game's traversing story line and predefined narrative.

Another textual instance which shows Simon's emotional immersion within the game-world is present in chapter 'The Cliff Dwellers' which continues Simon's adventures as he makes his way towards the game's end. In this chapter Simon and his companions have to cross Mammon—a city of greed—to go to the ice-lands where the game's creator Magna lives but even before entering the city they are greeted by a group of impish and homicidal monkeys. These monkeys present Simon's companions with chunky diamond stones, stating that this is the currency of Mammon which they will need to enter the gates and the city beyond the gates houses even more of such valuable stones. As Simon declines the offer, Gorog, one of the companions, filled with greed takes all the stones and eagerly heads towards Mammon but is attacked as he reaches some dozen yards away from the group. It is later revealed that the way to Mammon is

housed by tall canyons, the residents of which are cannibal savages called the 'Cliff Dwellers'. These beings are mostly headset players, unlike Simon and his companions who are disk players, and spend their time gathering valuables, like weapons, gems and gold, by attacking other headset players. One of such Cliff Dwellers spotting the shiny diamonds attacks Gorog and tries to puncture his jugular vein but is stopped by Simon who rushes to save him and catches the Cliff Dweller in a chock hold. Simon's emotional immersion can be observed here as arising from a combination of subjective and empathetic emotions. His concern for Gorog aligns with empathetic emotions as he sees him not only struggling with more than a dozen arrow wounds penetrating his body but also unable to defend himself against the vicious attacks of the Cliff Dweller. His empathy for Gorog is evident when he states, "I can tell he's in serious pain. The arrows must have inflicted real damage." (Segel & Miller 158) His concern for Gorog is not strategic rather genuine, as he is aware that even though they are playing a VR game but due to their disk headsets Gorog is actually in great pain. His attentiveness towards Gorog's wounds reinforces his emotional bond with his companions.

Additionally, Simon's immersion is driven by his avatar's internal-ontological interactivity because he is not a mere observer of this event, rather he through his actions is shaping them. His physical efforts for defending Gorog such as stabbing the Cliff Dweller with his dagger to disable him and eventually killing him through choke hold highlights Simon's—a gamer-character's emotional investment in the game-world because he is no longer playing a VR game rather actively navigating the hyperreal challenges. Another example of his emotional investment can be observed through his subjective reactions towards the Cliff Dweller. Simon displays aversion towards the Cliff dweller's insane behavior pondering that the headset gamer behind the Cliff Dweller's avatar may be sane in the real world but in Otherworld's game-world, fueled by his greed, he has become "completely berserk". Simon's feelings of contempt for the Cliff Dweller only increase when he sees his downgraded savage behavior towards another gamer, Gorog. However, when he examines the Cliff Dweller's malnourished body, looking heavily neglected similar to a shipwrecked person on a deserted island or like a prisoner locked away in a prison camp (158), Simon's earlier subjective reactions of distaste towards him give way to empathetic emotions of pity. This moment highlights that even though Simon and the Cliff Dweller were on the opposing sides, he still felt pity for Cliff Dweller's pathetic condition, similar to how sometimes

humans empathize with others misfortune even though they do not have good relations with them. By projecting emotions felt for real humans on a bunch of avatars inhabiting the virtual sphere of a VR game gives the whole situation a hyperreal touch. By observing this textual example, it can be inferred that Simon is deeply entangled with the emotional and physical conflicts of the game-world and he not only navigates the Otherworld's landscape as a game but also as a real thing. In other words, the virtual simulations becoming "more real than the real" (Baudrillard 56) are slowly overriding his real world experiences and blurring his distinction between the emotions felt for the real and virtual beings.

Furthermore, this blur in Simon's distinction can be further observed when he displays subjective and empathetic emotions for Carole—another companion. As Simon and Gorog get rid of the Cliff Dweller, they find Carole missing. Fearing that the homicidal monkeys must have something to do with it, he rushes towards the group and finds them gathered around a tree, all screeching madly. Following their gaze, he finds two monkeys climbing the tree with, "crude stone knives clenched in their teeth" (Segel & Miller 159) towards Carole who is stuck on the top branch of the tree. Witnessing his companion being hunted by the monkeys fills Simon with rage and he starts a heated discussion with the monkeys' leader—a Child of the Elemental of Mammon. The Child tells him that his father allows them to eat the weaker guests (the gamers) who hesitate to step in the canyon. Therefore, if Simon's companions are weak, they must be eaten. The monkey Child's blatant viewpoint, regarding his companions, makes Simon lose his temper and he stabs him to death:

"And I guess eating guests is essential to your survival? Your monkey friends need meat, do they?" I ask.

"They have developed a taste for it," says the Child ...

"Then I have a real treat for them. Bon appétit!" "Hope you taste good," I tell him. (160)

Simon is not a passive player, rather a gamer-character of the VR game Otherworld. As a gamer-character he actively participates in the game's events through his avatar's first-person actions and influences the events happening around him. This sense of agency—a characteristic feature of being a gamer-character in GameLit fiction can be clearly observed in this instance. When he finds that Carole is being hunted by the

monkeys, he reacts immediately and confronts the Child for his actions and feels personally responsible for the wellbeing of Carole in this situation, "I should never have left her alone with one of the Children and a band of homicidal monkeys." (158) and his desire to physically contribute to achieve her relief, increases his emotional immersion. For Simon, the game-world of Otherworld and its inhabitants like the NPC monkeys are not just VR existences here, they are capable of inflicting real damage. His emotional immersion for Carole is also a blend of his subjective and empathetic emotions. Simon's empathetic emotions towards Carole reside in his sense of relief when he finds her unharmed and his subjective reactions towards Carole consist of admiration for her resilience against the monkeys' attacks and a sense of protectiveness for her.

Simon's emotional investment can also be observed through his rage and frustration towards the monkeys on behalf of his companions—Gorog and Carole. It's evident through his subjective judgements of the monkeys' and especially the Child's behavior as being extremely hateful. Simon disdains the Child's haughty attitude towards him and his companions, "How dare this digital freak try to tell me who belongs" (159) because he judges their actions as morally degrading. Simon is a gamercharacter who actively takes part in the events of the game-world and molds them through his avatar's actions and interactions (internal-ontological interactivity). He physically engages with the game-world, for instance, confronting the Child about his actions, and killing him by plunging the dagger in his heart are direct and visceral first-person actions which deepen his sense of interaction within the game-world.

Furthermore, his interactions with the monkeys further raises his immersion in the game-world's dynamics as he is starting to perceive the place as comprising an ordered system of hierarchy where gamers like Simon occupy the top tier and the NPCs the bottom tier because the game-world was made for gamers like Simon while the bug NPCs like the Child are, "bad code" and "mistakes". Analyzing this thought process of Simon, it is clear that he is equating the Otherworld's political and social dynamics, based on class hierarchy, and morality with that of the real world. This moment highlights Simon's raising blur between distinguishing the real from the virtual—simulations of Otherworld's game-world do not seem artificial to him anymore rather they appear more real than the real as landscapes bearing with their own reality and identity. If it were not so why would Simon feel the need to reprimand the Child which

he considered as just a "bad code" for his inhumane actions and reinforce his own superiority over him. In other words, Simon's simulated experiences in the virtual world of Otherworld are superseding the real world experiences and raising his hyperreality, because he sees the Child and other creatures inhabiting Otherworld as moral agents and not simply as NPC bots. This blur in Simon's distinction can be further observed when his initial disgust towards the monkeys' cannibalistic tendencies transforms into regret over murdering the monkey leader, "I feel a twinge of regret, though I know I shouldn't. It's virtual reality, after all." (160) Simon's initial belief that the Bug NPCs like Children of Otherworld are nothing but mistakes, that should be killed without hesitation, shatters when he sees the monkey's taking the Child's body to bury instead of eating it, creating an unsettling feeling within Simon. Ryan categorizes this form of emotional immersion as self-centered emotions or as emotions felt for oneself. Simon's regret stems from the fact that his treatment against the NPC inhabitants is not at all different than what he accused them of and that they too harbor the same feelings of companionship towards their own kind like he does for his own companions—Gorog and Carole enabling Simon to display his emphatic emotions of empathy. Ryan states that, "once we develop empathy, it does not have to be limited to people we know nor to real people" (109). In other words, Simon is equating the NPCs emotions as real emotions. These personal reflections of Simon further reinforce that he views the simulated world irreplaceable from the reality he knows, blurring the distinctions between the real and virtual and thus creating hyperreality. This instance by presenting Simon's raising immersion due to his fluctuating emotions and interactions with the game-world's setting also sheds light on the impacts such hyperreal settings conjure on Simon's identity, behavior and decision-making skills in a virtual game-world. For instance, his decision to protect his friends Carole and Gorog and then feeling remorseful over his hasty actions showcases the impact on his behavior and identity. This can also be observed in another GameLit novel Cline's Armada. In Armada the gamers also experience a blur of distinction between the game-world of their VR game and their reality. Keerthana and Ramya in their article 13 state that such VR games by projecting a hyperreal virtual simulation can make gamers, "forget that

¹³ Details of the article are already mentioned in Literature Review.

they are in an artificially generated realistic environment that is just a mimic of reality" (Keerthana & Ramya 33).

Another example of spatial and emotional immersion can be observed in the chapter "Mammon" where Simon and his companions meet a headset player Gina as soon as they enter the gates of Mammon after their trip through the canyons. Gina—a headset player lives on the outskirts of Mammon in a well barricaded mansion and similar to the Cave Dwellers, spends her time in the game-world by hunting those who pass by her mansion and gathering their valuables like weaponry, gold, gems and others. Her guards capture Simon's group and what follows is a bitter encounter with Gina's twisted morality which not only raises Simon's emotional and spatial immersion but also thinks his already blurring perception between real and its virtual simulation. For Simon—a gamer-character, the spatial immersion in this instance arises from his avatar's internal-ontological interactivity and various techniques compiled by Ryan in her book. The first one being Honoré de Balzac's tying "description to a moving body" (Ryan 87). As discussed above, Simon is a gamer-character who interacts with the game-world of the game Otherworld through his avatar's first-person actions. Balzac's techniques can be observed here through Simon's avatar's interaction via movement with the dynamic sensory details of the environment as he is forcibly escorted inside Gina's mansion by her guards. The instance outlines the setting's descriptions as Simon systematically examines Gina's mansion first approaching it from the street, then examining the lawn and finally entering the mansion from the front door, similar to how Balzac's narrators introduce the place of setting. As Simon approaches the mansion from the street, his details of the place unfold in alignment with Balzac's technique of tying spatial description to a moving body and he registers the mansion as a "stuccocovered monstrosity". Further his step-by-step perception of the mansion's exterior with "windows barricaded with metal grates", "the balconies adorned with razor wire", "several snipers stationed on the roof", and "a defensive wall made of sandbags" (Segel & Miller 175) surrounding the entire building give the place a feel of a fortress. When Simon is led inside the building he is further taken aback by the mansion's décor which he describes as decorated in a "Baltic dictator" style with the floor tiled with "highgloss leopard print", the black painted ceiling "studded with tiny lights" and held by multiple "black marble columns topped with golden ornament" (175). Not only this but the mansion seemed devoid of any furniture and instead overrun with black garbage

bags lining the entire perimeter of the building. This step-by-step exploration of the mansion's interior also aligns with Balzac's technique because Simon approached the mansion in a systematic manner from exploring the exterior to interior.

Moreover, the use of these concrete details in describing the feel of the mansion also highlights the use of another technique—Roland Barthes 'reality effect' which work by mentioning such concrete details "whose sole purpose is to fix an atmosphere" (Ryan 91). According to Ryan the placement of such details may seem trivial but they are used to highlight the hidden meaning behind them, for instance, in this example the placement of the above mentioned concrete details of the mansion's exterior of barricaded windows, razor wires, snipers and sandbags is used to highlight Simon's sense of unease obvious by his chest feeling "a bit tight" making the simulated environment feel real and tangible since it has a real effect on Simon. The details of mansion's interior décor styled in a "Baltic dictator" style and teeming with garbage bags also employ Barthes proposed "reality effect" technique with the purpose of setting up an incongruous and unsettling atmosphere for Simon. These rich sensory details by setting up a bizarre atmosphere also contribute in rising a hyperreal feeling of the place for gamer-character Simon as he views the lavishness and decay existing alongside each other in the virtual simulation similar to the real world making the simulated atmosphere a distorted mirror of real world. It highlights the specific feature of VR games that simulate virtual reality by, "provid[ing] realistic effects" (Keerthana & Ramya 32) aided by the use of such props which make the gamers experience hyperreal.

Furthermore, Simon's spatial immersion in the setting is also fueled by the use of various proper nouns like "stucco-covered monstrosity", "Baltic dictator style" and Everglades City in Florida which grounds Simon's perception of the virtual simulation by paralleling it in real world. According to Ryan the use of proper nouns conjures a presence in the mind by tele-transporting one to the corresponding location. (Ryan 89). For instance, the reference to Everglades City in Florida, where Gina belongs from, creates a picture of intense heat and alligator ridden place in Simons' mind by using the basic encyclopedia knowledge of the place. Similarly, the use of "stucco-covered monstrosity" in explaining the mansion's exterior conjures the image of a tacky structure where 'stucco' is used to symbolize outdated architecture and 'monstrosity' and is used to symbolize the ridiculous largeness of the construction, giving the

mansion an overall unappealing feel. While the use of "Baltic dictator style" in explaining the mansion's interior conjures an image of a bizarre place furnished with over-sized and old-fashioned objects and gives a feel of a place more focused on projecting power rather than beauty.

Furthermore, as discussed above, Simon's a gamer-character's spatial immersion in the setting of the game-world arises due to his interactions with the gameworld through his avatar's first person (internal-ontological) actions and observations which enable him to shape the game-world dynamics in a way that it blurs the line between his perception of reality and the virtual simulations present in the VR game he is playing, ultimately conjuring a hyperreal experience for him. This can be observed in the above-mentioned instance where Simon observes the exterior and interior of Gina's mansion and feels his chest tighten with unease and a sense of danger. The parallels between the real and virtual world are symbolized by the employment of realworld objects like Stucco, Baltic dictator décor style, snipers, barbed wires, barricaded windows, leopard print tiles and Florida to explain the virtual world like Gina's mansions creates a hyperreal experience for Simon. Another instance of Simon's internal-ontological interactivity which enables him to actively mold the plot's progression in the game-world is his interaction with Gina through the exchange of dialogues between him and Gina and ultimate killing of Gina's avatar. Simon by killing Gina's avatar not only frees himself and his companions from Gina's clutches but also becomes the owner of all her valuables and NPCs which he then allows to be looted by Gina's neighbors thus shaping the game's plot progression through his actions and increasing his spatial immersion in the setting. However, his murder of Gina's avatar not only raises his spatial immersion but also brings in his emotional immersion.

During their interaction Simon asks Gina about the purpose of her obsession with Mammon to which she responds it is to win the game by collecting riches and she is willing to go to any length for her purpose such as cannibalism or murder. In this instance it can be observed that Simon's emotional immersion emerges due to a mix of subjective reactions, empathetic emotions and self-centered emotions. Initially Simon's emotional immersion rises due to his subjective reactions of amusement towards Gina's tacky décor and lifestyle of collecting different objects. But when he learns all the objects in her collection come from her robbing and killing other's avatars, it instantly transforms to subjective reaction of disgust towards Gina's behavior. Similarly, when

Gina orders her NPC bodyguards to dispose Simon's group, self-centered emotion of fear and empathetic emotions of pity for his companions also adds in the mix Simon's emotional immersion and he pleads Gina to let them go since they are wearing game's beta headset—disk and not the standard headset version that she is wearing. Finally, his emotions towards Gina take the form of acute hatred because she aims to sell him and his companions to a cannibal, even though she knows that their deaths in game world will kill them in real world as well:

"I was never planning to kill you," Gina says.

"You weren't?" I ask.

"No, I'm going to sell you. One of my neighbors developed a taste for human flesh ... he pays me top dollar whenever I bag one of you."

"And you're still going ahead with that after everything he just told you?" Carole asks.

"Of course," says the woman. (Segel & Miller 178)

Therefore, Simon in revenge jeopardizes her internet connection and opens the gates of her virtual mansion for looters, leaving her as helpless on return as she made him and his companions a while ago. Simon's emotional engagement with the virtual world further intensifies due to his avatar's internal-ontological interaction with the very cannibal, introduced as the "gentleman" Gina was going to sell him and companions to and ponders whether he should kill him or not, "I should kill him ... But if he's the one with a taste for human flesh, he's probably wearing a disk. If I kill him here, he dies for real." (203). This instance not only highlights Simon's deep emotional immersion with the virtual game-world by vividly presenting his emotional engagement with other gamers in the game-world but also through his first-person actions, dialogues, emotional reactions and moral dilemmas. For instance, his subjective reaction of disgust for the "gentleman" who feels no remorse in consuming the flesh of other inhabitants and frustration in not being able to kill this cannibal, as it will kill him in real life, showcases the level of realness Simon affords their situation. This can also be observed in his hostile response to that gentleman where he wishes him to meet a monster bigger than him above the food chain. He reacts as if it is not merely a virtual encounter with another gamer's avatar rather than one imbued with moral confrontation. Additionally, his active choice to reflect on his ethics, when he ponders on the fact that killing the

"gentleman" in the game-world will kill him in reality, not only further highlights him as an active participant in the game-world's plot progression capable to influence the events according to his actions but also solidifies the hyper-realness of his virtual encounter within a simulated world.

Furthermore, another instance which presents Simon's raising emotional immersion with the game-world and his resultant hyperreal experiences as a result of his internal-ontological interactions with the game-world's other gamers can be observed in the chapter "World of War" where Simon is stranded in the city of Nastrond and is forced to fight other gamer's in order to make his way out of the city. One instance from the chapter which presents Simon's complex play of emotions can be observed when he is being ambushed by a gamer named Rambo's avatar. Rambo's avatar is a savage dressed in the forest camouflage and attacks Simon with an axe. It is clear Rambo takes pleasure in butchering other gamer's avatars, however Simon vows to not kill him in case he is also a gamer wearing the beta headset—disk and killing him in game-world will result in his actual death in the real world. It can be observed in this instance that Simon's emotional immersion in this situation is driven by a complex combination of empathetic emotions and self-centered emotions, heightened by his avatar's internal-ontological interactivity through his actions against the other gamer—Rambo. Simon's interaction with Rambo's avatar raises his self-centered emotion of fear for his survival as he realizes that if he sustained a serious injury, he may actually die both in the real world and in the game-world in his avatar form. This self-centered emotion of fear intensifies Simon's emotional immersion by making his survival against Rambo's avatar a serious life or death situation rather than treating it like an ordinary game. According to Wang by strengthening the emotional impact of the virtual environmental construction and the atmosphere surrounding the gamercharacter, "high level of immersion is created to awaken the fear in the players and force them to actively find ways to survive" (495). Likewise, such immersive techniques can also be observed in this instance which makes the virtual simulations feel tangible on both a physical and emotional level, making the situation feel hyperreal. Simon's moral contemplation of whether to kill Rambo or not, as he resolves, "I won't fight. I saw the bodies in the capsules. I saw what happens to them when they die, and I don't know if Rambo's wearing a disk" (209) and finally deciding to run and hide instead of fighting, further adds empathetic emotions of pity for Rambo in the mix

raising Simon's emotional immersion. However, after discovering that since Rambo is a standard headset gamer and will not die when killed in game-world, Simon's selfcentered emotions of fear and ensuring his own survival over-power his pity for Rambo and he stabs him to death. Simon's act of murdering Rambo further triggers a complex mix of self-centered emotions of euphoria and relief which he equates with sexual pleasure, and he feels his head clear, his rage sated and his "whole body feels lighter" (210). To Simon's horror as soon as this satisfaction fades, he begins to crave for more murder, comparing this sensation to being addicted and withdrawal from drugs. This emotional evolution of Simon highlights the game's dark nature. The ecstasy Simon feels on killing Rambo echoes the hyperreal allure Otherworld produces in its gamers by hooking them to virtual simulations and blurring the line between simulated pleasure and real emotional gratification. As discussed above, Simon equates his ecstasy to sexual gratification which further highlights the game mechanics of Otherworld. It manipulates the gamer's emotions by using their sensory reactions against them and hooking them to a "cybernetic feedback loop". Rune Klevjer states that in digital games such as VR games the "cybernetic feedback loop" between the gamer and the VR game is a "representation of an action in a fictional world" (qtd. in Roine 167¹⁴). This means that the gamers interact with the game-world, such as Simon's with Otherworld's gameworld, creates two-fold results, controlling the game through choices and heightening their spatial presence. This aligns with Ryan's concept of internal-ontological interactivity as both Ryan and Klevjer view the gamer as an active participant of the game-world enabling the gamer to shape the game's plot trajectory instead of following a scripted narrative.

It can also be observed that Simon's avatar's internal-ontological interactivity plays a huge role in his raising emotional immersion and hyperreal experiences because Simon through his avatar's first-person interactions fuses his sensory experiences with

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¹⁴ Hanna-Riikka Roine includes a number of game theorists like Rune Klevjer in her dissertation on "Imaginative, Immersive and Interactive Engagements The rhetoric of world-building in contemporary speculative fiction". Her dissertation focuses on the relevance of world-building in fantasy and science-fiction to engage readers. She argues that world-building serves as a key element in generating readers' immersion and imaginary interaction with the fictional worlds.

his emotional reactions. Wang states that VR games which work on the principal of strengthening the First-Person Perspective allow gamer-characters to experience the realistic virtual space by fully integrating it around the virtual characters so that gamercharacters can have a closer observation and experience on the game surroundings. "Realized by operation substitution and scenario construction, the immersive and interactive effects in VR games are affected by both hardware equipment and software content" (496) For instance, when Simon plunges his dagger again and again in Rambo's avatar's body and feels his hot blood pour all over him, he equates this sensation similar to an emotional release which makes Simon's body light and head clear. Simply put, though the act of murder takes place in a virtual simulation, it creates effects that target Simon's mental and physical sensations which in turn blurs the line between real and simulated emotions. This blur of boundaries makes Otherworld feel tangible and raises Simon's hyperreal experiences where the simulated becomes "more real than the real" (Baudrillard 56) and blurs the real. Here it can be observed that narratological techniques of emotional immersion portrayed by Simon's initial empathetic emotions of moral righteousness which later give way to self-centered emotions of fear, and euphoria and ecstasy in the later part of the instance closely follow what Ryan describes emotional immersion should be like for a gamer-character. Such as, feeling emotions so strongly that the gamer-character temporarily forgets that the world around him is not real.

Moreover, the chapter "World of War" also provides various examples of spatial immersion. One such example can be observed towards the end of the chapter when Simon is dragged by Ragnar—the Elemental of Nastrond to fight in the main ring fort against his Child Ylva. Simon's spatial immersion of the setting arises from not only a mix of different techniques compiled by Ryan but also due to his internal-ontological interactions with the setting which also give rise to his hyperreal experiences by blurring the real with simulation. For instance, when Simon is escorted out of his cell towards the ring fort, the setting of Nastrond maps out as Simon systematically explores it, aligning it with Honoré de Balzac's technique of tying "description to a moving body" (87). As he is brought inside the fort ring, he observes its "circular stone walls" decorated with "hundreds of wooden posts" each of which supports a "severed head" of past warriors emanating "overpowering" stench of rotting blood. The Elemental of Nastrond encrusted with blood and gore himself stands on his

throne at the edge of the fort, below which is a bloody pit where his Child Ylva is busy "tearing apart" a "burly" avatar (215). These sensory rich descriptions of decaying avatars and vicious environment of the fort ring form an intense oppressive atmosphere that heightens Simon's spatial immersion within the setting. Also, as Simon actively moves through the setting, like a "real estate agent" in line with Balzac's technique, his actions and reactions like fear and feeling "overcome by nausea" due to rotting stench of blood affect his subjective perceptions regarding the setting.

However, these descriptions are not the only facilitators of Simon's hyperreal experiences due to his immersion, rather his own active interaction (internalontological) with the setting also enables him to shape the plot according to his subjective actions and reactions. Another technique which heightens Simon's spatial immersion is the use of proper names in the setting's description. In context of this chapter the proper names like Nastrond, Ragnar and Ylva all belong to Norse mythology¹⁵. According to Ryan, employing proper names to narrate descriptions conjures a presence in the mind that tele-transporting one to the corresponding location. (Ryan 89). In Simon—a gamer-character's context the interactions with Ragnar and Ylva, mythical beings of Norse mythology evoke his spatial immersion by teletransporting him to an ancient Viking den. Even the "windowless wooden" building with a "thatched roof" where Simon was imprisoned prior to bringing him in the fort ring also evokes connotations with a "Viking-style longhouse" (215). Therefore, it can be deemed that the use of these names, and objects like severed heads and rotting limbs facilitated with brutal and gory atmosphere summon the entire Viking cultural imaginary. This reinforces Simon's spatial immersion within the setting and enables Otherworld to evolve from merely a VR game to a self-contained reality which in turn increases Simon's experience of hyperreality, "where the boundaries between two worlds are evaporated" (Igbal 81¹⁶). Another spatial immersion technique in use here

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¹⁵ In Norse mythology "Nastrond" means the shore of corpses and is a place in afterlife 'Hel' for sinners.

¹⁶Iqbal in "The Loss of the 'Real' in Nikesh Shukla's Meatspace: A Study of Constructed Hallucinations" uses Baudrillard's theory of Hyperreality to examine the blurring of reality through the use of advanced technology and digital media in postmodern fiction.

is Barthes "reality effect" which according to Barthes serve the purpose of evoking a realness in the fictional world with the help of detailed props. In short, as shown in the above-mentioned instance everything from the severed heads of avatars, to rotting blood and screeching crowd gathered to witness Simon and Ylva's fight all work in collaboration to make the setting spatially immersive in line with Ryan's concepts of spatial immersion and consequently provide a hyperreal feel to the setting.

However, Simon's hyperreal experiences are not only the product of his spatial immersion, rather his emotional involvement also plays a huge role by making him emotionally aware of the NPCs mental and emotional states. For instance, Simon's empathetic emotion of grief rises on discovering Ylva's tragic story of losing her siblings to vicious attacks perpetrated by the guests (other standard headset gamers) and her resolve to avenge her sibling by killing each and every gamer that crosses her path. His empathetic emotion of pity adds to his emotional engagement when he informs Ylva' that despite her attempts to rid Otherworld of gamer's avatars she will never be successful because the Company aims to expand its consumers and the smile on her face slips away. The fact that he wishes he, "hadn't been the one to deliver the blow" because the truth of the situation hurts Ylva "more than a weapon" (Segel & Miller 218) further proves his personal concern for the NPCs and Children which in turn raises his emotional immersion. It can be deemed that he starts to care for the NPCs as if they were real beings of flesh and feelings and not virtual ones made of code aligning with Baudrillard's theory of hyperreality where the simulation takes the place of real and fashions itself an existence more real than real.

Simon's immersion in the setting is tied to his internal-ontological interactivity with the setting and NPCs of Otherworld. It can be seen not only here where Simon's emotional immersion is a product of his active involvement with the game dynamics through his conversation and fight with Ylva but it can also be observed in his active rejection to become like other gamers in Nastrond who gain pleasure in killing others. His active assertion that he does not "want to be like that" and proving himself by refusing to kill Ylva asserts his agency in shaping the game's dynamics by changing the plot progression.

Another instance which presents Simon's emotional immersion by raising his empathetic emotions of grief and pity is when he loses his companion Carole and is left to take her ruined avatar outside Nastrond. Carole kills Ylva in order to save Simon's

avatar and is killed by Ragnar to ensure Simon leaves Nastrond safely. The emotional burden of her sacrifice and his resultant grief and panic showcase the presence of genuine emotional bonds between Simon and his companions that transcend the usual relationship held by gamers in the same team. Such emotional interactions in fact makes the game world appear, "more real than real" world. Furthermore, Simon's sense of guilt and self-blaming himself for Carole's death also highlights the realness the game world's events hold for Simon and Carole. Other details such as his panic stricken plea to Carole to "hold on" and his frantic attempts to stop her bleeding and his teary and blurred vision as he takes her away from the forest add to the deepness of Simon's emotional immersion within the game world and in return blur the lines between the real and virtual, affording it a hyperreal presence which is both tangible and serious. It shows that the events unfolding in the game world are not merely that of a virtual reality game, rather they have serious real-world consequences. Here again Simon's immersion is a result of his active interactions with the game-world. His active agency through his avatar's internal-ontological interactivity can also be observed when he vows to kill the Creator. His desire to avenge his fallen companions, NPCs, Children and rid the game-world of the vicious guests is a testament to his full emotional and spatial immersion in the game-world's dynamics.

Summing Up

To conclude, the analysis reveals that Simon's immersive experiences within the game-world of game Otherworld are the result of his avatar's (first-person) internal-ontological interactions and spatial and emotional immersion within the game-world. The more he interacts with the game-world through his avatar's direct actions, the more he finds himself emotionally and spatially immersed within the dynamics of the game-world, consequently, contributing to his hyperreal experiences. This is because as Simon begins to spend more and more time in the VR game-world, he subconsciously begins to perceive the virtual simulations as affording real world existences which in turn impact his identity, behavior and decision-making skills.

Moreover, the intensity of Simon's immersive experiences also rests on the varying number of spatial and emotional immersive techniques also contributed in the game-world. For instance, Otherworld's game-world uses Balzac's technique profusely as it reveals itself to Simon as he moves through it and observes various facets including its inhabitants like NPC bugs, residents, and children and its own social and political

dynamics which point towards its logical existence. Furthermore, Ryan's technique of using proper names to tele-transport Simon to a specific location by conjuring its image in his mind is the second most used spatial immersive technique used in the game-world and can be observed in various instances like Simon's exploration of Imra, and Gina's mansion. This use of proper names in describing the game-world's spatial environment aids Simon's spatial immersion by consciously forcing him to make connections between the objects, places and living beings he encounters in the virtual world with the real world counterparts. In other words, the hyperreal allure of the game-world manifests when it clearly mimics the real-world places. Another technique used to tie the spatial immersive quality of the game-world's virtual environment in Proust's technique of madeleine effect which works when sensory triggers like taste or smell invoke powerful memories of a person's past. This is an involuntary response to the objects one might come across as can be seen in Simon's case when he is reminded of his reason to enter the game. Finally, the use of Barthes "reality effect" technique also effectively aids in tying the spatial setting of the game's virtual environment by introducing props which serve a valid reason and point towards the logical existence of the game-world in form of the political dynamics between the NPCs like Children of Elementals and headset players or the culture of each realm. All these techniques work together to immerse Simon in the virtual world and overshadow his real-world experiences, making the virtual world hyperreal. Also, with respect to how well Ryan's proposed narratological techniques are being employed in the game-world, it can be observed that despite Ryan suggested the above mentioned techniques in context of the reader's immersion in the fictional world of the traditional books, they have been efficaciously employed in the context of gamer-characters like Simon playing the VR game. The reason for this lies in the fact that similar to how readers explore the fictional world of books during their reading sessions the gamers of narrative VR games like Otherworld also explore the game-world during their playing sessions. The difference, however, lies that the game-worlds of VR games afford more intense immersion as compared to traditional books because in the VR games the gamers do not play the game, rather actively take part in the narrative as gamer-characters and through their first-person actions effectively mold the outcome based on their actions and interactions. Therefore, it can be stated that the extent of Simon's immersive experiences caused due to his avatar's internal-ontological interactions can be evaluated through the effect his avatar's actions make on the game-world. For instance, Simon

through his avatar's interactions during his fight with NPCs homicidal monkeys, and Gina changes the outcome of the events for himself and his friends. The game-world reacts to his choices by presenting results accordingly in form of the NPCs' deaths.

Moreover, Simon's intensity of immersive experiences also rests on the way the VR game Otherworld works. For instance, Simon's game headset does not afford the choice to take it off on will. Rather it has to be manually plugged off by third party intervention. So, when Simon logs back in the game, he is stuck in the game-world and given the way the Otherworld's headset influences the human brain to consider the ingame injuries as real, Simon has no option but to brave the challenges in order to survive the game-world otherwise he may lose his life. Therefore, owing to Simon's awareness of circumstances, his immersive experiences within the game-world are intense, because as soon as he sets foot in the game-world and knows he is standing in the world where any wrong actions can have life threatening results for him. Such circumstances blur the line between his perceptions of real and virtual world and make the virtual simulations more real than the real, contributing to his hyperreal experiences.

Lastly, the impact Simon's interactions with the virtually simulated gameworld, that is both hyperrealistic and immersive, generate on his identity, behavior and decision-making skills is also evident here. It can be observed that all three of these variables are interconnected and share a cause-and-effect relationship where if one variable changes it will bring change in other variables as well as though in a reciprocal interaction. In other words, the way Simon utilizes his decision making ability directly indicates his intensity of being immersed in the game-world which then directly affects his behavior in the game-world and this change in behavior directly affects his identity. For instance, in the beginning Simon was just a gamer but as the plot progresses we see him becoming the Company's guinea pig, then striving to preserve his life, then a protector of his friends.

CHAPTER 5

ANALYSIS: WARCROSS BY MARIE LU

The GameLit novel *Warcross* (WC) part of the duology of the same name, written by Marie Lu, follows the story of Emika Chen as she makes her way from a penniless hacker living in New York's grimy slum to becoming a gamer in the championship of game Warcross—a VR MMORPG—annually held in Tokyo, Japan. As the narrative unfolds, Emika, in desperation to escape her destitute life, risks hacking into the Warcross's life opening ceremony to steal a power-up¹⁷. However, she fails, and her identity is exposed to the entire arena. Amazed by her hacking skills, the creator of E-sport¹⁸ Warcross—Hideo Tanaka offers her a place in Tokyo city and a job to become his spy and infiltrate the game to track a mysterious hacker named Zero, who according to Tanaka aims to "sabotage the game['s]" championship (Lu 85). However, the narrative further unfolds a plot twist when the true intentions of Zero are revealed towards the end of the game and he exposes Tanaka's shady plan of using his NeuroLink during the final game to control the minds of global populace with an aim to eliminate crime, "My plan," Zero says, "was to stop Hideo." (271).

Similar to the VR game Otherworld, the game Warcross also requires its gamers to participate in the game using their avatars. It also requires the gamers to use headsets to interact with the game's game-world. However, in game Otherworld the headsets were either simple visors with haptic gloves or beta version visors with disks attached to the gamers' skull base, while the game Warcross takes it several steps further and uses high level neural technology termed as NeuroLink for its headsets. The narrative defines NeuroLink as a paradigm shift in the existing technology which has pushed the world towards the new era of virtual and augmented reality by introducing the "ultraslim glasses" hailed as a revolutionary brain-computer interface device. Hideo Tanaka

¹⁷ Power-ups are brightly colored orbs scattered through Warcross's different gamelevels and grant gamers with temporary special abilities like increased speed, wings for flight, defense shields, freezing opponents or instant knockouts.

¹⁸ E-sports are "Video games that are played competitively." (Egenfeldt-Nielsen et al. 191)

designed them as ordinary looking but ergonomic, "wireless pair of glasses with metal arms and retractable earphones" quite distinct from their VR headset predecessors that were more like bricks strapped to the face. (33)

What sets NeuroLink apart from other VR devices of its time, however, is not only its design but also its groundbreaking evolution in immersive VR technologies. NeuroLink glasses work by capitalizing on the brain's inherent capacity to imagine realistic experiences during neural phenomena like dreaming. Inventor Tanaka's invention of NeuroLink stemmed from his belief that VR technology's scheme of solely relying on perfecting the graphic quality of the VR devices will not generate life like experiences because consumers' minds will always be unconsciously aware of their artificial nature. Therefore, instead of adding excessive virtual details, the VR devices need, "to fool the audience into thinking it's real" using their own brain. (34) In other words, the VR devices need to be equipped with brain-computer interface technology that utilizes the brain's temporal lobe to leverage the brain's ability to generate vivid and descriptive experiences. The NeuroLink glasses work on this principle by sending signals to the brain that perceive virtual overlays as real. Though Tanaka initially created NeuroLink as eyeglasses, the further technological innovations evolved these glasses into their next generation: contact lenses. The NeuroLink contact lenses work by creating a "harmless film" on the human eye which, "acts as a conduit between the lenses and your body" (81). This enables them to be worn for extended time period, and they are easily chargeable using the electric pulse created by the human body.

This makes NeuroLink capable of integrating virtual simulations in the real world and as a consequence provides its user with hyperreal experiences by letting them interact with virtual simulations. Resultantly NeuroLink's evolutionary technology has brought the world to a state of unceasing human computer interaction where the users can either fully immerse in the virtually created wonderlands filled with fantastical landscapes and creatures like elves, dragons and others or create virtually augmented overlays over the real world like walking virtual pets through the streets of Tokyo or interacting with floating digital information regarding geographical locations and names of streets, buildings, and stores (34), or fill the sky with virtual flying orbs displaying news and commercials (68), or use their NeuroLink lenses to indulge in either text messaging with texts hovering in front of the sender and receiver like a

computer screen (89) or video calling (207) or transform an ordinary ceiling into a night sky filled with stars and northern lights (115).

Moreover, even though NeuroLink was created as a headset for VR MMORPG game Warcross but it proved to be such a game changer in the field of VR and mixed reality technology that its ability to seamlessly augment real world with virtual simulations made the entire world and specifically city Tokyo its domain. But, as opposed to the VR game Otherworld which allows gamers to set the pace of their progress and comprises of different worlds focusing either on recreation and enjoyment for gamers, or collecting material wealth or constant combat, the game Warcross instead has different versions depending on the type of gamers: it can be played solo and in groups or pairs. For average gamers it is a goal driven game where the ultimate goal is to complete different game levels and collect points increasing ones ranking so that they can become professional gamers. However, the professional gamers not only play Warcross as a VR MMORPG game, but also as an annually held e-sport between two (five member) combat teams¹⁹, "one trying to take the other team's Artifact (a shiny gem) without losing their own". What makes the game Warcross a global sensation, however, rests its virtual worlds the gamers use for their battles, each one feeling so hyper-realistically crafted through NeuroLink that the gamers feel like "dropping ... right into that place" (34). It can be stated that in the VR game Warcross the narrative techniques of immersion and interactivity are essential elements in creating exceedingly hyperreal immersive and interactive experiences for its gamers like Emika Chen.

Furthermore, as discussed in third chapter²⁰ Marie-Laure Ryan's concepts of Immersion and Interactivity though focusing on reader immersion and gamer interactivity can also be applied for the analysis of Emika's hyperreal immersive and interactive experiences in the VR game Warcross. This is because a feature of GameLit texts like WC is that since the plot revolves around the characters playing games by completing the levels or quests, these characters take on a position of the gamer-

¹⁹ Each team includes at least five members: Captain, Shield—the team's defense, a Fighter—the team's offense, Thief—the one responsible for stealing the artifact, and Architect—the one responsible for changing the game-world in favor of its team.

²⁰ For more details, refer to page number 31.

character, especially when the games are MMORPGs and are set in virtual worlds which act as a separate layer of reality one can interact with. Therefore, the character of Emika Chen can be considered as a gamer-character because the concerned GameLit novel not only focuses on her playing and winning the game Warcross but also presents her as an active participant capable of altering the game-world through her avatar's actions.

The analysis will however focus on how Emika's experiences of being spatially and emotionally immersed in the game-world make the said experiences hyperreal. Also, it needs to be noted here that Emika's immersion is the result of her avatar's interactions with the gameworld. This aligns well with Ryan's concept of internal-ontological interactivity which discusses the gamers experiences with first-person games such as shooter games like PUBG and VR games like Second Life. In other words, the more Emika interacts with the game-world using her avatar, the more her virtual experiences become hyperreal— "more real than the real" (Baudrillard 56) itself and the more she feels a blur between real and virtual world.

Among the textual examples which show Emika's spatial and emotional immersion within the game-world of game Warcross, one can be observed in chapter thirteen where Emika after being recruited for Annual Warcross Championship sets out to train along with her team Phoenix Riders in the virtual training grounds of Warcross's game-world. The team leader, Asher Wing, sets up the training ground level in such a way that it becomes a microcosm of all the levels that Warcross offers to its gamers. As the narrative unfolds, when Emika sets foot in the training grounds of Warcross using her avatar, she is hit by the hyperreal immersive quality of the gameworld and her immersion within the game-world rises as she interacts with the gameworld mechanics through her avatar's first-person engagement and actions. For Emika, a gamer character, her rising spatial immersion can be observed through a mix of her internal-ontological interactivity and a number of techniques mentioned by Ryan in her book.

The first technique proposed by Ryan which makes the game-world spatially immersive is Balzac's technique of tying "description to a moving body" (Ryan 87). Just as Balzac uses his characters as tour guides to gradually explore the setting of his novels creating a "memory palace" in the minds of their readers, likewise the setting of the virtual training ground or as Emika observes, "a new world materializes" (Lu 129)

as she step by step maps out this level of the game-world creating a "memory palace" in her mind through her interactions with the training ground level of the game-world thus resulting in her raising spatial immersion within the setting. She through her bodily movements and exploratory gaze navigates the virtual training ground as an unpainted and un-textured whitewashed world only half finished with its "white streets crowded by white cars", "white columned buildings" on one side and the "whitewashed jungle" with ivory trees and white grass on the other side, with only the exception of the sky colored as bright blue. The virtual space initially comes as a shock to her but as she adjusts to the setting, she feels herself forget the reason of being there and enjoys the exciting scenery around her, "I allow myself to forget about my hunt" (129). This can be cited as an instance of her raising spatial immersion because she feels comfortable in the setting and is willing to forget about her main goal. This then highlights her ease within the game-world's setting, which can only be achieved if one was present in a place which they are at ease with. But how can Emika feel comfortable in a virtual world that is so different than the real world she is accustomed to.

This can be explained with the help of another spatial immersive technique mentioned in Ryan's book: Roland Barthes "reality effect". This place-constructing technique is used by packing the setting with, "concrete details whose sole purpose is to fix an atmosphere" and tell the gamer-character that, "This is the real world" (Ryan 91). The above-mentioned details of the whitewashed world such as white sidewalks, white streets jammed with white cars and buildings, white forests filled with ivory trees and bright blue sky also serve the same function of adding realistic details to world that is otherwise virtual and colorless. According to Ryan the immersive quality of the presented virtual world depends not only on its features of being filled with vivid details that fuel one's spatial immersion by stimulating their basic senses but also how those details emerge through the gamer-character's embodied navigation of the said virtual world. For example, in this instance Emika, through her embodied navigation of the whitewashed world, feels herself lost in its wonders even though she has never been there before, but she feels a certain sense of ease on the hyperrealness of the gameworld. Hence Emika's immersion within the whitewashed world rises not only because of the spatial configuration of the game-world, but also because of the emotions she feels while exploring the game-world.

According to Ryan there are three types of emotions – a gamer and in the study's context the gamer-character can feel: subjective reactions, empathetic emotions and emotions felt for oneself. Emika's feeling of losing herself in the game-world by forgetting her goal and excitement aligns with the third type of emotion conducive to immersion which consists of emotions like ecstasy, excitement, fear and arousal. In other words, as Emika, using her avatar, bodily navigates the training ground level of the game, the setting of the whitewashed world filled with vivid descriptions similar to any real world heighten her excitement, which in turn blurs the line between virtuality and reality and thus acquires a hyperreal state. It then becomes, "more real than the real". According to Baudrillard this is, "how the real is abolished" (56) because virtual starts becoming uncannily similar to real to the point the gamer-character displaces one for another.

Emika moves through the game-world using her avatar's internal-ontological interactions and actions similar to an avatar in first-person games like Second Life and it is due to this that her immersion also rises. Wang in her research study while examining the immersive features of VR action games states that because the actions of players' (gamer-characters') entire body are easily reproducible in the VR environment via the gesture capture ability of HMD headsets and haptic gloves or controller, "action games in VR environment have a more immersive experience than those in other environments." (493). This can be further seen in the same instance when Emika's team leader Asher initiates training practice to judge her skills and weaknesses as an Architect. Asher's training practice consists of a match between Emika playing as an Architect and Hammie playing as the Thief to go after the morph power-up²¹. Whoever acquires the power-up first wins. Emika's Architect armor equipped with a "utility belt" around her waist containing tools like "Hammer. Screwdriver. A box of nails. Two rolls of duct tape. A small chain saw. A coil of rope" her boots containing, "sticks of dynamite, lock picks" and right thigh strapped with an, "assortment of knives" (130) shows that as an Architect she is a, "designer" of the levels who frequently comes in contact with the mechanics of the game-world and is capable of manipulating and molding the game-world's terrain in favor of herself. According to

²¹ Morph Power-up allows the gamers in Warcross game to "change one thing in to something else". (Lu 131)

Brooks²², as opposed to the other gamer positions in e-sport Warcross which mostly focus on obtaining the Artifact, the Architect's position is rather more about, "playing against the game's designers" (Brooks 66) as it is mostly divorced from such struggles and concentrates on the game-world environment. This makes Lu's creation of Architect's position—a gamer position capable of dismantling the game environment, a challenge against the normative standards of E-sports where the gamers are expected to play within a limited number of skills. It can be further observed in her practice match against Hammie. As soon as Asher signals the start of the training session, both Emika and Hammie bolt towards the morph power-up placed on the top of a high-rise building. While Hammie takes on a traditional route of climbing the building brick by brick, Emika begins her interactions with the game-world by molding its environment to suit her needs. This she does by blasting a streetlight near the building and using it to reach the power-up faster than Hammie. However, when she reaches for the rope in her utility belt Hammie steals it but Emika improvises by using a nearby Speed Burst power-up and outpaces Hammie by several feet. She then uses the hammer in her utility belt to plant a trap for Hammie on the nearby bridge which proves to be futile as Hammie figures out Emika's plan and takes a detour to reach the morph power-up. Emika as a last resort uses her Architect tools to lunge at Hammie and throw her off balance. Hammie reacts by punching her with rapid speed and Emika after a brief strife barely manages to pull herself up and obtain the power-up after which she plunges downward on the streets and knocks her avatar out of commission for several minutes. The session concludes with Hammie stealing the power-up from Emika as she crashes (131 - 134).

This brief but impactful strife between Emika and Hammie showcases how Emika's internal-ontological interactivity through her avatar's actions and interactions with the game-world enables her to manipulate its setting by blasting the architecture and planting traps. It can be further observed in this instance that as Emika responds to the challenges of the training session her interactions with the changing landscape of the game-world echo a "memory palace" effect in her mind through her avatar's active embodied movement. Ryan states that Balzac defines "memory palace" as a detailed mapping of the setting that leaves an everlasting spatial impression on the mind of the reader. However, as discussed elsewhere in the context of this study it is the gamer-

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²² For more details, refer to page number 17.

character—Emika since she is not only a character in the novel's narrative but also an active participant of the VR game Warcross's world which acts as a separate layer of reality within the narrative's reality and is able to manipulate the game-world through her avatar's interactions and actions.

Other techniques mentioned by Ryan which add to the spatial immersive quality of the training ground level of the game-world for Emika are Marcel Proust's "madeleine effect" and Ryan's technique of using proper names. Proust's "madeleine effect" works by immersing the (reader) gamer-character into the setting the (novel) game-world through a personal sentimental memory attached to either a name, object or an incidence. For example, in the above-mentioned instance when Emika lunges at Hammie in an attempt to throw her off balance, Hammie attacks her viciously, attempting to stab her avatar's vital bodily parts like eyes and jaw with a virtual dagger. As Emika dodges her attacks Hammie's tactics reminds Emika of her time as a bounty hunter, "the memory of me running through New York, catching the gambler, flashes back to me" (134) and she fights with Hammie "on pure instinct", movements honed by being a bounty hunter. This recollection of a dark sensory memory parallels her virtual game-world experience with a real-world event further anchoring her in the dynamics of the game-world.

Also, the use of proper names like New York further works by immersing Emika in the setting. Ryan states that the use of proper names conjures their presence to one's mind and aids in tele-transporting one to corresponding location by fixing an atmosphere in one's mind (Ryan 89). Similarly, the combined effect of familiar experiences and place create a layered spatial immersive experience for Emika by mentally tele-transporting her to New York where she chased gamblers down its streets, dodging their knife attacks. The use of these techniques also creates an atmosphere of danger, violence and private history. Therefore, for Emika, Hammie's attacks are not merely a match set in a virtual game-world, rather based on her past personal recollections, they transform into something much more serious similar to her physical fights against gamblers in the real world thus converging the real and the virtual. This convergence generates her spatial immersion in that moment in the game-world and makes the game-world feel hyperreal. Here it can be observed that the narratological techniques of spatial immersion as proposed by Ryan, though originally catering to reader immersion in the fictional world of traditional books, are being adopted in the

VR game-world of Warcross. This is because for Emika the VR game-world opens similarly to a narrative as she begins to systematically explore it and create associations with her personal history.

Furthermore, Emika's hyperreal experiences are further fueled by her fluctuating emotional involvement in the events taking place in the game-world. For instance, as Emika makes her way towards the morph power-up she feels a sudden, "surge of adrenaline" (131) hit her. Similarly, when she struggles against Hammie's barrage of knife attacks, she feels fear and when she finally obtains the power-up she lets out "a shout of triumph" and experiences shock on realizing that Hammie stole the power-up without her noticing (134). This visceral release of emotions aligns with what Ryan states as emotions felt for oneself which includes fear, shock, arousal and excitement among others. For instance, when Emika bolts towards the power-up fed on her adrenaline, it deepens her immersion in the game-world by generating excitement, and stress of competition. The flux of emotions she feels in this instance are tied to her physical and mental response to her surroundings and the ongoing challenge. This proves that she takes these challenges, though set in a virtual game-world, with similar seriousness to her real-world challenges thus blurring the line between her real and virtual world experiences. Likewise, the emotion of fear she feels when dodging the virtual dagger attacks, during her physical combat with Hammie, is her real psychological response to the situation, even though the events are set in a virtual world and the weapon being used is also virtual in nature. This is because the dagger attack triggers a flashback of dark personal memories set in her real world—dodging the gambler's knife attacks. Her emotional response in this virtual situation is therefore rooted in her past traumas which further aid her emotional immersion in the virtual game-world events.

As virtual experiences generate real life emotions, they also promote the blurring of lines between real and virtual experiences thus making them hyperreal. Similarly, her fluctuating emotions of euphoria on attaining the power-up and shock on losing are also based on her physical and psychological responses to the situation. Her moment of achievement reflects her pleasure in overcoming her struggles and her moment of shock reflects her disbelief. Therefore, together these barrages of emotions echo her emotional involvement in the game-world further aiding in her hyperreal experiences. In short, though the events take place in the virtual game-world made of

digital codes but due her spatial and emotional immersion within its setting and her internal-ontological navigation of the game-world she views the virtual game-world as not just an illusion but rather as an inhabitable reality which can be experienced both physically and emotionally.

However, the above-mentioned instance showcases Emika's response to the training ground level of the game-world that is whitewashed—only black and white, except for the blue sky. Moreover, it is not even a part of the main tournament and therefore not at all equal in immersive quality to the game-world levels of the actual championship. The hyperreal immersive and interactive qualities of the game-world levels specifically designed for the championship are so spectacularly advanced that stepping into them is like, "dropping right into that place" (34). Among the instances which showcase this spatial immersive quality of the Warcross game-world's various levels, one can be observed in chapter nineteen where Emika and her team Phoenix Riders face off against Demon Brigade (another team) in the first match of the annual championship. As discussed, Warcross has various versions, one of which is a VR esport played annually in Tokyo, Japan by different teams committed to win. The directions of playing Warcross are pretty simple. It is played between two teams with a similar goal: capturing the other's artifact while guarding your own. The teams concerned battle in various levels designed either for speed or space. Similarly, the teams Phoenix Riders and Demon Brigade faceoff in the game's racing level called as the White World—a snowy glacier world, designed to test the gamers' speed, and quick thinking, skills that Emika is required to utilize frequently since she plays as her team's Architect. As discussed earlier an Architect is the "designer of the level" (Lu 107) and is responsible for molding the game-world's terrains in favor of his/her team. This means that Emika too, through her avatar, comes in contact with the game-world's mechanics more often than other team members and owing to her avatar's internalontological interactivity reshapes the game-world's landscape for her team through her interactions, resulting in her increased immersion within the game-world. By applying Ryan's proposed concepts, Emika's immersion in the game's White World landscape can be observed through a mix of various spatial immersive techniques such as Honoré de Balzac's technique of tying description to a body in motion and Roland Barthes technique of "reality effect".

Barthes technique works by packing the setting with concrete details whose sole purpose is fixing an atmosphere. According to Barthes such minute details though holding no plot function are significant because they make fictionalized landscapes look and feel real by anchoring the audience in the physical textures of the fictionalized world (Ryan 91). Similarly, the concerned instance expresses a number of minute details, such as, when Emika opens her eyes in the White World level of the gameworld, she is blinded by the cold sunlight scattering in a million rays on the blue and white polar landscape. As she regains her composure, she observes snowy glaciers decorated by repeatedly erupting huge monuments and glittering blue cliffs within which are frozen prehistoric creatures of enormous sizes with their jaws set in a snarl. The sky above her bursts with vibrant colors of gold, purple and pink and teems with hanging ringed planets. The landscape surrounding her is thick with a layer of sounds such as alien sounding synthetic bells, howling background wind and thudding rhythmic music which evokes a sensory quality of the White World (Lu 175). The above-mentioned surplus of descriptive details anchors Emika—a gamer-character in the physical textures of the virtual game-world by telling her that this world that she is standing in, "is the real world" (Ryan 91). In other words, for a virtual world to feel real it does not need to fully mimic the elements of the real world rather it needs to be filled with objects that present the said world comprising of logical existence. The abovementioned minute details of the virtual White World level also create a similar effect by conjuring an inhabitable world operating on its on logic, making the landscape feel hyperreal and raise Emika's spatial immersion. However, according to Ryan the profusion of descriptive details sometimes may over crowd the senses and cause a mental fog effect where the details flow out of one's mind, "without forming a stable geography" (91) of the place. But as can be observed in the concerned instance, it is not the case for Emika—the gamer-character, rather than being confused by the rapid bombardment of the visual and auditory details in the polar landscape, she instead keenly surveys the entire terrain and makes its mental map to be viewed when needed. This brings in another spatial immersive technique which can be observed in this concerned instance.

Ryan in her book wonders how a spatial setting can successfully capture both its atmosphere and topography without losing the audience in a descriptive thicket. She answers this by proposing Honoré de Balzac's technique of tying, "description to a

moving body" (87). Balzac, in order to create a spatially immersive setting without boring the audience with lengthy descriptions, introduces his setting dynamically, that is by making his narrators introduce the setting systematically like a tour guide or real estate agent. In other words, the game-world uses a similar feature to boost its gamer's such as Emika's spatial immersion in its setting and also aids in making the game-world's landscape attain a hyperreal state. The setting of the White World also reveals itself dynamically with the gamer-character Emika's exploration of the place through her avatar's physical interaction with the game-world's landscape. For instance, when she opens her eyes in the White World level of the game-world, her sense of sight is hit by the hyperreal virtual sunlight that makes her eyes squint and she has to hold her avatar's "virtual hand" over her eyes to shield them against the light, further bodily situating her in the setting (Lu 175).

Moreover, similar to how Balzac's narrators' step by step introduce the setting in his novels, Emika also introduces the setting of the game-world's White World level as she progressively explores it through her interactions throughout the game. For instance, as she regains her sense of sight after the initial glare of the virtual sunlight, she finds herself suspended in midair on a hover-board and begins her exploration systematically. Her avatar's panoramic gaze follows the sun rays as she surveys the expanse of the vast polar landscape in front of her illuminated by cold sunlight. The landscape feels hyperreal packed with blue icicles and white snowy glaciers from which enormous translucent monuments continue to erupt, startling her senses. She raises her avatar's neck to survey the sky colored in hues of purple, pink and gold and shimmering with giant ringed planets. Then bends it again to observe the towering blue cliffs on either side containing frozen prehistoric beasts like a polar bear, a white wolf, a dragon, a saber-toothed tiger and a woolly mammoth, their sizes equal to giant skyscrapers. Finally, she looks around her and finds her team members dressed in matching red fur suits like her, while their opponent team is dressed in silver. On Asher's command she surveys the entire landscape for any potentially useful power-ups to grab for her team (175). The setting of the White World amazes Emika to such an extent that she loses her sense of goal while standing in the glacial landscape and only reverts her attention back on the game when the commentators begin to announce the game rules (176).

The above-mentioned Emika's subjective itinerary of the game-world's landscape showcases that she reveals each element sequentially as if mapping it out like

a cartographer and constructing a mental memory palace for herself which she can revisit later on. This subjective mapping of the landscape is not only an attempt at exploring the game-world but rather is essential for her due to her position as her team's Architect. The more comprehensively furnished the memory palace the more precisely it will remain in Emika's memory during her ventures in the concerned Warcross annual session. She even continually compares the visual elements of the landscape with its 3D model she examined before the game, continuously connecting points and marking areas she can mold. Such actions increase Emika's spatial immersion in the setting of the landscape by challenging her cognition in the same way a real-world problem does. For instance, it is pertinent for Emika playing as an Architect to be fully aware of the composition of the game-world's landscape so she can utilize her knowledge later on when planting traps and reshaping the game-world's terrain in favor of her team. Wang in her examination of virtual environment in VR games observes that the simulation of a logically well-constructed fantasy world in VR which employs high level of computer graphics allows gamers, "to explore or reconstruct the world precisely. Contacting with things which are unavailable in daily life and interacting with different objects in a virtual environment, players in VR games can directly play with the objects, making use of their natural expression, to perceive interactive visual feedback of the environment" (Wang 495). In short, it can be observed that the game Warcross's gameworld contains the above-mentioned spatial immersive techniques that aid the gameworld in constructing a world that is not only sensory rich but also bodily navigable. Through her avatar's continuous bodily movement—neck rotation, Emika becomes spatially immersed. Here it can be observed that the spatial immersive narrative techniques of VR game-world closely follow Ryan's concepts in generating an environment that is though virtual but more immersive than the fictional world presented by the traditional narratives like novels.

Furthermore, Emika's emotional engagement assisted by her internalontological interactivity in the hyperreal virtual game-world also furthers her immersion process. For instance, the blinding glare of virtual sunlight generates her feelings of physical unease. Similarly, when Emika surveys the hyperreal polar landscape blanketed with glittering snow, the lifelikeness of the polar cliffs and glaciers and the enormity of the beasts generate within her feelings of amazement, even though they all are virtual constructs made of code and she states, "I shiver in awe at the size of them" (Lu 175). This active response by Emika for the hyperreal landscape of White World aligns with Ryan's proposed category of emotional immersion that is "emotions felt for oneself". Similarly, when Emika looks down from her hoverboard her, "stomach dips" as she comprehends her avatar's sheer vertical elevation from the ground raising feelings of fear and bodily vertigo. This visceral engagement of Emika with the landscape marks her emotional immersion within the game-world's level White World.

Likewise, the second category of emotional immersion which can be observed here is subjective reaction and judgement of other characters and their behavior. When standing among her teammates of Phoenix Riders and opposite to the opponent team Demon Brigade, Emika feels a flurry of fluctuating emotional engagement expressed through her unease on Asher's composed indifference towards Jena's smirk and mocking salute, Max Martin's cold calculating gaze towards Phoenix Riders and Tremaine's full attention on Emika herself expressed by his ice-blue unreadable eyes hiding a silent hint that he will surely target her, further enriches her emotional immersion²³. Similarly, the verbal exchange and body language of her own teammates such as Ren's ambiguous comment of "Good Luck" to Emika feels more malicious than earnest to her, leaving her feeling anxious as she responds with a tight smile. Such a spectrum of emotional exchanges during that brief moment before the game starts not only sharpens the stakes of the game but also prepares her competitive spirit.

Lastly, Emika's empathetic emotions for her teammates come to play for Roshan when she notices the tense atmosphere between him and Tremaine showcased by Roshan's jaw set tight and both of them actively ignoring each other. This layered and emotionally charged atmosphere expands Emika's immersive depth. Therefore, it can be stated that Emika's emotional immersion within the dynamics of the game-world evolves the virtual gameplay into something much more serious making the whole scenario feel hyperreal such as a real-world competition between two groups holding serious things at stake.

²³ The members of Phoenix Riders include Asher—the Captain, Hammie—the Thief, Emika—the Architect, Ren—the Fighter and Roshan—the Shield, while the members of Demon Brigade include Jena—the Captain, Ziggy Frost—the Thief, Tremaine—the Architect, Max Martin—the Fighter and Darren Kinney—the Shield

Emika's internal-ontological interactivity with the game-world plays a huge part in her immersion, but, in the above-mentioned instance Emika's spatial and emotional immersion is limited to her intellectual engagement via her avatar's bodily movements, that is neck rotations. However, as the starting call blares and the game session begins, Emika's interactivity with the game-world evolves from merely observing from a far to her interacting with it using her avatar's first-person actions. For instance, as soon as the game commences Emika begins her interaction with the first object of the game-world nearest to her: her hoverboard and tests the hover-board's built-in abilities of navigation and control such as pressing her avatar's front heel down for going faster and pressing the back heel down for stopping. After mastering control over the hoverboard she shoots forward from the rest of the crowd, her years of experience of riding hoverboards kicking in. Further heeding Asher's command, she charges in the direction of a Lightning power-up suspended within a giant hole in a cliff, initiating her second active interaction with a game-world's object. As she pockets the power-up successfully, her memory of the White World's 3D map springs in her mind. She observes the cliff's structure for any weaknesses and spotting the terrain's uneven tilt to one side, her Architect instincts kick in and she decides to exploit the landscape's structure to her team's advantage by planting her first dynamite. The cliff erupts spraying shards of ice everywhere and destroying Demon Brigade's formation. Seizing her opponent's moment of distress Emika shots the Lightning power-up towards their cluster, effectively electrocuting them and knocking out their Shield. Emika's actions illuminate the landscape brightly. Crucially, all these active bodily movements of Emika such as scanning the landscape for the power-ups, acquiring them, and manipulating the game-world's landscape are powered by her avatar's first-person interactions—internal-ontological interactivity. Instead of being a passive observer of the landscape Emika actively takes part in altering its architecture through her avatar's actions. Ryan states that when the gamers in such games actively take part in the construction or manipulation of the game-world's objects through their first-person interactions, they make their constructions a permanent part of the game-world and consequently "write" "the life (or lives) of her character and, by extension, the history of the entire world" (Ryan 164).

Furthermore, as discussed above, as soon as Emika stepped in and surveyed the entire virtual landscape of the game-world, she was already spatially and emotionally

immersed in it owing to its hyperreal CGI quality. But as can be observed from her above-mentioned first-person actions, Emika's direct interaction with the game-world's landscape also plays a crucial role in her spatial and emotional immersion within the said landscape, making game-world transcend the virtual realm and obtain a hyperreal state for her. Emika's spatial immersion in the setting of the game-world in this concerned instance is created by her sequential navigation through the polar landscape of the game-world—a technique used by Balzac to create highly immersive settings for his works. This can be observed in the way Emika observes the frozen cliff for any weaknesses, and plants dynamite.

The White World's virtual terrain ceases to be a virtual entity and attains a hyperreal state by assisting her immersion in the landscape and diminishing the line between virtual game-world's consequences of an action with real world's. For instance, seeing his team receive a heavy blow by Emika, Tremaine rushes towards her and slashes her chest hard, turning the nearby glaciers scarlet and strikes unceasingly forcing Emika to lose her balance. A tussle ensues where Roshan comes to her assistance, but Tremaine continues to tail Emika's avatar, her vision on the verge of collapsing. Despite his continuous attempts to crash her into nearby cliffs, Emika though semi-conscious activates her quick-thinking skills and by recalling the 3D map of the landscape in her numbing mind succeeds in saving her avatar from crashing. She surveys the landscape with Tremaine on her heels and spotting a Power Burst powerup uses it to zoom ahead to her team the Phoenix Riders. As the Phoenix Riders decide to initiate their attack on Demon Brigade the NPC giant prehistoric polar bear explodes from the nearby cliff and lunges towards Emika who manages to veer out of the way in the nick of time but rams into her teammate crashing a couple of kilometers away from everyone. Desperate to join her teammates again, she hunts for them on her 3D map and upon finding them trapped between the beasts, blasts the nearby archway. Phoenix Riders assemble to fight in formation, but Demon Brigade makes their move with first Tremaine shooting a dynamite stick towards them to cause disorientation and then the rest of them teaming up against Asher. As the situation escalates Emika prepares to activate a hasty plan but is hindered by Tremaine's intervention who rams his hoverboard with hers and knocks them both out. However, Emika quickly regains her composure and uses a Speed Burst power-up to quickly reach her destination and put her plan to motion by lassoing the dragon beast and leading it towards the Demon

Brigade and helps her team to successfully knockout the Demon Brigade's Captain, snatching their Artifact, and winning the game session.

The chain of first-person actions initiated by Emika throughout the course of the entire game session vividly demonstrates how her avatar's internal-ontological interactions with the game-world not only raise her spatial immersion within the setting but also deepen her hyperreal experiences. It is through her embodied navigation of the virtual game-world and her active actions such as planting dynamites, scoring powerups that she feels spatially immersed resulting in dissolving the boundary between her virtual self and real-self. Throughout the game session Emika navigates the terrain of the game-world's level White World as a knowledgeable insider and makes substantial changes in the terrain according to the challenges she encounters. For instance, when she spots her team members Asher and Hammie trapped in an archway cliff between two NPC beasts and Demon Brigade she surveys the topography of the cliffs around them and calculating the affect the dynamite placement will have on her teammates and the opposing team, she yanks out the dynamite, zooms towards the top the archway cliff and slaps the, "stick of dynamite to the top of the ice structure" (182). The dynamite blasts with an earth-shattering explosion showering the Beasts and members of Demon Brigade with snow, while her teammates Asher and Hammie escape unscathed. This is a clear example of Emika's internal-ontological interactivity as it aligns with what Ryan states in her book that the system of such VR games, which allow the gamers to move about and actively interact with the game-world, projects a storyworld within which the gamer can also fashion him/herself as an "individuated member" of the storyworld. Also, the gamer by actively interacting with the objects of the said game-world such as NPCs "writes the life ... of her character, and by extension, the history of the entire [game]world ... the narrative is created dynamically by being enacted" (Ryan 164). In context of the game Warcross this means that instead of being a passive observer of the events in the virtual game-world, Emika is living within the virtual game-world's environment through first-person actions, quick-thinking skills and adjusting herself according to the spatial orientation of the place. Emika's actions within the game, like, blasting the archway, saving her teammates and using the NPC dragon beast as a weapon by lassoing it and charging it in the direction of the opposing team Demon Brigade actively "write" the lived experiences of her avatar and by extension the history of the game-world.

Similarly, Emika's spatial immersion within the landscape occurs dynamically and aligns with Balzac's technique of tying description to a body in motion. For Emika the game-world's features during the gameplay materialize as she moves through them, such as in the above instance she "zoom towards" the archway, slaps the dynamite on "top of the ice structure" and her eyes "flicker to the glacier's ice" below them where she spots the NPC dragon stirring awake. She "darts towards the surface" and dives close to the dragon (Lu 183). It can further be observed that these examples of motionoriented descriptions by revealing in depth the setting of the game-world through Emika's spatial orientation also aid in the hyperreal quality of the game-world. For instance, during the gameplay when Emika interacts with the NPC beasts like Polar Bear, she physically reacts to the situation in a manner similar to one would when facing a real world threat, such as her, "limbs go into autodrive" (181) and by slamming her back foot down she sharply swivels her hoverboard to her left in an attempt to get out of the Polar Bear's way even though the beast is a virtual object made of code and she herself is physically present through her avatar—a virtual presence. But the immersive visual and auditory sensory features attached to the situation such as the Polar Bear's "earthshaking roar" and jaws filled with sharp teeth (181) add a realistic touch to an otherwise virtual simulation and evolve the environment to a hyperreal state. This instance by presenting Emika's waning perception of distinction between reality and simulation offers an intense moment of her spatial immersion. Also, the sensory cues provided by the VR game are so lifelike that they create a simulation of a tangible world and by overwhelming Emika's perception with convincing audio and visual simulations that imitate reality, overwhelm the line between real and virtual contributing to her raising hyperreal experiences. It feels like Emika is not playing the VR game rather she is living in it and experiencing the virtual game-world around her as a real inhabitable place. Therefore, it can be observed that Emika's spatial and emotional immersion within the game-world's landscape via her internal-ontological interactivity occurs in line with Ryan's concepts.

Similarly, another instance which further provides a more nuanced and insightful demonstration of the hyperreal quality of Warcross virtual game-world's various levels can be observed in chapter twenty-four where the team Phoenix Riders faceoff against another team Cloud Knights in the game-world level: Lost City Level—a subaquatic level showcasing a vast ancient city bathed with dim light emitting from

the ocean surface. As discussed above, Emika's immersion within the setting of the game-world stems from her active interactions (internal-ontological interactivity) with its dynamics, and this process of immersion generates her hyperreal experiences where she subconsciously begins to perceive the virtually constructed simulations as real, resultantly overwhelming the line between real and virtual. In the above-mentioned chapter, during the second round of championship between the two teams Emika's active interactivity with the elements of the virtual game-world commences from the time of pre-game standoff as she acclimates herself with how to maneuver her avatar's body by experimenting with her avatar's hand interface, "equipped with buttons in [her] palms" (Lu 226). When she presses the buttons, her avatar jerks forward allowing her to navigate the underwater game-world level.

As soon as the game begins, her active interactivity manifests in multiple layers such as her interactions with her teammates and with the game-world. Also, as stated already, Emika's internal-ontological interactivity with the dynamic events of the game-world drives her emotional immersion within it. The whole of the gameplay session chronicles her subjective itinerary charged by her fluctuating emotions which can be analyzed using Ryan's three types of emotional immersion: subjective reactions towards the characters and judgements of their behavior, empathetic emotions for others and emotions felt for oneself. For instance, her emotional engagement begins as soon as she sets foot in the game-world and is struck by the hyperreal ethereal beauty of the subaquatic Lost City Level. Her subjective reactions for the setting come into play as she stares with wonder at the submerged city featuring ruined remnants of "once grand theaters and bathhouses" (226) and enclosed by tall stone pillars and coral walls. In line with Ryan's explanation of subjective reactions, Emika expresses awe and admiration for the subaquatic environment as obvious from the words she uses to narrate her visual experience in the sunken city like "spectacular, ruined city" encased in walls of "colorful coral" and decorated with glittering "jewel-like" power-ups hanging all around the city and illuminated by dim light making hyperreal shadows on the city's base (226). The way Emika, through her internal-ontological interactivity with the game-world's Lost City level does not merely construct a mental map of the city, rather reacts to it with wonder, shows her emotional pleasure towards the environment, generating her immersion.

Similarly, as soon as the game commences, Emika's active interactions with her teammates further reinforces her emotional immersion within the shifting dynamics of the game-world. For instance, Emika continues to defy Asher—her team Captain's orders and instead stubbornly tails after Ren whom she suspects of plotting something dangerous against the game Warcross²⁴. It can be observed from these lines:

Asher: "Can you follow my lead for once?"

Emika: "I see a better route," I lie, continuing in my direction ... I keep my gaze on Ren ... Where is he going? (227)

Here it can be observed that Emika's emotional engagement within this situation in the virtual game-world aligns with two types of emotions conducive to immersion: subjective reactions and empathetic emotions. Firstly, her Subjective reactions towards her teammates and "judgements of their behavior" (Ryan 108) arises in context of Ren in form of suspicion and curiosity regarding his activities in the game. From the beginning Emika harbors misgivings about his actions. For instance, during the time when the announcer was reading the gameplay rules and both the teams Phoenix Riders and Cloud Knights were busy in a pre-game assessment of each other, Emika finds Ren intently staring at the distant ruins as if searching for someone instead of paying attention to the game. This makes Emika suspect Ren that he may be hatching a dangerous plan of his own on Zero's orders, raising her subjective reactions of apprehension and a gut feeling of distrust as her "jaw tightens" and a small voice in her mind tells her to "follow him" (Lu 227). Her in-game objectives blur with her personal emotions and following her gut feelings, she exclusively pays attention to Ren's actions and her judgement of Ren's character as a distrustful person further deepens when she finds him stealthily separating from the rest of the team and going deeper into the ruins. Therefore, she decides to forsake her team's strategy and even her oxygen supply level and instead tails Ren obsessively, hell bend on getting to the bottom of his mystery.

her job as Hideo's hired hacker to stop Ren and Zero.

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²⁴ Zero is the main antagonist of the story and Ren is his henchman. Ren entered Warcross's Championship as a gamer on Zero's orders to execute his plan of hacking the game-world. Therefore, Emika is suspicious of Ren's actions in the game as it is

Likewise, her empathetic emotions target the rest of her team because she is aware that by obsessively tailing Ren, she is jeopardizing her team's strategy and that it may end badly for the whole team and affect their score level. Her empathetic emotions of guilt towards her teammates especially her team Captain Asher intensify as she continues to disobey his commands despite his exasperation, "Your only solo move. Hear me?", intentionally misses useful power-ups like silver and gold Invisibility and suppresses her inner thoughts of "concentrate on the game right now" instead of following Ren (227). These choices that she makes through her avatar's active interactivity anchor her in the fictional game-world level by deepening her emotional investment in its dynamics. Therefore, both subjective reactions and empathetic emotions work in tandem, to reinforce her immersion within the game-world.

Similarly, the third type of emotional immersion: emotions felt for oneself arise when a glitch in the game's Lost City level tele-transports Emika to a cavern illuminated by dim, scarlet light. Her emotions of panic rise as she fails to reconnect with her teammates and discovers herself completely locked out of the game. Shock adds to panic when on turning she comes face to face with the antagonist Zero himself and realizes that what she initially assumed as a malfunction of the game is in fact an intentional hack committed by Zero and Ren to strike fear in her by temporarily putting her out of commission. Zero informs her that at the moment no one is aware of her dilemma since in game her avatar is being controlled by him. Her emotions felt for herself reflect horror as she sees through Zero's window her avatar repeatedly ignoring Asher's orders and instead trapping itself in an airless pocket causing immense annoyance to her teammates and endangering their chances of winning. Her emotional immersion in the present situation amplifies when Zero first offers to become his spy and then threatens to expose her weaknesses if she does not stop aiding Hideo. She experiences raw visceral emotions of fear, anger, disgust and frustration all directed towards him and presented by her bodily expressions of flaring temper, gritted teeth, a feeling of shiver running down her spine (229) and clenching her fists tightly (230). As a last attempt to subdue her Zero mocks her display of bravery and manipulates her Architect suit to mimic his hunters' armor. Clearly horrified of seeing her skills being used against her she chokes out a gasp and angrily threatens to kill him. Emika's interaction with Zero leaves her terrified as on her rejection he promises her that she will regret her choices. Here it can be observed that despite her meeting with Zero taking place in a virtual environment, the emotional effects produced in her are very much real. Wang in her research while examining the emotional toll caused by VR games states that the VR games, "awaken fear in the gamers" by conjuring high level of emotional and spatial immersion by strengthening the environment construction and surrounding atmosphere, that force them to actively find ways to survive. She further states that multiple researches have proven that emotional impact of horror in VR games, "causes higher anxiety during the game and more ease after escape by recording the physiological indexes such as heart rate and skin conductance response" (Wang 495). This can be further observed in this instance that as soon as Zero vanishes the scarlet lit cavern around Emika also vanishes and she finds herself exhaling a sigh of relief, grateful that the ordeal has passed but still feeling terrified of what just happened. However, her emotions continue to evolve as she finds herself thrusted back into the game and due to her expired oxygen reserves, she discovers herself unable to move. Self-centered emotions of helplessness overcome her as she watches her teammates struggle against the opposing team and barely pass the level in the end. As soon as the game ends Emika's emotional immersion takes on a multi-layered form with all three kinds of emotions working in tandem to amplify her emotional immersion within the shifting dynamics of the game-world. Her subjective reactions of disgust and frustration rise when she encounters Ren's smug smile, fully aware that he knows about her encounter with Zero. Her empathetic and self-centered emotions, however, rise in form of her feelings of sadness and immense guilt when she is confronted by Asher, his face twisted with fury and disgust, "what the hell happened?" and on seeing shock and disappointment etched on her teammates Roshan and Hammie's faces (231).

From the above-mentioned account of Emika's fluctuating emotions it can be observed that her avatar's internal-ontological interactivity intensifies her emotional immersion within the virtual game-world's Lost City Level. For instance, aligning with Ryan's concepts, of the user writing the "life ... of her character and, ... the history of the world" (164) through her actions, it can be observed that it is Emika's choices that defines how she writes the life of her avatar and the history of the virtual game-world. For instance, by choosing to tail Ren instead of focusing on the game Emika reacts to the game-world not as a mere gamer following a pre-scripted route, but rather as a self-directed gamer-character who using her avatar's internal-ontological interactivity can mold the game-world through her actions and choices. Moreover, her emotional

immersion caused by her avatar's active interactivity in the dynamics of the gameworld also aided in her hyperreal experiences. For instance, her forced interaction with Zero—a character from her real world within the confines of the virtual game-world blurs the boundaries between her perception of digital and real world. Similarly, her rejection of Zero's deal despite his intense attempts to mentally manipulate her and her interaction with her teammates within the game-world also highlights the game-world's hyperreal allure where the virtual situations begin to imitate the real ones. It can be stated that by facing such threats and confrontations, Emika is not merely playing the VR game, rather she is living in its virtual game-world. Baudrillard comments on this altered perception of one's environment and states that when the virtual becomes "more real than the real" it abolishes the real (56). Similarly, Emika's perceptions of reality are altered by her life-like interactions with the virtual world such as forsaking her team, confronting Zero and feeling helpless in the end. She reacts to these events taking place in the virtual world as if they are based in the real world.

Likewise, another instance which provides an account of Emika's hyperreal immersive experiences within the virtual game-world's level can be observed in chapter twenty-nine where the teams Phoenix Riders and Andromeda compete in the Warcross's finale in the game-world level: Silver Circle²⁵. This instance shows how Emika experiences a unique form of spatial immersion because in this instance Emika does not interact with the game-world through her avatar's internal-ontological interactivity rather by hijacking Brennar Lyons's²⁶ avatar. In prior instances of gameplays Emika performing as an official member of the Phoenix Riders team was permitted to navigate the game-world terrains at will. But, after Phoenix Riders' last match with Cloud Knights, she and Ren were pulled out from the team because of their interactions with Zero. However, Emika decides to play in the final tournament when she uncovers Zero's plans of sabotaging Warcross and taking over the global NeuroLink network by planting a virus in the game through rigged copies of Artifacts (shiny gems) which will be used in the final championship. In order to activate the virus,

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²⁵ Silver Circle level in Warcross is tall and circular mecha battle arena enclosed around a lake with ten bridges fixed on its walls in equal intervals, each bridge is connected to a metal hanger inside which rests a mecha robot that gamers have to activate to fight.

²⁶ Brennar Lyons replaced Emika as the new Architect for Phoenix Riders.

Ren composes a music string which will start booming as soon as the game-world chosen for the finale of Warcross's championship begins to load. When a gamer uses the Artifact, the virus embedded in it will spread in the entire NeuroLink network and corrupt the system²⁷. Realizing greater things are at stake Emika devises her own plan to secretly infiltrate the game's championship finale through secure shields and force her way into the game-world by hacking the game, glitching herself inside Brennar Lyons's avatar, and by using a number of unauthorized power-ups bought from the Dark Web, deactivate both the Artifacts so they cannot be used to spread virus in NeuroLink's global network. Researchers Brooks and Butterworth-Parr²⁸ regard Emika's hacker position as a departure from the conventional representation of hackers in Cyberpunk and GameLit fiction. Butterworth-Parr by citing examples of Case and Wade²⁹ claims that WC presents Emika as a "less normative hacking body" (200) in fiction where the intelligent hacker position has always been occupied by a White Male. Brooks adds that Emika, "as a woman of color" alters the standard of gameplay by hacking the game, recoding it (deactivation of Artifacts and use of unauthorized powerups) and by forcing other gamers to play in her altered game environment (67). Both assert that Emika's unique position as a Chinese American woman sheds light on the long existing niche in Cyberpunk and GameLit fiction where the dominant gaze has always been masculine treating women bodies as eye-candy for entertainment. However, Emika proves to be unconquerable by the traditional system when she utilizes her hacking abilities to hack a highly renowned and heavily regulated e-sport, that also at the height of its engagement (final tournament). But the stakes are high for Emika since if she fails to time her glitch correctly, it may not only notify the Warcross

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²⁷ The NeuroLink networks of all the users are connected with the main NeuroLink network. So if virus spreads in one user's network it will affect the network of everyone else. This is why Zero chose the final game to execute his plan since it will ensure maximum number of global NeuroLink users being affected.

²⁸ For more details, refer to page number 17.

²⁹ Some examples of White Masculine entities occupying the intelligent hacker position in traditional Cyberpunk and GameLit texts include Henry Dorsett Case from *Neuromancer*, from Zack Lightman *Armada*, Wade Watts from *Ready Player One*, Charlie from *The God Game* and others.

authorities of her hacking but also alert Zero. Therefore, she stealthily enters the gameworld and bids her time for the opportune moment to execute her plan.

The opportune moment arrives as the final match commences. The final tournament is a mecha battle set in the Silver Circle level between the two teams where each gamer fights by piloting a giant mecha robot. Emika carefully observes Brennar's movements and realizes she cannot hijack his avatar unless he activates his mecha robot. As Brennar dashes to his robot, hops in and activates it, Emika zooms herself directly over him and brings up a grid over his mecha robot and converts it into a data code for hacking. Swiftly executing her plan, she then brings herself closer to his machine, and while hovering eye level from the robot, types the command and hijacks his avatar. Emika then gains full control over Brennar's avatar and begins her interactions with the game-world through his avatar. For instance, she asks Asher to pass Phoenix Riders Artifact to her and using her deactivation hack eliminates the virus from it. This instance vividly aligns with Ryan's concept of internal-ontological interactivity where the gamers actively inhabit the game's storyworld and through their actions write the life of their characters and consequently the history of the game-world. For instance, Emika instead of passively observing the game-world as an audience, actively takes part in its unfolding by moving herself around the game-world like floating over the arena, then hovering over Brennar's avatar, and finally hacking and gaining control over his avatar and by extension his mecha robot.

Moreover, Emika's ability to hijack Brennar's avatar and then control it smoothly as if it were her own further reveals the immersive nature of here active interactivity. What gives a hyperreal quality to her immersive experiences is the collapse between her perception of her real and virtual existence and her critical thinking skills. For instance, Emika actively inhabits the place as if she were an individuated member of the virtual game-world. Also, her elaborate strategy to shut down the virus also mimics real-life problem solving strategies. Such as she aims to use Play God power-up, to "permanently alter the landscape" of the game-world according to her requirements, then use Team Freeze power-up, to "disable the enemy team" and finally use Artifact King power-up, to "steal Shahira's Artifact" (267). Her experiences feel hyperreal due to their life-like nature because even though they are situated in the virtual world, they are motivated by genuine, visceral emotions. Her hyperreal immersive experiences in the virtual game-world are also aided by the game-worlds

sensory and physical cues like glowing red and green eyes of mecha robots when they are activated, screeching of metal when the bridges change their formation, and roaring virtual storm in the horizon, her raising tension as she proceeds with her plan, nervous to be found before accomplishing her goal All this enables the blurring of the line between her perception of real and virtual world and makes her experiences hyperreal.

However, the second phase her plan, deactivating Andromeda's Artifact, proves to be a challenging feat because in order to acquire their Artifact, Emika will have to lure Shahira—Andromeda's Captain out of her mecha robot. In order to implement this phase of her goal, Emika settles herself on one of the bridges and using the unauthorized Play God power-up temporarily pauses the game, yanks all the bridges together, and motions Shahira's mecha robot to land on the "now-connected bridge". With rising anxiety, she speedily uses her second power-up before Warcross's authorities find her and kick her out of the game. By using Team Freeze power-up Emika freezes Shahira's robot and exits her own mecha to manually open Shahira's robot's top and deactivate her Artifact. However, Emika's plan fails as upon reaching Shahira's mecha Emika finds Shahira's avatar hijacked and Brennar's avatar immobilized by Zero. Zero takes Emika's Artifact King power-up and runs to retrieve Phoenix Rider's Artifact to start the virus distribution through Asher's NeuroLink network. A series of struggles ensue, which Emika successfully overcomes with the aid of her teammates and shuts down Zero's virus (266 - 270). The game ends with a plot twist where Zero furiously informs Emika that "his plan ... was to stop Hideo" (271) and by deactivating the virus she has enabled Hideo to initiate his plan of world domination through his NeuroLink network—a brain computer interface technology.

Moreover, her above-mentioned series of hyperreal experiences further exemplifies her immersion within the virtual game-world because of her internal-ontological interactivity through Brennar's avatar. Her instinctive reactions towards the threats and struggles she encounters in the game-world like immobilization of Brennar's avatar by Zero deepen her immersion in the virtual game-world and blurs the boundaries between real and virtual. Other factors that contribute to it include her high emotional engagement driven by her rising anxiety on running out of time and dread of being caught by the authorities or horror on expecting Zero to win at last and her final exhilaration on crushing Zero's plan. Her actions exemplify that she does not merely move through a pre-determined path, rather, she exercising her real-time agency alters

the path of the game-world which itself reacts fluidly to suit her needs, such as repositioning bridges, brings Shahira's robot towards her and diverts storms. Also, her confrontation with Zero within the virtual world mimics the real-world risk filled confrontations with life threatening situations. For instance, she confronts his actions of freezing Brennar's avatar, and her tackling of Shahira's avatar as if they have real life consequences. The dynamics of the virtual game-world overwhelm her emotionally and spatially, making her experiences attain a hyperreal state.

Summing Up

To conclude, as depicted in the selected GameLit novel, the game-world of Warcross employs certain techniques which deepen Emika's immersion in the gameworld through her avatar's internal-ontological interactions. As Emika continues to increase her interactions with the game-world, she begins to subconsciously displace real-world experiences with her experiences in the virtually constructed game-world. This in turn makes her experiences within their game-world attain a hyperreal state more real than the real. However, her immersive experiences are highly dependent on the level of immersion Warcross's game-world exerts on her. For instance, Warcross's game-world has a very straight-forward method of play. In order to win, the gamers have to collect the Artifact of the other team. Also, as evident from the quoted examples in the analysis Emika only gets to observe the architecture of Warcross game-world's various levels before the game begins or whenever she is able to halt her other activities in the game and concentrate on her Architect job and find any weaknesses in the structure to exploit in her team's favor. Also, her level of immersion in the game's game-world is also influenced by her circumstances. For instance, Emika is a hacker but also a pro-gamer of Warcross. She can enter and leave the game-world at will by logging in or logging out of her Warcross account or by removing her NeuroLink contact lenses—the headset. Even when she is denied entry in any level, she uses her hacking skills to manipulate the game-world's security to her advantage. Therefore, her immersion in the game-world is limited to the time she willingly spends playing the game either with her team during tournaments or team practice. However, it cannot be concluded that Emika's immersion through interaction is more or less than Simon, it is just that it happens at different paces. This is because both the VR games played through headsets dominate their sense of sound, smell, touch and sight, and both the gameworlds provide equally immersive experiences. Also, she is able to influence the gameworld and change the trajectory of its events through her actions. For instance, Emika, through her avatar's interactions with the NPC dragon, changes the outcome of the events in the game. The game-world similarly reacts to her choices through the submission of the NPC dragon and other beasts.

Moreover, the process of immersion through Emika avatar's internalontological interactions with the game-world is also similarly dependent on the spatial and emotional immersion techniques employed in the game-world. For instance, the life-like dynamics of the game-world immerse her through emotional engagement. Such as by raising her subjective feelings or empathetic emotions for either her teammates or opponents or NPC characters in the game-world. Also, Emika experiences self-centered emotions of either fear, horror or anxiety when faced with potentially dangerous events. Similarly, the spatial immersive quality of the gameworld manifests through the use of techniques like Honoré de Balzac's technique of tying description to a body in motion, Roland Barthes technique of "reality effect" with Marie-Laure Ryan's technique of using proper names to immediately tele-transport the gamer into another place and Marcel Proust's technique of "madeleine effect" arising here and there during the concerned characters avatar's interactions with the gameworld. These spatial immersive techniques by mimicking real-life overshadow Emika's perception of real-world experiences with the virtually created ones, resultantly giving a hyperreal allure to the game-world. For instance, for most of Emika's interactions with the game-world through her avatar, the game-world materializes as she moves through it and interacts with her aligning with Balzac's technique. Similarly, the gameworld employs certain props such as its architecture and NPCs which point towards it logical existence. All these techniques work together to immerse Emika in the virtual world and overshadow her real-world experiences, making the virtual world hyperreal. Also, with respect to how well Ryan's proposed narratological techniques are being employed in the game-world, it can be observed that despite Ryan suggested the above mentioned techniques in context of the reader's immersion in the fictional world of the traditional books and interactivity in context of computer games, they have been efficaciously employed in the context of gamer-characters like Emika playing the VR game. This is because the immersive qualities provided by VR narrative games like Warcross aided by the first-person interactivity of the gamer-character's avatar are far more effective than the immersion provided by traditional books. Therefore, it can also

be observed that the VR game-world of game Warcross successfully implements the above-mentioned narratological techniques in its world building and narrative constructions as observed by various instances mentioned in the GameLit text's analysis.

Also, the way the narrative techniques of Spatial and Emotion immersion and internal-ontological interactivity impact Emika's identity, behavior and decision-making skills in a virtually simulated game-world, that is both hyperrealistic and immersive, can also be observed from the above quoted instances. It can be noted that due to the cause-and-effect relationship between the three variables, where if one variable changes it will bring change in other variables as well as though in a reciprocal interaction, Emika's decision making ability directly indicates her intensity of being immersed in the game-world which then directly affects her behavior in the game-world and this change in behavior directly affects her identity. For instance, Emika begins the game as an anonymous gamer displayed by her gamer title null but then her glitching in the game-world during the opening ceremony transforms her identity to that of a tournament player and her plan with Tanaka makes her a spy and a hacker. Simply put Emika dons various identities during her entire gameplay, and these changing identities are directly tied to her decision-making skills demonstrated through her actions and behaviors.

CHAPTER 6

CONCLUSION

This research by utilizing the conceptual framework based on Marie-Laure Ryan's concepts of Immersion and Interactivity and Jean Baudrillard theory of Hyperreality aimed to analyze the immersive and interactive techniques employed within the game-worlds of the games Otherworld and Warcross. The research emphasized how exploring the narrative techniques of Immersion and Interactivity in GameLit texts i.e. *Warcross* and *Otherworld* impacted the gamer-characters' identity, behavior and decision-making skills in a virtually simulated game-world that is both hyperrealistic and immersive. The research also focused on analyzing how these techniques blur the boundaries between the real and virtual experiences of the concerned characters by mimicking and overshadowing the real-world with the virtually created simulations of their VR game systems.

6.1 Findings of the Study

This research employs a qualitative interpretive paradigm which gives subjective interpretations. Therefore, the research yields context specific findings and is thus not generalizable for other GameLit novels. Keeping the thesis statement, significance and research gap delineated above by the research it can be noted that the research set out to analyze the GameLit novels OW and WC using Ryan's concepts of Immersion and Interactivity to shed light on the creation of hyperreal experiences of the concerned characters in virtually simulated game-world environments and do being in such immersive virtual worlds may affect the characters' identity, behavior and decision-making skills. The key findings of the research reveal that Emika and Simon's perception of reality in the GameLit novels is impacted by the virtual technologies overshadowing their real world experiences. This is done by utilizing various narrative techniques by the game-worlds' in their plot. For instance, the narrative techniques of spatial and emotional immersion and internal-ontological interactivity which focus on narrative features like setting and character interaction.

Moreover, the findings of the research also shed light on another issue and that is while both the VR games utilize virtually created worlds where the gamers can spend their time in gameplay. However, even in the GameLit texts, the VR technologies

behind the creation of both Otherworld and Warcross are evolving and desire to take over the real world through use of mixed reality technologies. This points towards a much serious topic deeply tied with innovations in VR technologies of 21st century and that is how this innovative technology will challenge our perception of reality and what impacts it might generate on human agency in coming times. For instance, it is revealed in the text OW that while the game product Otherworld was marketed as a therapy for coma or crippled patients, the Company desired to secretly carry out illegal neural experiments with the end goal to trap the gamers' minds in a virtual world and gain immense political and economic benefit. In other words, the VR technology which was introduced to relieve the sufferings of patients by setting them free from the constraints of their crippled bodies ends up trapping them. This raises serious questions about the ethical use of VR technologies in a time where everything is increasingly becoming commodified.

Another issue raised in the novel OW regarding the immersive allure of the virtual game-worlds is that even though the characters like Simon and his companions Gorog and Carole eventually find out the true nature of the game-world and how the headset Beta Disk works, that is during the game it sends signals to the brain to consider in game changes as real because the headset is connected to the back of the skull where the brain steam is, and the real reason of them being there, they cannot help themselves but be drawn to the hyperreal allure of the virtual game-world. This is the reason that Simon was able to smell blood, taste roast meat and feel the chill of environment. In fact, the novel shows only Kat's character as somewhat unaffected by the hyperreal allure of the immersive virtual world. This may be because since entering the gameworld she was determined to achieve her goal — exiting the game successfully. However, since Kat's character is not the main concern of the study because the novel OW's plot is not focused on her, so exploring Kat's character as an alternate perspective, somebody who resists immersing in the hyperreal virtual game-world, can potentially be an avenue for exploration in future researches.

Furthermore, in the text WC we see the world and especially city Tokyo already living in a mixed reality world where due to NeuroLink lenses the virtual overlays are not just superimposed on the real world objects, rather the people can interact with them in real world and this interaction will produce real time results for the people. For example, as discussed elsewhere, since the game Warcross is a huge global sensation

and people of all ages play it and especially in Tokyo the game level of each person can be viewed hovering over them and the people are presented with opportunities to increase their level through little acts of service such as water the plant or enter the Henka Games studio, the society due to these innovations can be considered a videoludified society.

Living in such a society where the real world is always heavily overlaid by virtual augmentations which simulate human senses in real time such as engaging one's emotions through vividly presented and interactive details, resultantly muddles one's conception of where the line that divides the real from the virtual. This is what gives such places a hyperreal allure, blurring the real with the virtual and consequently abolishing the real and trustworthiness of the objects. This presents serious stakes for human agency because when people find themselves deeply immersed in such virtually augmented places their decision-making power will also be impacted. For instance, there are more chances they may be swayed by the dominant discourse since they will be constantly feed the data that supports the said dominant discourse, as a result, eradicating people's ability of critical thinking and abolishing the authentic from the mainstream. This then makes the global populace more susceptible to being subconsciously controlled by a chosen few. For instance, in Warcross the virtually augmented city of Tokyo at first glance seems like the city of possibilities but it is not always sunshine and daisies since this also means that using NeuroLink lenses means that each user must have a Warcross account and each interaction with the virtually augmented Tokyo is noted by the system and impacts the Warcross level of each individual. Moreover, with each such interaction the sense of being monitored realizes itself heavily over the individual. For instance, Emika when observing the setup in Tokyo realizes that each person's account is connected with others through the NeuroLink network. This is also why the threat of Zero introducing a virus in the NeuroLink network was such a serious global threat. This means as much as the NeuroLink empowered its users like Emika to leave her destitute life and come live and work in Tokyo, it also disempowered them by chaining them to a system that records all their activities and awards them with either positive or negative outcomes. Therefore, instead of accepting innovations in immersive technologies based on their obvious advantages, they should instead be scrutinized against the strict moral regulations because it raises serious questions about human autonomy, consent and

their control over their critical thinking skills and decision making ability. Therefore, the research thus stands to fulfil its goal by proving that the game-worlds' of VR games like Otherworld and Warcross employ certain immersive and interactive techniques that overshadow the gamers' real world experiences.

6.2 Implications of the Study

This research highlights theoretical implications because it fuses Ryan's concepts of Immersion and Interactivity into the concept of gamer-character. As discussed in the third chapter Ryan's concept of immersion focuses on reader immersion in the traditional narratives while interactivity, especially internal-ontological interactivity, focuses on the gamer's first-person interactivity in the gameworld of computer games. But in the concerned GameLit novels we observe that the plot revolves around concerned characters playing a VR game in a way that the virtually created game-world creates another layer of reality for the characters'. In other words, the concerned characters Emika and Simon become the readers and the game-worlds become the novel texts: this is how Ryan's concepts of Immersion and Interactivity work for this study. This then creates a blurring of the boundaries between the reader and the character who is a gamer and between the novel and the game-world.

6.3 Future Recommendations

While the primary focus of this research is delimited to the observation and analysis of the immersive and interactive techniques employed in game-worlds of games Otherworld and Warcross present in GameLit texts OW and WC. However, these texts are not standalone, rather they are a part of duologies and trilogies. Therefore, with respect to the primary texts the future research can perhaps work by expanding their focus on either *Warcross* duology or *The Last Reality* Trilogy to observe any possible shifts that may occur in patterns of concerned character's either Emika or Simon's immersion or interactivity within the game-world. Similarly, research can be conducted by applying Ryan's concepts to other characters in both the series such as the character of Kat in *The Last Reality* trilogy. Kat is one of the main protagonists in the trilogy. She is also the sole reason Simon sets foot in the VR game. However, since the first book of the trilogy *Otherworld*, which is also the main focus of this research, is Simon's story, it will be interesting to observe how Kat—a female is impacted by the immersive and interactive quality of the game-world. For instance,

in the trilogy Kat undergoes a great deal of change as she observes humanity's reliance on the virtually simulated game-world, however, she seems resilient against being swayed by the immersive pull of the virtual game-world. Research which specifically charts out her fluctuating emotional and spatial immersion via her interactions within the game-world throughout the trilogy as she begins to realize the physical and psychological toll such VR technologies can provide a fruitful contribution in the larger technological and social debate revolving around the quest for normalization of use of mixed reality technology in 21st century.

Moreover, since both the Warcross duology and The Last Reality Trilogy also include characters on the crossroads of human and machine, therefore the literary research on these texts can also branch out to include other perspectives such as posthumanism. Posthumanism which challenges the traditionally held humanist beliefs of humans as autonomous and rational beings superior to other life forms like animals and emphasizes on the hybrid and entangled relationships of humans with nonhuman beings, can generate unique outcomes when considered in context of Warcross duology and The Last Reality Trilogy. Both the texts portray characters with dual machine and human nature. Therefore, future researches can utilize both Warcross duology and The Last Reality Trilogy to shed light on a much darker theme of technological evolution – - the idea of transmigration of human consciousness from body to cyberspace. Both the series introduce this concept in form of the character of James Ogubu in The Last Reality Trilogy and Zero in Warcross duology who are individuals existing as pure data in their concerned cyberspace. For instance, Zero—the main rival of Hideo Tanaka in the duology is later revealed to be his lost brother who was kidnapped and nonconsensually experimented on to turn him into an artificial intelligence program. Likewise, the creator of White City James Ogubu's consciousness was also uploaded to his avatar when he died in real world. Analyzing these cyberspace existences by utilizing the concepts given by Katherine Hayles How We Became Posthuman (1999) or Donna Haraway's A Cyborg Manifesto will generate profitable understanding in the domain of virtual embodiment of the relationship between man, his consciousness and machine. Especially Hayles concept of "disembodied subject" where she critiques the embodiment as crucial to being humans.

Furthermore, both the *Warcross* duology and *The Last Reality* Trilogy can also be analyzed from the psychoanalytic perspective as psychoanalysis offers tools to

comprehend the unconscious state of the subject. Research study conducted by focusing on the psychoanalytic state of the concerned characters may give a new dimension to the hyperreal allure of such immersive technologies like NeuroLink and White City in WC and OW respectively. For instance, a psychoanalytic study of the primary texts may shed light on why characters' desire to commit to such virtual worlds and how their subconscious desires shape their in-game experiences.

Furthermore, future researches on both the *Warcross* duology and *The Last Reality* Trilogy can consider using theories and concepts from other fields like anthropology, especially the concept of liminal spaces first given by Arnold van Gennep in *The Rites of Passage* (1909) and further expanded by Victor Turner. The concept of liminal spaces refers to transitional or in-between spaces or states, where the normal boundaries, structures or identities are blurred giving rise to a threshold between two states while not fully belonging to either side. Using this concept for analyzing both the primary texts may generate fruitful understanding of the game-worlds of both VR games Otherworld and Warcross because both the game-worlds act as liminal spaces where the characters like Simon and Emika find themselves suspended between the states of physical and digital existence. The framework of "betwixt and between" given by Victor Turner can provide a conceptual foundation to interpret the in-between phases the characters' experience in the VR game-worlds.

Moreover, there is ample room for conducting research studies which connects to the broader genre-based debates related to subgenres of science-fiction like Cyberpunk fiction. Future research can utilize other Cyberpunk texts to shed light on a much darker theme of technological evolution which has been discussed since the popularization of Cyberpunk fiction, for instance, the idea of transmigration of human consciousness from body to cyberspace. Texts like *The Lifecycle of Software Objects* by Ted Chiang, *Speak* by Louisa Hall and *All Systems Red* by Martha Wells introduce individuals existing as pure data in their concerned cyberspace. Analyzing these cyberspace existences by utilizing the concepts given by Hans Moravec or Katherine Hayles may generate profitable understanding in the domain of virtual embodiment of the relationship between man, his consciousness and machine.

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