

**ASPECTS OF CINEMA IN NARRATIVE BASED VIDEO GAMES:
ANALYSIS OF SONY INTERACTIVE ENTERTAINMENT VIDEO
GAMES**

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University or for any other award.

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DEDICATION

To Dad, Mom, Eve - John, & King Kearn.

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TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT.....	iv
TABLE OF CONTENTS	v
LIST OF FIGURES	ix
ABBREVIATIONS AND ACRONYMS.....	xi
DEFINITION OF TERMS.....	xii
ABSTRACT.....	xiii
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.2 Statement of the Problem.....	4
1.4 Research Questions.....	5
1.5 Assumptions	5
1.6 Justification and Significance	5
1.7 Scope of the Study.....	6
1.8 Literature Review	7
1.8.1 Related Literature.....	7
1.8.2 Theoretical Framework.....	16
1.8.3 Conceptual Framework.....	18
1.9 Research Methodology	20
1.9.1 Research Design.....	20
1.9.2 Sampling Techniques and Sample Size.....	20
1.9.3 Research Instruments.....	21
1.9.4 Data Collection Techniques.....	21
1.9.5 Data Analysis.....	21
1.9.6 Ethical Consideration	22
1.9.7 Reliability and Validity.....	22
1.10 Conclusion	22
CHAPTER TWO	24
NARRATIVE IN VIDEO GAMES	24
2.0 Introduction.....	24

2.1 Narrative.....	24
2.2 Narrative Styles.....	25
2.2.1 Linear Narrative	25
2.2.2 Nonlinear Narrative.....	26
2.3 Narrative in Video Games.....	28
2.3.1 <i>The Last of Us</i> (2013) by Naughty Dog.....	30
2.3.2 <i>Until Dawn</i> (2015) by Supermassive Games	31
2.3.3 <i>Uncharted 4: A Thief's End</i> (2016) by Naughty Dog	31
2.3.4 <i>God of War</i> (2018) by Santa Monica Studio.....	32
2.4 Narrative Structure in Narrative-based Video Games.....	32
2.4.1 Three Act structure.....	32
2.4.2 The Hero's Journey in Video Games	41
2.5 Elements of Narrative.....	52
2.5.1 Point of View	53
2.5.2 Plot.....	55
2.5.3 Theme.....	57
2.5.4 Setting.....	60
2.5.5 Characters	64
2.5.6 Conflict.....	69
2.6 Effectiveness of narrative in narrative-based Video Games	73
2.7 Conclusion	77
CHAPTER THREE.....	78
CINEMATOGRAPHY IN VIDEO GAMES.....	78
3.0 Introduction.....	78
3.1 Cinematography.....	78
3.2 Camera Shots	79
3.2.1 Close-Up (CU)	80
3.2.2 Medium Shot (MS).....	82
3.2.3 Long Shot (LS)	84
3.2.4 Medium Long Shot (MLS)	85
3.2.5 Extreme Long Shot (ELS)	86
3.2.6 Over the Shoulder (OTS)	87
3.3 Camera Angles	88

3.3.1 Eye Level Angle.....	89
3.3.2 High Angle.....	90
3.3.3 Low Angle.....	91
3.3.4 Oblique/Dutch Angle.....	92
3.3.5 Point Of View (P.O.V) Camera Angle.....	93
3.4 Cinematography Framing and Composition.....	95
3.4.1 The Rule of Thirds.....	96
3.4.2 Frame within a frame.....	99
3.4.3 Depth of Field (DOF).....	100
3.4.5 Selective Focus.....	103
3.4.6 Compositional Lines.....	105
3.5 Camera Movements.....	106
3.5.1 Pan.....	107
3.5.2 Tilt.....	108
3.5.3 Long Take.....	109
3.6 Conclusion.....	110
CHAPTER FOUR.....	112
LIGHTING TECHNIQUES IN VIDEO GAMES.....	112
4.0 Introduction.....	112
4.1 Cinematic Lighting.....	112
4.2 Properties of Cinematic Light.....	114
4.2.1 Hard Light.....	115
4.2.2 Soft Light.....	115
4.3 Lighting Techniques.....	115
4.3.1 Light Contrast.....	116
4.3.2 Ambient Light.....	120
4.3.3 The Three-point Lighting.....	122
4.3.4 Background Light.....	126
4.3.5 Motivated/Practical Lighting.....	127
4.3.6 Chiaroscuro Lighting.....	130
4.4 Effectiveness of Lighting in Narrative-based Video Games.....	132
4.5 Conclusion.....	142
CHAPTER FIVE.....	143

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS.....	143
5.0 Introduction.....	143
5.1 Summary of Findings	143
5.2 Conclusions.....	149
5.3 Recommendations.....	150
REFERENCES.....	152
FILMOGRAPHY.....	157
APPENDICES.....	158
Appendix I: Observation guide.....	158
Appendix II: Research Authorizations	159

LIST OF FIGURES

Figure 1.1, Diagram of conceptual framework

Figure 2.1, The three act structure courtesy of Syd Field

Figure 2.2, Screenshot of one of the settings of *The Last of Us*

Figure 2.3, Screenshot of a market scene in New Devon city in *Uncharted 4: A Thief's End*

Figure 2.4, Setting of *God of War*

Figure 3.1, Screenshot of CU shot of Ellie in *The Last of Us*

Figure 3.2, MS screenshot of Nate's boss Mr. Jameson in *Uncharted 4: A Thief's End*

Figure 3.3, MLS of Kratos in *God of War* as he starts to cut down the marked tree

Figure 3.4, ELS of Sam on her way to the cable car in *Until Dawn*

Figure 3.5, Subjective Camera Angle of Joel on a sniper rifle shooting bandits in *The Last of Us*

Figure 3.6, Rule of thirds grid courtesy of Spencer Cox

Figure 3.7, CU shot of Nate observing rule of thirds in *Uncharted 4: A Thief's End*

Figure 3.8, MLS of Kratos in frame within a frame at the door of his house in *God of War*

Figure 4.1, High key lighting following treasures in Madagascar in *Uncharted 4: A Thief's End*

Figure 4.2, Low-key lighting in *Until Dawn*

Figure 4.3, Light bouncing off surfaces to create ambient light in *The Last of Us*

Figure 4.4, Rim light highlighting Matt from behind in *Until Dawn*

Figure 4.5, Three-point lighting on Elena in *Uncharted 4: A Thief's End*

Figure 4.6, Kratos house is lit in the background by well-placed candle light in *God of War*
War

Figure 4.7, Candles around the body of Faye act as motivated lights in *God of War*

Figure 4.8, Table lamps in *Uncharted 4: A Thief's End* act as practical lights

Figure 4.9, Chiaroscuro of Annunciation by Matthias Stom courtesy of Arts and Culture

Figure 4.10, Chiaroscuro light on Hector Alcazar in *Uncharted 4: A Thief's End*

ABBREVIATIONS AND ACRONYMS

AI - Artificial Intelligence

CBI - Cordyceps Brain Infection

CGI - Computer Generated Imageries

ELE - Expressive Lighting Engine

HBO – Home Box Office

HD – High Definition

NPC - Non-Playable Character

PC - Playable Character

PS3 - PlayStation 3

PS4 - PlayStation 4

PS5 – PlayStation 5

RPG - Role Playing Games

WHO - World Health Organization

DEFINITION OF TERMS

Cinema – The art of telling stories visually with moving images i.e. films and animations.

Cut-scenes – Sequences in a Video Game that are not interactive, such as scenes of dialogue, setting mood, introduce new gameplay elements, improve pacing and foreshadow events.

Film noir – Style of Cinematographic film marked by mood of pessimism, fatalism and menace.

Interactivity – Communication between human beings and a computer.

Ludology – The study of Video Games.

PS – PlayStation gaming console made by Sony Corporation.

Sony Interactive Entertainment – A Video Game and digital entertainment company owned by Sony Corporation.

Video Games – An electronic game that involves interaction with a user interface to generate visual feedback on a 2D or 3D (dimensional) device.

ABSTRACT

Video games have evolved over time and are attracting attention and criticism both positive and negative from all corners. The ability and potential of video games as an art form has spurred discussions and arguments in equal measures. Modern narrative based video games seem to have more semblance to film than any other narrative media and are considered as being cinematic. It is thus the aim of this study to interrogate the integration and influence of cinema to these narrative based video games. Based on formalism film theory, which deconstructs a text by looking at the individual elements that bring out the form, and semiotic film theory, which studies signs and creation of meaning, the study aims at critically analyzing the aspects of cinema deployed in the making of modern video games. The study looks at video games from the angle of cinema in terms of narrative, cinematography and lighting, which are the foremost basic tenets of cinema. Four Video Games published by Sony Interactive Entertainment; *The Last of Us* (2013) developed by Naughty Dog, *Until Dawn* (2015) by Supermassive Games, *Uncharted 4: A Thief's End* (2016) by Naughty Dog and *God of War* (2018) by Santa Monica Studio were purposively selected for the study. The study applies qualitative research design using both primary and secondary data collection techniques. Observation and analysis of books, articles, journals and reviews of related literature available are used for data collection. Content analysis then applies to synthesize data. The study finds out that indeed modern narrative based video games are on a quest to be cinematic by applying aspects of cinema in their design, though not exactly the same way, but based on principles of cinema. Modern video games not only apply these aspects of cinema, but also employ the skills of film professionals in their design. The study concludes that video games need to do more in effectively applying aspects of cinema in their design to appeal to players in both narrative and gameplay.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

From arcade systems, to home consoles, to handheld consoles, and mobile devices, the growth of video games is eminent. Some video games have grown to a point of being compared to cinema. Majek (2011) observes that video games are now being influenced by plot-points and themes, camera, lighting, and set techniques, which can be attributed to certain film genres. Video games have however evolved more alongside technological evolution than multimedia platforms. According to Glancy (1996), the roots of the video game industry can be traced back to 1962, when Steve Russel, a student at the Massachusetts Institute of Technology created a game called *Space War!*

Majority of early video games however started as early as the 1950s by computer scientists as research experiments and hobbies. Borries et al. (2007) note that in 1952, a Ph.D. student, A. S. Douglas, at Cambridge University developed the *Tic-Tac-Toe* or *Noughts and Crosses* game called *OXO* as part of his doctoral dissertation (p. 430). To entertain attendees at an annual public visitor's day in 1958, William Higinbotham developed a rudimentary tennis simulation using analog computer technology and a pair of oscilloscope screens. The result created a game titled *Tennis for Two* according to James Ivory (2016, p. 2). The first Video Game to find a large audience and be available beyond a single exhibition was *Space War!* (Ivory, 2016). It was however until 1971 that Video Game was commercialized when the first coin-operated Video Game *Computer*

Space created by Nolan Bushnell and Ted Dabney, a version of *Space War!* was released (Ivory, 2016).

The 1980s is considered the 'golden age' of the video game industry as the age brought with it many technical innovations and genre-defining games developed and released. Ivory (2016), states that action games also defined the video game industry as Namco released the most notably iconic *Pac-Man* in 1980. *Pac-Man's* simple action hunt-and-chase play made the game a commercial success and a cultural phenomenon (Ivory, 2016). The 1990s marked a decade of innovations in the video game industry; it is also during this time that the industry transitioned into mainstream entertainment. As the technological evolution path in video games can be traced, Ivory (2016), notes that a separate pedigree can be identified tying the text-based games to the narratives and fantasy settings of beloved literary classics. Since then, video games have aspired to grow towards a similarity with film by incorporating within them distinct features that can be attributed to cinema. Cinema is characterized by distinct features: narrative, sound, cinematography, lighting, color, characters, editing etc.

Narrative is the recounting or telling the occurrence of real or fictitious events of a given space and time. Hayward (2000), defines narrative as the strategies, codes and conventions, including mise-en-scène and lighting, employed to organize a story (p. 256). Simpson and Weiner (1989) define cinematography as the art of photography and

camerawork in filmmaking, the arrangement and composition of images on screen. Film noir is the most cinematographic style adapted by recent video games, Hayward (2000) notes that film noir has a style of cinematography that emphasizes the impression of nighttime photography with high-contrast lighting, occasional low-key lighting, deep shadows and oblique angles to create a sense of dread and anxiety (p.129). Film noir has become dominant in the cinema industry and the majority of modern narrative based video games can boast of film noir in their development. Majek (2011) observes that film noir has recently become popular as a stylistic trend in game narratology and visual presentation.

Modern Video Games have adopted these cinematic aspects in their development containing full-blown cinematics not only in the name of cut-scenes, but also throughout the gameplay. According to Majek (2011), *Pac Man*, released in 1980, can be considered the first game to include cut-scenes where a short clip of Pac Man (the character) being chased by ghosts, only to eat a cherry and turn to chase them instead, would play between levels (p. 5). Since then, video game developers continue to “cinematize” their games with improved graphics, narratives, lighting and cinematography in a quest for more reality in their games.

Aesthetically, modern narrative-based video games look much more like cinema. The potentials of video games are immense and impeccable. Video games are proving to serve more purpose than just a means of children's entertainment and/or commercial

success. Video games are a game changer in dealing with/or improving the way we do things. The creativity of video game developers is starting to get recognition. More studies need to be done on the textual elements of video games, which will in turn provide more knowledge and act as a point of reference for academia. This study therefore is motivated to investigate the aspects of cinema employed in video games, their effectiveness in application and the effect of these cinematic features on the game.

1.2 Statement of the Problem

The video game industry has received much criticism for its existence, form and impact. Narrative-based video games, being inspired by cinema, have revolutionized the gaming industry from every aspect of the gaming world, yet still receives much criticism for “cinematizing” the gameplay. Modern narrative-based video games now employ many cinematic features such as narratives, cinematography, color, sound and lighting techniques in their making to affirm their place in the entertainment industry, as an art and cultural medium. With video game and cinema tie-ins, franchising and the adaptations of cinema into video games and in some instances, adaptations of video games into cinema, there is a need to study video games from the point of view of their relationship with cinema. Prestigious awards nominate narrative-based video games alongside cinema; films and animations in quite a number of aspects in terms of being cinematic and creative. This study therefore aimed at critically analyzing the textual and structural aspects of cinema that narrative-based video games embrace and embody in.

1.3 Research Objectives

1. To identify the aspects of cinema used in narrative-based video games.
2. To explore how narrative-based video games employ aspects of cinema in their design.
3. To evaluate the effectiveness of aspects of cinema on narrative-based video games' designs.

1.4 Research Questions

1. What are the aspects of cinema employed in narrative-based video games?
2. How have narrative-based video games employed aspects of cinema?
3. How effective are aspects of cinema in narrative-based video games' designs?

1.5 Assumptions

1. Narrative-based video games employ aspects of cinema in their development.
2. Aspects of cinema applied to narrative-based video games in part or in whole are applied appropriately.
3. Aspects of cinema applied to narrative-based video games in some way affect gameplay in video games.

1.6 Justification and Significance

Narrative-based video games have grown to a point of comparison with the cinema industry. Video games have become an integral part of the entertainment, art, and

education industries in the recent generations. Video game development has become a desiring career for many young creative generations for their artistic expression and for scholars studying on video games. This study thus is very significant for game developers in designing, employing and appropriately applying cinematic techniques in the development of their games. This study also fills the gap in textual, formal and structural context of video game studies in relation to cinema as a future reference by other scholars analyzing video games.

1.7 Scope of the Study

This study was limited to analysis of narrative-based video games published by Sony Interactive Entertainment. Sony Interactive Entertainment was selected for this study because of its consistency in production of video games as well as being an affiliate of the Sony Corporation, which produces and sells PlayStation (PS) gaming consoles, animations, and films. In order to obtain a comprehensive analysis, the study focused on four (4) video games; *The Last of Us* (2013) developed by Naughty Dog, *Until Dawn* (2015) developed by Supermassive Games, *Uncharted 4: A Thief's End* (2016) developed by Naughty Dog and *God of War* (2018) developed by Santa Monica Studio. These video games are narrative based video games that prove to have strong representation of cinema and have been nominated for/and won awards in categories of cinema such as narrative, cinematography and performance.

1.8 Literature Review

This section of the study examines previous studies on Game studies and Cinema studies and the relationship between the two fields. These studies are based on elements of cinema and video games such as narrative, lighting and cinematography and their interaction with their audience.

1.8.1 Related Literature

The artistic potential and nature of video games has scholars, critics, gamers and even game developers having very different and contradicting opinions for a long time. Roger Ebert a film critic for example believes that,

Video games cannot be art. Perhaps it is foolish of me to say "never," because never, as Rick Wakeman informs us, is a long, long time. Let me just say that no video gamer now living will survive long enough to experience the medium as an art form (Ebert, 2010, p. 1).

Remarks by Ebert stirred up a discussion that was ongoing for quite a while on the state of the art of Video Games. Even after the evolution of video games, Roger Ebert still believes though that video games in entirety are, "I regret to say, pathetic. I repeat, no one in or out of the field has ever been able to cite a game worthy of comparison with the great poets, filmmakers, novelists and poets" (Ebert, 2010, p. 6). Ebert's point of view is vague and only limited to earlier games. The potential portrayed by modern video games concerning art is immense and it is only a matter of time before they get recognition for it. The art status of video games has theorists and scholars differ on the study of games, and as a result, ludologists and narratologists are caught up on the focus video game studies should take. According to Jenkins (2005), a blood feud threatened to erupt

between the self-proclaimed ludologists, who wanted to see the focus shift onto the mechanics of game play, and the narratologists, who were interested in studying games alongside other storytelling media to realize their full potential of artistic nature. Some game developers seem to have chosen the narrative path and have integrated narratives into modern video games that are even a bit more complex than most sophisticated film plots.

While not all video games contain the ability to tell stories, some recent modern video games contain rich narratives. “Video games combine elements from narrative fiction, film, music and sports. They are arguably an art or sister art of the moving image, specifically, a form of digital animation” (Smuts, 2005, p. 4). It is this potential by video games to contain narratives that scholars argue and believe make video games an art form just like literature and cinema. Fidalgo (2012) asserts that video games borrow from other media, almost in wholesale with current trends. Video games take cinematic clips, music and sound design, writing, and acting and combine them into a playable experience. Those elements, most would agree, are artistic. With the aesthetics possessed in video games that are acknowledged in literature, music and film, then video games too fall under the conventions of art. If one acknowledges the art status of animation, he/she would most probably recognize the art status of modern video games since they are more or less similar aesthetically. This study sets to focus on these artistic elements of video games, which happen to be aspects of cinema.

Narratives in modern video games tend to appear in two categories: linear and nonlinear. In linear storytelling, the narrative follows a typical plot diagram or the five-act structure where the story can be clearly broken down into beginning, middle and end. “In linear narrative, the player advances through the narrative by proceeding from one predetermined point to another,” (Hurme, 2016, p. 23). Nonlinear storytelling narratives contain more than one storyline and, in some instances, multiple ends. Most Role-Playing Games (RPG) apply this type of narrative. Players are given the freedom to decide how they want their character in the game to act in different situations. Thus, determine how the story should flow and end, “in certain video games the narrative can be chronologically distorted similar to movies in which this effect is used to portray the main characters’ ability to process information” (Hurme, 2016, p. 20). Video games through the interactivity of the player, game play and the narrative explore narrative potentials not available to other narrative media. The player plays a more active role in gameplay as compared to reading a book or watching a film, “there is an interesting phenomenon in which the player is taking an ever more active role in the narrative, becoming a far more active collaborator than in cinema and literature” (Lemon, 2018, p. 2). The player has the potential to tell their own story in a nonlinear narrative through deciding the way to end the story and game. Hurme (2016) and Lemon (2018) assert that video games have embraced narrative dispositions in their development but their focus is mainly on the interactivity of the player and narrative through gameplay as compared to literature and cinema. They delve deeper into how active or passive role is played in the interaction with narrative in video games but they both do not explain how narrative is

employed and constructed in video games. The conventions of narrative disposition in video games have not been explored.

Video games now not only challenge players with puzzles, goals and victory conditions, but with tough meanings and subject matters addressed by other art forms. When video games tell stories on different subject matters, they tend to draw from the genres in cinema and the conventions used by cinema in tackling these issues as noted by Jenkins,

When game designers draw story elements from existing film or literary genres, they are most apt to tap those genres - fantasy, adventure, science fiction, horror, war - which are most invested in world-making and spatial storytelling. Games, in turn, may more fully realize the spatiality of these stories, giving a much more immersive and compelling representation of their narrative worlds (Jenkins, 2004, p. 5).

Apart from just telling stories, video games have emulated cinema in tackling issues affecting the society giving different perspectives to issues, “while movies and literature can also spark sympathy, it seems that video games are exceptionally effective in giving you a new perspective to an issue” (Paaso-Rantala, 2016, p. 25).

Cinematic video games are always confined by the use of live action films or animated films like cut-scenes. Cut-scenes have been the most direct link between cinema and video games as far as cinematic video games are concerned. Smuts (2005) observes that most narrative-driven games are heavily interspersed with full-motion video sequences called cut-scenes (p. 9). Ludologists however, brush off the need for cut-scenes as they argue that cut-scenes do not benefit the experience of the gameplay as the player has little

or no control over the game at that given time when the cinematic cut-scenes appear during the game. Ludologists argue cut-scenes compromise the interactivity of the player and the game making the player go from active to passive, “many cut-scenes do not simply furnish a story element but appear to actually undermine engagement with the Game world” (Newman, 2004, p. 98). Based on Newman’s argument, different standpoints always arise over the use of cut-scenes. This study will thus try to resolve these different standpoints over cut-scenes by evaluating the effect on the audience.

Video games, through cut-scenes, borrow from the cinema the idea of using cinematic establishing shots of the setting and locations to introduce the audience into the cinema world as well as towards the end of the film. According to Majek (2011), cinematics are displayed both as introductions to the game before any actual gameplay begins; as conclusions at the end of the game; and throughout the game's plot, which is progressed by means of gameplay (p. 4). As observed by Majek (2011), these cut-scenes in most cases are used to set and establish the setting of the game in terms of location and time, putting the game player into the mood of the virtual gaming world. Cut-scenes serve to advance the narrative of the play in which players find themselves immersed into the video game world while being imparted practical instructions to guide them through the game and the hardware technologies being used like the consoles, screens and phones. Majek (2011), however, does not go further to detail the structural elements that constitute cut-scenes. This study will add on to Majek’s study by breaking down the cut-scenes to understand the formal attributes that make cut-scenes referred to as cinematic. The importance of these cinematic cut-scenes needs to be realized, evaluated and

understood in very particular textual elements of the game and the qualities associated with the game. This study will thus analyze how suitable cut-scenes are deployed in video games to shed light as well as resolve the stalemate between narratologists and ludologists on the applicability of cut-scenes.

Much of the audio in video games is further more constrained by the audience expectations and the specific genre, which influence how it functions and sounds. Video games just as cinema, strive to offer their audience with realistic sound and sound effects that makes the gameplay experience unique, realistic and worthwhile, “many games, particularly in the popular horror genre, are already quite creative in using sound to enhance the player’s involvement” (Poole, 2004, p. 126). The development of video games audio has immensely been impacted by the audio in cinema as observed by Poole (2004). Sound in modern video games is more of cinema quality that has grown over time and as Karren Collins notes “it is certainly not surprising to me that it is only now that games audio has reached a ‘cinematic’ quality that it is gaining some recognition” (Collins, 2007, p. 15). Collins’ observation begs a question that this study sets out to look into, how cinematic can video game audio quality get? In addition, what is the cinematic audio quality posed by cinema itself? In narrative-based video games, dialogue is essential in advancing the narrative of the game. In most cases these dialogues and narrations do occur at the cut-scenes, as Larsen observes, “voiceover is a film noir technique that has found its way into computer games. It creates ambience and builds drama by enhancing suspense,” (Larsen, 2019, p. 11). The adaptation, application and

suitability of cinematic audio aspects; dialogue, voiceovers and narrations in video games need to be analyzed.

As the power of camera techniques and graphic capabilities in video games are realized, “video games have begun superficially to look a bit more like films, while films have become more interested in video games as visual furnishing and conceptual subject matter” (Poole, 2004, p. 130). Cinematization in video games is not only in the cut-scenes and in the constant display of animations on the screens, but they do contain within and without the cut-scene sequences very cinematic close to the film look. Smuts (2005) observes that, in addition to including these small digital movies, games often attempt to emulate the look of film (p. 9). The use of the cinematic cut-scenes being the most borrowed aspect of cinema by the video games, are more or less similar to short films from cinematography, sound, lighting and editing. Many games according to King & Krzywinska (2006), use cut-scenes to establish the initial setting and background storyline. Opening cut-scenes frequently employ the same expository devices as cinema, using a combination of long shots, mid shots and close-ups to provide orientation for the player (p. 142). King and Krzywinska (2006) affirm and only mention existence and/or use of aspects of cinema in video games, this study will add on to their study by delving deeper into how these aspects are applied and utilized in video games.

YouTube has numerous cinematic video game trailers; a trend that applies to cinema blockbusters before their release. Modern video games announce their productions by use

of pre-release cinematic trailers through promotional means using celebrities to promote the games. Just like cinema, “actual gameplay moments and even entire game designs can be influenced by camera, lighting, and setting techniques attributed to the style of a specific film or film genre” (Majek, 2011, p. 1). Many video games draw directly from the styles and presentations established within cinema like the specific and unique genres and subgenres. Majek (2011) asserts that cut-scenes in action-adventure games borrow from cinematography prevalent in action and adventure films, of which *Uncharted 3* is a good example (p. 6). In addition, Majek (2011) further observes, games with crime-based plots, such as the popular, highly grossing *Grand Theft Auto* franchise, sometimes borrow story elements as well as cinematographic styles from popular crime films (p. 6). Majek (2011) only goes as far as mentioning these styles but then focuses on the franchising aspect in relation to genres. He does not go deeper to the applicability in video games compared to their use in cinema. He does not explain for example; the use of different camera angles, lighting styles or setting techniques associated with a certain genre of cinema and its appropriateness as applied to a video game.

The lighting techniques in cinema as well as the color associated to be the “film look” is one admired by video games and game developers will stop at nothing to offer gamers the experience of film look in their games. The focus of individual cinematic game experience is more directed towards either narrative development or spectacle with the feel of a film look game leading the player towards the state of active control or passive spectator. The desire for ‘film look’ as Mack (2012) notes is the constant interaction between these seemingly incongruous elements that catalyzes the increasingly common

exclamation "This game feels like playing a Hollywood action movie!" Mack (2012) makes a good point but he only focused on defining the textual characteristics that denotes the term cinematic. However, what exactly does film look or cinematic look constitute? How are these tenets employed in video games to give a video game that film look? Film look is an experience that game developers dream to offer to gamers across the divide. Games continue to cinematize their gameplay experience with lighting, color, improved modeling, texturing and rendering of characters employing voice-acting technique to have audio in dialogues and narratives as smooth as possible close to that of cinema. This study will then focus on how these characteristics of film look are deployed in video games.

The question of video games being art needs to be put to bed with the potential of modern video games as an art form capable of comparison with poetry, literature, music and film. More study needs to be done to affirm the new possibilities within video games as an art form, in this way video games will be able to develop to full art expectations. Similarly, the industry is still young and dynamic and needs much research to build on the present research available. Crawford (1982) suggests that we must consider the potential, not the actuality. We must address the fundamental aspects of computer games to achieve a conclusion that will withstand the ravages of time and change. With few studies on the aesthetics of video games, more emphasis needs to be put on the form and structure of video games, hence, the need to critically analyze the aspects of cinema in modern video games and their employability.

1.8.2 Theoretical Framework

The analysis of aspects of cinema in narrative-based video games was anchored on the formalist film theory, which focuses on the formal and technical elements of a text, and semiotics film theory, which studies sign systems and creation of meaning.

1.8.2.1 Formalist Film Theory

Formalist film theory is concerned with methodical reading of texts as instruments used as a form of symbolism to inform the environment of a subject/character. The practitioners of formalism theory advocate for methodical and systematic readings of texts. According to Dudley Andrew (1976), Hugo Munsterberg, Rudolf Arnheim, Sergei Eisenstein, and Bela Balazs proposed Formalism film theory. Formalism also known as New Criticism aims to classify, categorize and catalog works according to their formal attributes. As observed by Evans (2014), the study of form dates back to Aristotle but can enrich contemporary gaming literature in significant ways. Modern video games present a different form of texts with different forms evolved from literature and cinema. “While the meaning of form has long evolved from referring to a genre, mode, or type of oratorical text, as per Aristotle’s three original forms—deliberative, forensic, and epideictic—what form can mean in contemporary times has yet to be explored in regard to digital games” (Evans, 2014, p. 4). It is the critical approach to analyzing, interpreting and evaluating the inherent features of a text. According to Jacobs (2013), a formalist approach looks at the film itself, its structure and form. Analysis of specific formal techniques might concentrate on a film’s use of mise-en-scene, photographic composition, camera movements, editing choices, sound in relation to the image, etc., noting the effect of those techniques on how the viewer perceives the scenes and

interprets what they mean as noted by Jacobs (2013). Formalism thus focuses on modes, genres, discourse and form of a given text. Formalism theory applied to this study to break down the form of the text in video games to analyze the relationship of those attributes to those of cinema. The formalism film theory forms part of the basis for this study upon which research findings and conclusions are drawn.

1.8.2.2 Semiotic Theory

Semiotics is the study of sign systems. It has its origins around 1907 - 1911 in the work of a Swiss linguist Ferdinand Saussure who identified the basic principles that apply to the study of sign systems within society (Hayward, 2000, p. 320). A sign is defined by Edgar-Hunt et al. as an object, event or quality whose occurrence or presence indicates the probable occurrence or presence of something else (2010, p.17). The governing principles of sign systems according to Saussure are the signifier and the signified. The signifier implies what is perceived of the sign we can see, hear or feel, such as tears, while the signified is the intended meaning implied from the sign, such as the tears to mean sadness or happiness (Edgar-Hunt et al., 2010, p.23). A sign might have one signifier, but there could be many signified. Human beings experience situations differently based on their environment, background, and moods they are in which leads to their creation of meaning. The context in which a sign is used determines the perceived meaning. A signifier on the hero and the same on the villain is likely to elicit varied signified in an/the audience.

Semiotics thus analyzes structural relations within a system, which work and function together to produce concrete meaning as a whole. It breaks down a text into its constituent parts to identify the building blocks that add up together in understanding of the constructed text. Though semiotics started with linguistic systems, it has become vital in the understanding of sign systems in cinema, literature, television, and other forms of popular culture (Hayward, 2000, p. 320). Video games being a visual medium like cinema can equally benefit from the conventions of semiotics in understanding the creation of meaning in their audience. They are made up of individual elements, images and sequences experienced as one combined picture. In the communication of meaning in film, Edgar-Hunt et.al (2010) note that to create the desired effect on the audience, the filmmaker needs to understand how the screen communicates upon the imaginations of the audience moment by moment (p.17). This is similar to video games. Game designers need to understand how the screen communicates to the player for an effective game experience. Semiotics was vital for this study to help understand how players form experiences during their interactions with the game world.

1.8.3 Conceptual Framework

Figure 1.1 below demonstrates the conceptual framework applied to this study. The aspects of cinema i.e. narrative, cinematography, and lighting are the independent variables. Effects on video games are the dependent variables of the study. Bhandari (2022) states that a mediating variable informs how the dependent variable is influenced by an independent variable. The application of aspects of cinema to video games directly affects the cinematic effects on video games. As such, the application of aspects of

cinema in video games is the mediating variable in this study. Technology based on the gaming consoles is the moderating variable. Moderating variables influences the presence and level of relationship between key variables (Bhandari, 2022). The technological advancement of the gaming consoles from PS3, to PS4 and the recent upgrade to PS5 influences the effect of cinematic features, such as graphics, rendering, etc., on the video game. This conceptual framework was effective in maintaining the focus of the study to obtain concrete and substantial findings.

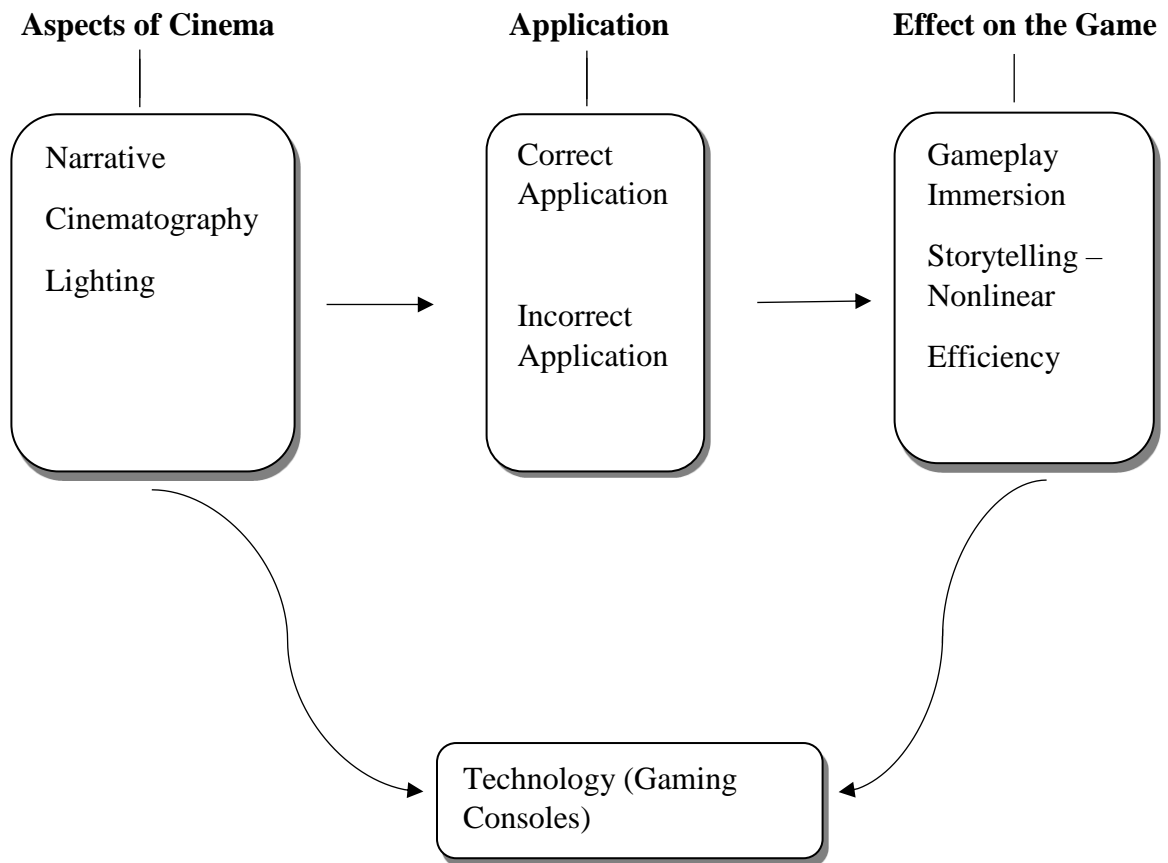


Figure 1.1, Diagram of conceptual framework

1.9 Research Methodology

1.9.1 Research Design

This study aimed at analyzing some of the aspects of cinema deployed in modern video games. Qualitative research design was embraced in the analysis of selected video games in this study using observation and document/content analysis to acquire data.

1.9.2 Sampling Techniques and Sample Size

As of May 2020, there are 2566 modern video games for PlayStation 4 (PS4) (“Games,” n.d.). The target population for this study was narrative-based video games for PS4 published by Sony Interactive Entertainment that seem to possess aspects of cinema. Purposive sampling technique was applied to this study to determine the sample size. Purposive sampling according to Whitehead and Whitehead (2016) is a sampling technique that recruits participants according to pre-selected criteria relevant to the research aims and objectives of a given study to provide rich information. Using purposive sampling, four (4) narrative-based video games; *The Last of Us* (2013) developed by Naughty Dog, *Until Dawn* (2015) developed by Supermassive Games, *Uncharted 4: A Thief’s End* (2016) developed by Naughty Dog, and *God of War* (2018) developed by Santa Monica Studio, which is representative enough of Sony Interactive Entertainment’s last 6 years were selected. These are narrative-based video games that prove to have strong representation of cinema and have been nominated for/and won awards. *The Last of Us* (2013) won BAFTA Games Award for best story/narrative in 2014 and *God of War* (2018) winning the same award in 2019, *Until Dawn* (2015) was

nominated for BAFTA Game Award best story in 2016 while *Uncharted 4: A Thief's End* (2016) won The Game Awards 2016 in the best narrative category.

1.9.3 Research Instruments

The study used observation guide and content analysis: document and video analysis in acquiring data. Document analysis involved reviewing and analyzing existing sources like books, articles and reviews on video games.

1.9.4 Data Collection Techniques

Data collection techniques for this study used both primary and secondary sources of data collection. Observation of the aspects of cinema in the video games were used in collecting primary data. Secondary sources involved critically analyzing film and video game reviews, online video interviews as well as collecting information from books, magazines, newspapers and journals based on the textual and structural features of video games. The study then set the various findings into an objective-oriented cluster for ease of analysis and interpretation.

1.9.5 Data Analysis

Data collected from these sources were analyzed using a content analysis approach. The data (cinematic aspects) was presented in a form of analytical discourse. This involved analyzing the primary information gathered through observation and secondary information gathered through a review of on-line sources and related literature. After

analysis, data was reviewed to see the patterns that emerge from the study objectives, to help prioritize the findings and help in giving good recommendations that arise from the various findings.

1.9.6 Ethical Consideration

The study was conducted with ethical concerns and dignity that is deserved; the researcher treated everyone involved with respect, care, and dignity. Any instruments such as gaming consoles, information, documents, and permission to access video gaming spots were acquired through legal means, rules, and regulations according to the law. Any unnecessary deliberate practices that might have hindered or influenced the outcome of the data collected were avoided.

1.9.7 Reliability and Validity

The study ensured it is reliable and valid by following all the procedures the study laid out and ensuring no bias by the researcher. Trustworthiness is key to the reliability of the study; peer review was applied to ensure the researcher was not biased while analyzing data. Internal consistency and test retest reliability was used to check the consistency of the study. Peer debriefing was used to achieve accuracy and validity of the study.

1.10 Conclusion

This chapter laid out the background to the study, theoretical framework, and the process through which research was conducted. The method of data collection used as well as the

instruments used has been outlined. This chapter also shows the validity of the techniques used in ensuring that the data collected is credible and authentic. The ethical considerations put forth in the research process have been laid out ensuring the research followed all the laws, rules, and regulations. The next chapter looks at the presence and application of narrative in modern narrative based video games.

CHAPTER TWO

NARRATIVE IN VIDEO GAMES

2.0 Introduction

The focus of this chapter is on detailing the presence and application of narrative discourse in modern narrative based video games. A point of reference is made to the narrative in cinema as both cinema and video games enjoy the unique audio-visual medium of entertainment. An understanding of the narrative in cinema is thus crucial to the understanding of narrative styles in video games, as the former has greatly influenced the latter. This chapter then critically immerses itself into following the development of narrative from traditional media to the new forms of media.

2.1 Narrative

Narrative comprises structures through which stories, real or fictional, are recounted and conveyed to the audience. Bordwell et al. (2017) define narrative as “a chain of events linked by cause and effect and occurring in time and space” (p.73). On her part, Susan Hayward views narrative as “the strategies, codes and conventions (including mise-en-scène and lighting) employed to organize a story” (Hayward, 2000, p.256). Seymour Chatman (1978, p.28) views narrative as,

A communication; hence, it presupposes two parties, a sender and a receiver. Each party entails three different personages. On the sending end are the real author, the implied author, and the narrator (if any); on the receiving end, the real audience (listener, reader, viewer), the implied audience, and the narratee.

Going by these definitions, we shall refer to narrative as the organization of events, which consists of spatial and temporal elements and structures employed to tell a detailed story with a beginning, a middle and an end. This then informs how the analysis of narrative in modern video games is shaped from styles and the structures that make up a whole text.

2.2 Narrative Styles

Narratives appear in two major styles, linear and nonlinear narratives based on the approach used in relaying the story information to the intended audience. These styles have also found relevance in narrative based video games.

2.2.1 Linear Narrative

Linear narrative is a story structure where the story follows a chronological order of events happening. It is concerned with the causality relationship between events whereby something happens because something else happens. Domsch (2013) asserts, “the question of chronology is concerned with the relation between the order in which events in a narrative happen and the order in which they are represented” (p.75). This is a common style of narrative across the different narrative media. Narrative in cinema as observed by Hayward (2000) “tends to follow a fairly standard set of patterns which can be defined by the triads - order/disorder/order and order/enigma/resolution - often referred to as disruption/resolution” (p.257). Video games either utilize linear narratives in its entirety or briefly in collaboration with nonlinear. A linear narrative might appear briefly in the mini plots of nonlinear games or in entirety in games like *The Last of Us* and *God of War*, which have clear linear structures.

2.2.2 Nonlinear Narrative

Nonlinear narratives entail narratives with many outcomes or a single predetermined outcome but does not occur in a chronological order. Events in nonlinear narratives occur in a non-chronological pattern; the story does not follow the causality relationship form of disruption/resolution (Stone, 2019). In nonlinear narrative, many mini plotlines add up to the main plot and feature flashbacks and foreshadowing, which goes back and forth in the narrative. This is typical of many narrative based video games. A game can equally incorporate both linear and nonlinear narratives. In such games, the story may begin as linear then through choices diversifies to nonlinear then folds back to a linear structure. Roth (2015) explains “this is common for video games that leave the player the choice on how to solve a situation or to explore a sub-story, while the meaning for the overall story arch remains the same; the outcome always leads back to a predefined linear storyline” (p. 25). *Uncharted 4: A Thief's End* is a narrative game that has a predetermined end but events occur in a nonlinear form. The story begins right in the middle and jumps back and forth through flashbacks giving the player a better understanding of the actions by the main characters of Nate and Sam in the narrative.

2.2.2.1 Branching Narratives

Unlike traditional narratives, which always have one predetermined end, video games allow the story the flexibility to have multiple ends through a branching structure. Branching narratives entail many stories centered on player's choices with possibilities of different outcomes or blended into a single one (Stone, 2019). Rouse (2005, p.223)

explains that with branching narratives the player makes decisions at various points that significantly affects the progression of the story as the game carries on.

Modern narrative based video games incorporate many choices that allow participation that influences and/or alters a dramatic storyline by the player. Many narrative games are designed for replay-ability with each play offering a completely new experience and story. Through the choices players make during gameplay, the story can take many shapes and progress differently before arriving at a predetermined end or unique multiple ends. In a branching narrative game Rouse (2005) ascertain that players take different challenges from the previous which they succeeded at and forge other paths to explore a different challenge. As such, replay-ability allows a player to make new decisions in the choices presented thus experiencing a different and/or unique story from the one played before. *Until Dawn* is such a game that has a branching narrative. The player's choices and decisions here really count to how the story unfolds. The game features the butterfly effect, which states that small changes like the flap of a butterfly have severe consequences and outcomes later (Lorenz, 1994). As such, every decision the player makes will have dire consequences later on either in favor of or not. Players are met with tough decisions to make such as killing another character or saving them, keeping the trust with another character or destroying that trust, among others. These decisions either haunt or help the players later on when they really need it for survival.

2.3 Narrative in Video Games

The possibility of video games as a medium capable of telling stories has for long aroused mixed reactions and has been argued through. Early games began as a medium not capable of telling any story. Video games that contain storylines began to appear in the mid-1970s that had the player being the story character, which led to experiments combining gameplay and story (Schell, 2008, p.262). Even with the existence of these video games with underlying storylines, it remained difficult to place video games in reference to having stories. The realm at which story in games can be defined has for long been ignored. Plyler (2013) observes that there are some old games that tell great stories but only recently is when they are talked about as narrative medium (p. 20). The definition of presence of the story in video games is yet to be agreed upon. Scholars and critics both have differing views on what “story” should entail in video games. Schell (2008, p.263) argues that some stories in video games are strong, epic tales while others are subtle. He gives an example of chess as containing thin layer of story on two kingdoms which are at war. He adds soe games without story do make players to some extent create their own stories about the game. This assertion gives the allowance to how wide the story in a video game can be. It also raises the questions of the eligibility of video games as a narrative medium. Telling stories is diverse with many media, literature, film, painting, theater, etc. adapting to technological advancements over time. Juul states that narrative cannot be viewed independently, but only through a medium. As such, it can be translated from one medium to another (Juul, 2001, p.27). Chatman (1978) argued this transposability of the story across mediums as the strongest reason that narratives are indeed structures independent of any medium (p.20). According to Juul, video games

“pass by” and are not identical every time they are played, thus could not fit in the realm of transposability of story across other mediums. This led to him further arguing video games are a narrative medium at all. He explored that stories coming from other media must be retell-able in computer games and vice versa, which at the time he felt was not the case (Juul, 2001). Currently, there are a myriad of examples of stories from video games, which are retell-able in other media especially in film. Video games are being inspired by literature, comic books, and film in telling stories. There are countless adaptations across comic books, film, and video games. *The Last of Us* is currently in the adaptation to make a TV Series under the same name produced by Home Box Office (HBO). *Uncharted 4: A Thief's End* has also been adapted into a 2022 film, ***Uncharted*** directed by Ruben Fleischer.

Going by today's standards, modern narrative based video games tell incredibly great stories. Video games have immensely imitated its predecessors, literature and film, in structuring their stories. Lemon (2018) notes, early video games relied upon written word as in literature for storytelling. Texts were used to give commands to players as a way for story progression. In video games, the story is carried out in three (3) parts as explained by Rouse (2005). There is the out-of-game where storytelling is done on the computer, at this point, the game is running but the player(s) is not playing. Usually done through cut-scenes during which player(s) loses control of the playable character (PC). In-game storytelling occurs while player(s) are in control of the PCs in the game and interacting with their non-playable characters (NPCs). External materials are done out of the computer and includes written manual and/or any paraphernalia that came with the game

(p.206). Video games differ by large extent from other narrative media through the range of participation of the audience. Unlike traditional narratives where the audience are largely passive, in video games the players who are also the audience must participate in the game for it to move forward. The player assumes a role and the story is reliant upon the game environment and the actions the player takes in the game world. As such, the story only unfolds through the player and s/he becomes an active agent of the story. Domsch (2013) asserts the appeal of games is in the guarantee of agency, an openness that depends on the player and his/her choices (p.3). By this accord, it is seldom clear that indeed video games are a medium able to contain great narratives, though not the same way as the traditional media.

2.3.1 *The Last of Us* (2013) by Naughty Dog

The Last of Us is a story that takes place in 2033 in the United States, about twenty years after the breakout of a brain-altering fungal infection known as Cordyceps has infected the majority of the world's population. The infection turns humans into dangerous creatures known as the Infected. At an advanced stage, it rips the brains of the humans into fungal heads creatures called Clickers. Since the outbreak, the world has gone into panic and government officials try to control the condition. The country is put under quarantine zones to keep the survivors safe. Joel is a smuggler together with Tess, his partner and friend, in a quarantine zone in Boston. To get back their stolen weapons and double the cache, they are to smuggle Ellie, a teenage girl, out of the quarantine zone to a safe house in Massachusetts to try to procure vaccine for the infection.

2.3.2 *Until Dawn* (2015) by Supermassive Games

Until Dawn takes place in 2015, at the Blackwood Mountain. The game begins in a flashback of winter 2014 where Josh and his twin sisters, Hannah and Beth Washington, invite their friends Samantha Giddings, Mike Munroe, Jessica Riley, Emily Davis, Matt Taylor, Ashley Brown and Chris Hartley to Washington Lodge for their annual getaway. During the celebration, part of the group pranks Hannah that led to her disappearance together with Beth, and are declared missing as the police found no bodies. A year later, Josh invites the friends back to the mountains to commemorate their disappearance. They all accept the invitation and arrive at the Mountains. Dangerous creatures like the Wendigos torment the friends the whole night as they fight for survival.

2.3.3 *Uncharted 4: A Thief's End* (2016) by Naughty Dog

Uncharted 4: A Thief's End tells the adventures of brothers, Nathan "Nate" Drake and Samuel "Sam" Drake taking on adventures to finish what their mother started. 15 years later, Nate has retired from treasure hunting. He works in a salvaging company and leads a normal life with his wife Elena. His boss, Jameson, approaches him with a job in Malaysia, which they do not have the permits to do. Nate refuses, as he does not want a life of risk. One night while working late, Sam, who is still alive, visits him for help. Sam reveals his cellmate, Hector Alcazar, who is a drug lord broke him out and gave him three months to find the treasures of Henry Avery or face consequences. Reluctantly, Nate accepts to help Sam while lying to Elena that he has taken the job in Malaysia. Nate and Sam team up with Victor "Sully" Sullivan, Nate's mentor and friend, in a globetrotting

adventure to find the fortunes of Henry Avery, the famous pirate who staged the largest heist in the 1600s with fortunes worth 400 million dollars.

2.3.4 *God of War* (2018) by Santa Monica Studio

God of War occurs in Midgard, one of the Nine Realms of Norse Myth, Norway, where Kratos lives with his son Atreus as they journey to honor Kratos' second wife and Atreus' mother, Faye, by pouring her ashes at the peak of the highest mountain as she wished.

2.4 Narrative Structure in Narrative-based Video Games

Narratives appear in different forms such as written, verbal, and visual. The stories tend to contain forms or shapes that can be traced from beginning to the end of it. Narrative structure are the codes of communication employed in the combination of small elements that make up a large or whole feature.

2.4.1 Three Act structure

The three-act structure is based on plot model championed by Syd Field in 1978 that divides a story into three parts following Aristotle's three stage parts of beginning, middle, and end. Syd Field (1978) labels these three parts as Act I (Set up), Act II (Confrontation) and Act III (Resolution). As observed by Syd Field, many of the modern narratives adhere to the three-act model. Video games too, though not in exactly the same way, follow the three-act structure.

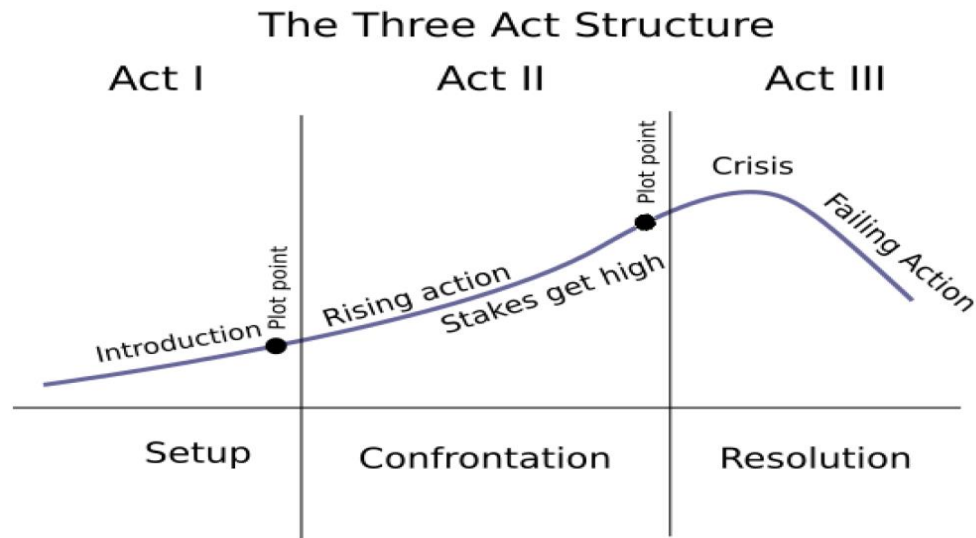


Figure 2.1 The three act structure of Syd Field

2.4.1.1 Act I – Setup

Act I is the starting or beginning action of the narrative that concerns itself with setting up the narrative; mise en scene, establishing the characters and launching the theme(s) of the story (Field, 2005, p.22). Though nonlinear narratives might be presented differently, nearly all narratives start with a beginning. The relationship among the characters (protagonists, antagonists and allies) in the narrative are portrayed at this stage. Act I invokes curiosity and interest in the audience to keep following the story as it drives the protagonist into a compromising and conflicting situation to leave his/her normal life into the unknown. Chatman (1978) states that the function of exposition at Act I is to produce the necessary information regarding the characters and the events that exist before intense action begins. At this stage, more emphasis is given to descriptions and explanations. Act I is very important in introducing the conflict the protagonist is faced with and without it s/he will not be aware of the impending conflict that needs to be resolved (Thabet, 2015).

Syd Field (2005) defines plot point as “any incident, episode, or event that hooks into the action and spins it around in another direction” (p.26). Plot points are very important in progressing the storyline and are usually associated with the protagonist/hero. Plot Point I progresses the action in the narrative into Act II and subsequently Plot Point II moves Act II into Act III. Plot Point I is regarded as the inciting incident where the hero commits to resolve the main conflict and sets out into the world of confrontation (Thabet, 2015).

Many narrative video games begin with an introductory sequence containing narrative usually through cut-scenes or an interactive gameplay. These expository sequences can or cannot be skipped by the player depending on the game design and game goals. Before the game begins, it is important the player understands the world they are entering and the goals presented to them. Many narrative games will not provide the player an option to skip in order to introduce and acquaint him/her with enough information of the game world, through either texts or cinematic cut-scenes, required for a thrilling experience. Often, the game’s main objectives are spelt out at this point. While traditional narratives tolerate a good amount of time at Act I, video games dedicate very little time or none at all for set up. Video game players always want to participate actively in the game experience as opposed to following through non-interactive cut-scenes for quite a while.

The Last of Us begins with Act I where Joel is living a normal life as a caring father alongside his daughter Sarah. As the setup, we discover it is on his birthday as Sarah offers him a watch as a birthday gift. Plot point I occurs when Cordyceps infections, a fungal based brain altering infection, surges. Jimmy, their neighbor and infected, bursts

into the house of Joel and Sarah forcing Joel to shoot him and they flee which soon after leads to the death of Sarah. In *Until Dawn*, the story begins by Josh welcoming his friends to the Blackwood Mountains for their annual winter getaway. It is a year since the disappearance of Josh's twin sisters Beth and Hannah at the Mountains after a prank gone wrong. The friends agree to meet at the Blackwood Pines and one by one make their way to the mountains where the past and other creatures begin to haunt them all night long.

Even though *Uncharted 4: A Thief's End* begins right in the middle with the action, it tracks back soon after into the setup that led to the events of the action. Nate works in a salvaging company, lives a normal life and retired from treasure hunting. His boss Jameson presents him with an opportunity to work a job in Malaysia without permits, which is similar to treasure hunting, but he turns it down. One night while working late, his brother Sam, whom he presumed dead, pays him a visit. Sam is in danger and in need of Nate's help to find the treasures of Henry Avery. This becomes the turning point where he agrees to help Sam and dives into the adventures of treasure hunting. Kratos, in *God of War*, lives with Atreus, his son. They mourn the death of Faye, Kratos' second wife and the mother to Atreus. She had wished her ashes be scattered at the mountains' highest peak in Midgard. As they prepare to leave, a stranger with godlike powers, later identified as Baldur, whom Kratos kills, attacks them. The journey to honor Faye then begins.

2.4.1.2 Act II - Confrontation

Act II brings out in detail the progression of the story, as it is full of action in the context of confrontation. It contains the rising action through a series of challenges and obstacles where tension keeps building up to the climax. Here, the protagonist encounters numerous successive obstacles that deter him from achieving the goals s/he set out to achieve and leads the protagonist to understand the path to resolving the main conflicts (Field, 2005, Roth, 2015). Narratives major in this phase as the audience/reader/player are curious to find out what unfolds as a result of the culmination of challenges faced by the protagonist. Towards the end of Act II is Plot Point II, which separates Acts II and III. Plot point II is the moment where the protagonist, after overcoming many incredibly challenging obstacles, sees the path to conquering the main conflict and achieving victory. It leads to the climax of the action.

Narrative video games dwell on Act II as it provides the players with an interactive experience they are after. Huddles upon huddles are presented to the player in pursuit of quality gameplay. The player is tested to the core as well as skills sharpened for the increasing toughness level of the game. Twenty years later in *The Last of Us*, Joel has moved on, now working as a smuggler, secretly smuggling things in and out of the quarantine zones together with his friend and partner Tess. To get back their stolen cache of weapons, Marlene tasked them with smuggling a teenage girl, Ellie, out of the quarantine zone. They get help throughout the game from Bill, Tommy, Maria, Sam and Henry. They meet with many challenges including losing Tess as she is infected, fighting the infected and clickers, staying alive from attacks from James and David as they move

from one town to the other. As they get closer to finally finding the Fireflies where Ellie is to be taken to procure medicine, as she is immune to the infection, the Fireflies ambush them. Joel wakes up from unconsciousness with Marlene beside him. She explains Ellie is being prepared for the surgery. This leads to the climax where Joel realizes Ellie will have to die for them to get the cure. After losing Sarah years ago, Joel cannot allow Ellie to die. He asks them to find someone else to get the cure from as he fights his way to Ellie killing anyone who stands in his way including Marlene.

In *Until Dawn*, an unknown creature abducts Jessica as she and Mike try out the guest cabin. Mike goes looking for her, finding an abandoned sanatorium containing information concerning the mountain cave-in accident in 1952 that trapped miners. Depending on his choices, he finds her either dead or alive before disappearing again. A man wearing a mask back in the lodge disturb Josh, Chris, Ashley and Sam resulting in a jigsaw bisecting Josh. Emily and Matt find a radio tower and ask for help. Due to a storm, their request is received but they have to wait until dawn for help. The tower collapses separating Emily and Matt. Emily finds the location where Hannah and Beth disappeared with Beth's damaged head nearby while looking for a way out. The stranger at the lodge confronts Mike, Sam, Ashley, Chris, and Emily if she escapes the mines. The Stranger then reveals the creatures are former humans who became creatures known as the wendigos after being cannibals during the 1952 cave in. The wendigo kills Stranger and possibly Chris (depending on choices) as they head back to the lodge.

After agreeing to help Sam in *Uncharted 4: A Thief's End*, Nate and Sam team up with Sully to steal a crucifix same as the one they were after in Panama years before. They sneak into the auction only to find the crucifix already moved out of the storage earlier than it was planned, forcing them to create new means to access it. Sully encounters Nadine, an old acquaintance and owner of Shoreline and her new partner who happens to be Rafe. They manage to steal the crucifix and escape. After the escape, they find a letter inside the crucifix that leads to the grave of Henry Avery at St. Dismas Cathedral in Scotland. They make their way to Scotland where Rafe, Nadine and Shoreline are already. On arrival, Nate and Sam sneak past Shoreline and discover a large room with a scale. On one side of the scale a cross and on the other coins. After a thoughtful analysis, they trigger a light that reveals a map that points to King's Bay in Madagascar. Nadine had been stalking them and they hold Nate and Sam at gunpoint. The brothers trick them, collapsing the chamber as they escape. They sail to an island, Libertalia, only to find Shoreline guarding it. As they head to New Devon, Rafe corners them. Rafe decides he only needs Sam and shoots Nate but Sam jumps in the way, Nate is knocked off. Elena finds Nate with the help of Sully after she changes her mind. Nate arrives at Avery's ship with the treasure where Nadine and Rafe are engaged in a confrontation. Nadine, reluctant to finish the job, argues it is time to call it quit. A trap triggered causes an explosion on the ship, Nate runs in to find all the treasure and Sam is trapped under a wooden beam. Rafe fights Nate using one of the corpse's swords; cleverly, Nate cuts the rope holding a net of treasure dropping it over Rafe crushing him to death. Nate helps Sam get off the beam and leave in Sully's plane together with Elena.

Kratos and Atreus in *God of War* encounter many challenges on the way. They meet the Dwarf blacksmith brothers, Brok and Sindri who constantly upgrade their weapons. They also meet a friendly witch of the woods, Freya. At the Lake of Nine, they encounter the last remaining giant World Serpent, Jormungandr. They manage to reach Midgard's peak and learn that the stranger Kratos had killed is still alive and is being helped by sons of Thor, Modi and Magni to interrogate a prisoner, Mimir. Modi and Magni attack them while looking for a way to open Jotunheim's portal by. Kratos kills Magni, and Modi flees away but returns later to ambush them. Atreus falls ill from mental struggles of a god. At Midgard's peak, Baldur ambushes them where Atreus picks a fight with him leading to the destruction of the Jotunheim portal, throwing them to Helheim. As they escape from Helheim, they discover Baldur is the son of Freya. It becomes apparent Freya had cast a spell on Baldur to protect him from physical and magical threats that made Baldur dislike his mother. Mimir realizes there is another way to get to Jotunheim while returning to Midgard. Baldur attacks them again. In need of mother-son connection, Freya intervenes to protect him. During the fight, Atreus with his arrow pierces Baldur breaking Freya's spell. Kratos kills him and Freya swears revenge on Kratos taunting him for hiding his true nature.

2.4.1.3 Act III - Resolution

Act III consists of the resolution part with falling action where the culmination of obstacles to the climax are resolved and loose ends are tied together (Field, 2005, Roth, 2015). Field (2005) points out that Act III should not be considered as the ending but rather a unit that resolves the story. The ending, he notes, is the last scene that ends the

story. After killing Marlene so that she does not come after Ellie again in *The Last of Us*, Joel drives away with Ellie who wakes up from unconsciousness at the backseat of the car. She asks what happened and Joel lies to her that Fireflies stopped trying to get the cure, as they were unable to find the cure from other immune people found. She insists he swears that his story is true, which he does as they head towards Tommy's settlement in Jackson County. Depending on the choices by the player in *Until Dawn*, the survivors escape the basement where they were hiding. A fight between the wendigos causes a gas leak and Mike ignites the gas with an electric spark resulting in an explosion that destroys the lodge killing the wendigos. Rescue helicopters arrive after the explosion to help those who survived until dawn.

In *Uncharted 4: A Thief's End*, Sam joins Sully for a job as Elena and Nate return home. Nate goes back to work; Jameson retires and sells the company to Nate, through Elena who planned it all using the treasure given to her by Sam. She gets permits to do the job in Malaysia. Years later, together with their teenage daughter Cassie, they live on a beach. They agree to tell her their adventure stories as she learns about them. In *God of War*, Kratos and Atreus make it to the peak of the highest of the nine realms and scatter the ashes of Faye. They realize Faye was a giant who stayed in Midgard, making Atreus a giant, god and mortal and was named Loki by his mother. It is also revealed Baldur was after Faye all along not knowing she was dead. Kratos and Atreus go back home where Atreus gets a vision in the dream that Thor will arrive to confront them at the end of Fimbulwinter.

2.4.2 The Hero's Journey in Video Games

Schell (2008) notes that it is an old maxim of Hollywood screenwriting that the main ingredients for a story include a character with a goal and obstacles in his/her way that will deter the character from achieving those goals. Heroic stories always have a conflict starting it off that sets up the hero through a journey to overcome the piling conflicts and challenges. In *The Hero with a Thousand Faces*, Joseph Campbell (1949) came up with a basic story structure termed the hero's journey or the monomyth. In the text, Campbell describes a structure that he believes is underlying in the majority of the mythological stories and serves the main ingredients of the story (Schell, 2008, Roth, 2015). Today, most narratives (literature, film and video games) still structure themselves around the hero's journey/monomyth. Many narrative video games rely upon the agency of heroism to place the player/protagonist at the center of the game. Thus, the monomyth becomes a relevant factor in the structure of narrative video games. Modern video games, just as heroic films, have borrowed Joseph Campbell's monomyth structure in their design in order to be more appealing to the player. In this structure, the hero/player leaves his/her comfortable life and ventures into the unknown, lethal and challenging world. The monomyth follows a pattern of distinct stages to unravel the journey the hero undertakes. Video games follow the majority of the phases of the monomyth but not all, as some cannot be actively applied. Since the monomyth/hero's journey is centered on the character of a hero(s), *Until Dawn* does not feature a definite hero's journey. The player controls all the eight characters in the game interchangeably with the possibility of different outcomes based on the decisions made. As the chances of each character surviving or dying are high, there is no definite character playing out the hero.

1. The Ordinary World

The first stage in the monomyth pattern is the ordinary world where the hero/protagonist is a regular person, at home, in a 'normal' world and leading a normal ordinary life (Carlquist, 2002). This is usually the exposition and there is not so much action in the life of the hero. At this stage, the audience/player is made to understand the setting and get to associate with the life of the hero and other characters. In film, the ordinary world can take up some time to acquaint the audience with the setting of the film. In video games however, the ordinary world is not prolonged as in most cases it is done through less active or non-interactive cut-scenes. The main objective of many games being to give the player a playable experience, the majority of video games give the option to skip this part and dive straight into the gameplay where conflicts are introduced. Narrative based video games however, introduces a part of the conflict in prologue to get the players active, then using non-linear (flashbacks and foreshadowing) narrative techniques bring the narrative starting with an ordinary life such as the case in *Uncharted 4: A Thief's End*.

Joel as an ordinary man living with his daughter Sarah in a normal world in *The Last of Us*. It is the night of his birthday and Sarah gives him a watch as a birthday present. In *Uncharted 4: A Thief's End*, 15 years after the presumed death of his brother Sam, Nate has retired from treasure hunting. He lives a normal life with his wife Elena and daughter Cassie and works a normal job in a salvaging company. In *God of War*, Kratos and his son live in a normal state of events mourning the death of their wife and mother respectively. They respect her wishes by cutting down the marked trees to be used in her pyre.

2. The Call to Adventure

The call to adventure sets out the goal the hero has to achieve. The hero is hereby presented with a challenge that sets out to disrupt and alter their normal life in the ordinary world. Campbell notes that the call to adventure “signifies that destiny has summoned the hero and transferred his spiritual center of gravity from within the pale of his society to a zone unknown” (2004, p.53). The call to adventure is key in narrative video games as it sets in motion the challenges the player has to overcome. Jonas Carlquist (2002) affirms that the call to adventure explains to the player why the hero has to take action. The challenges are presented to the hero in different ways that suit the respective narrative, such as curiosity to explore an environment, retrieve an item, fight an opponent or hide from danger as spelled out in the game.

Into the night in *The Last of Us*, Sarah wakes up and realizes her dad is missing. As she looks for him, Joel runs back in the house shutting the door. The infection has begun surging as one of the infected bursts through the glass door prompting Joel to shoot and kill him. Joel’s brother Tommy shows up and they are forced to flee to stay safe by not being infected. In *Uncharted 4: A Thief’s End*, Jameson, Nate’s boss at the salvaging company, approaches him with a job in Malaysia but there are no permits to do the job. He discusses the possibilities of the job with Elena. To respect the wishes of Faye, Kratos and Atreus have to travel to the highest peak of the nine realms in Midgard to scatter her ashes in *God of War*.

3. Refusal of the Call

Refusal of the call is about fear of the unknown by the hero and s/he will make excuses on why s/he cannot take on the adventure. Carlquist (2002) asserts that the hero does not feel ready, hesitates and thinks of turning back. Refusal of the call to adventure “converts the adventure into its negative. Walled in boredom, hard work, or ‘culture,’ the subject loses the power of significant affirmative action and becomes a victim to be saved” (Campbell, 2004, p.54). Refusal of the call is very common in films as it creates tension for the story but not common in video games. Players are in the game specifically for the challenging experiences thrown their way and they will not hesitate to take them. Narrative games involve subtle refusal of the call, Jonas Carlquist (2002) observes that some video games may include refusal to the call but usually it happens during non-interactive sessions of the game.

Refusal of the call appears in *The Last of Us* where after twenty years passed after the death of Sarah, Joel is a smuggler in Boston. In order to retrieve weapons stolen from him and Tess, they must help smuggle Ellie, a teenage girl, out of the city for Marlene. Being Sarah’s age mate, Joel is reluctant, as she reminds him of Sarah. In *Uncharted 4: A Thief’s End*, Nate turns down the Malaysia job, even after Elena asks him to try, as he believes the job is dangerous and he is done with the life of risking it. Refusal of the call is not definite in *God of War* gameplay, however, Kratos is hesitant to take Atreus along with him in the storyline. He feels Atreus would slow him down and is not ready for the journey.

4. Meeting with the Mentor

The phase of meeting the mentor happens to convince the hero to be courageous and take up the challenge or upon acceptance of the call to adventure, the hero finds that the task ahead is overwhelming and incredibly difficult. Beyond the hero lies darkness, danger and the fear of the unknown. Meeting the mentor thus provides the hero with a wise and protective figure that physically, spiritually, or mentally aids, trains, and advises the hero to achieve the goals s/he has set up (Campbell, 2004, p.63). As is destined, the mentor guides and aids the hero until s/he enters into the crossing threshold.

Arriving at the drop-off where Ellie was to be picked by Fireflies, they discover all the Fireflies had been killed. Joel proposes they return as they have failed but Tess, believing that Ellie could be the key to finding the cure begs and urges him to take up the challenge and ensure he delivers Ellie to the other Fireflies with the help of Tommy, a former firefly, in *The Last of Us*. One night as Nate works late in *Uncharted 4: A Thief's End*, Sam, who is still alive, visits him at the salvaging company. Sam explains he was saved by the doctors and put back to prison, only to be broken out by Alcazar, a dangerous drug lord. Sam details how he is in danger and in dire need of Sam's help to locate the treasures of Avery. *God of War* does not have meeting the mentor but the appearance of Baldur at their home acts as one. With the surprise attack from Baldur, Kratos realizes he has to protect Atreus at all cost.

5. Crossing the Threshold

When the hero eventually decides to commit to take the adventure and leave the ordinary life, s/he gets to cross the threshold and begin to resolve the conflict (Skolnick, 2014). The hero overcomes the fears and commits to taking the challenge from this point onwards. At this point, the adventure gets going and the hero has no chance of turning back, the only options s/he is left with are either success or failure (Carlquist, 2002, p. 27). The story intensifies from this point with the audience aware of the main conflict, setting, characters, and everything that is at stake.

Left with no other option in *The Last of Us*, Joel fully accepts to deliver Ellie to the Fireflies, to create a cure for the infection that would save the world, asking her to repeat that she will always do what he says when he says it. Though reluctantly, Nate in *Uncharted 4: A Thief's End*, agrees to help his brother Sam. He lies to his wife Elena that he has decided to take the job in Malaysia. Nate introduces Sam to Sully, his friend and mentor, and they begin the adventures of treasure hunting. Left with no choice than to protect his son, Kratos decides to take Atreus with him through the journey in *God of War*. Even though Atreus is not ready, the journey begins.

6. Tests, Allies and Enemies

In the new world, the hero learns new rules, adopts new ideas, encounters new challenges s/he makes allies and confronts enemies. After crossing the threshold, the hero faces more challenges in the world of the unknown (Campbell, 2004, p.83). The hero at this stage, faced with successive tests and challenges, is aided by the wisdom, advice and training received from the mentor s/he met earlier on. Narrative video games often base

themselves around tests, allies and enemies. A great deal of the game takes place at this stage of the monomyth. Players are tested to the core with many puzzles they have to solve, enemies they have to trounce, and allies to help take down the enemies to achieve the goals in order to get to the furthest point of the game.

In *The Last of Us*, the player is tested by being offered challenges after challenges. Joel and Ellie are often ambushed and attacked. As they get closer to the location of the Fireflies, they discover they (Fireflies) have already moved to another location prompting Joel and Ellie to conquer the challenges to survive. They have allies such as Tommy, Maria, Bill, and the brothers, Sam and Henry who help them achieve their missions. Equally, they meet enemies including The Fireflies, the bandits, James and David together with their cannibal groups. Sully and Elena become the first allies to Nate and Sam in *Uncharted 4: A Thief's End*. After learning of an auction of a cross in Italy, similar to the one they are after, Nate, Sam and Sully plan to steal the cross. At the auction, they meet old acquaintances, Rafe and Nadine who owns Shoreline, who are their constant enemies throughout the game. These enemies put up fights and huddles on the way of Nate and Sam getting to Avery's treasures. Kratos and Atreus in *God of War* are met with numerous tests, Atreus falling ill, Kratos being tormented over his past, fighting giants, gods and other dangerous creatures. They have to fight their way to accomplish their goals, with the help of Brok, Sindri, Freya, Mimir, and Jormungandr. Baldur, Magni and Modi do all they can to deter them from progressing in their quest.

7. Approaching the Cave

After encountering numerous tests, setbacks and enemies, the hero is then willingly or forced into the inmost cave, which is probably the worst place to try doing things from another view point (Skolnick, 2014). Here, the hero prepares for the final task that lay ahead, usually resolution of the main conflict. At approaching the cave phase, final arrangements to succeed by the hero have to be made for the main ordeal of the adventure to come (Carlquist, 2002).

In *The Last of Us*, Joel and Ellie arrive at a place with medical tents. Joel realizes the place is similar to one he has seen before where he saw many broken families. Ellie brings Sarah up and for the first time over the long period, Joel talks about Sarah without being angered. Soon Fireflies attack and trap them, knocking Joel unconscious as he tries to save Ellie. In *Uncharted 4: A Thief's End*, after Elena saves Nate, he opens up about him and Sam. She agrees to help find Sam. They get to Avery's house avoiding traps where they find clues left by Sam. They find Sam who had escaped from Rafe and Nadine. Being close to the treasure, Sam is reluctant to leave and decides to set off after the treasure. Nate follows him, as Sully and Elena are unable to continue due to a large fence. Atreus becomes wild after learning his god and mortal power in *God of War*. As a result, his actions haunt their mission as they are thrown to Helheim when they are almost crossing the Jotunheim portal.

8. The Ordeal

At the ordeal, the hero faces the peak of his/her tests and must confront his/her ultimate challenge and surpass surprising barriers that seem too difficult to achieve (Carlquist, 2002, Campbell, 2004). Stakes are high and, everything hangs in balance, chances of victory and defeat are equally high and things could go either way. The hero does everything s/he can to resolve the conflict completely.

Joel wakes up from unconsciousness in a hospital in *The Last of Us* with Marlene beside him. Marlene welcomes him to the Fireflies telling him Ellie was saved and is being prepared for surgery to create the cure. On realizing Ellie will have to die first, by removing her brains out, for them to get the cure he insists they let her go and find someone else to use. After losing Sarah, Joel cannot yet again lose Ellie, whom their relationship has grown over time to that of father-daughter. Joel fights against Marlene and Fireflies, killing anyone who stands on his way to saving Ellie. He manages to get to her before she is operated/killed, carrying her unconscious body out of the Fireflies hospital. The ordeal in *Uncharted 4: A Thief's End*, Nate makes it to Avery's ship that has the treasures after a triggered trap caused an explosion. He finds Rafe and Nadine in a confrontation, his brother Sam trapped under a huge wooden beam. Nadine confiscates Nate's guns and runs out, locking Rafe and Nate inside the ship pointing to the dead bodies of Tew and Avery who killed each other because of greed. Rafe fights Nate using swords of Avery and Tew after being locked in the ship by Nadine. Nate cleverly slashes a rope holding a net of treasures, which fall on Rafe killing him. Sam, still trapped under a large wooden beam, gets help from Nate. Together, the brothers try to remove the beam

to no avail. Sam asks Nate to leave him but he finds cannon and shoots the bottom of the ship. With water flowing in, they manage to move the beam away and escape the burning ship. While returning to Midgard to find another way in *God of War*, Baldur, who cannot be killed, appears again and attacks Kratos and Atreus. They learn he is Freya's son who had casted a spell on him to protect him. Atreus spears him, casting the spell enabling him to feel pain. Kratos then manages to kill him for good and they continue on their way to the highest peak of the realms.

9. The Reward

Having successfully conquered the incredible tests on the way, fears and surviving the ordeal, the hero is rewarded for the achievements (Campbell, 2004, p.100). The reward can be a treasure, wisdom/knowledge, status elevation in society or promotion of roles. Video games most often end at this stage. Some games have different levels or chapters with each chapter having an independent hero's journey. In the case the game ends, the player is rewarded with great experiences and clear understanding with information of the past and the narrative of the game. Usually, this is done in cinematic cut-scenes at the end of an interactive gameplay. For games that proceed with other levels and chapters, the player is rewarded with better weapons, knowledge and understanding of the game to continue unlocking the puzzles that are set forth. The narrative structure becomes repetitive and the majority of the monomyth stages start all over again. Video games make good use of this repetitiveness by always creating more tests and puzzles for the game players to solve. The toughness of the puzzles in this repetition keeps escalating making it more hard to achieve and worthwhile for the players to engage and unravel.

At the end of *The Last of Us*, Joel drives away in silence for a while, Ellie wakes up at the backseat as they drive to Tommy's settlement. Ellie asks what happened, Joel lies to her that the Fireflies are no longer looking for the cure and she is not the only one who is immune. She later asks Joel to swear that the events he told her is true, which Joel does but she reluctantly accepts. Nate and Sam in *Uncharted 4: A Thief's End* finally get Avery's fortunes they have been chasing after with all the troubles and challenges. Kratos and Atreus learn more information about themselves and Faye in *God of War*. They get to accomplish the wishes of Faye by scattering her ashes at the highest peak of the realms over the gods and giants. Kratos and Atreus strengthen their father-son relationship.

10. The Road Back

After accomplishing the mission and being rewarded, hero then goes back to his ordinary world with a normalcy, but the problems are not fully solved (Campbell, 2004, Schell, 2008). The forces along the way are mobilized with the success and pose a threat to the hero, which he must escape to return to the normal world with the prize. On their way back in *God of War*, Mimir predicts that Fimbulwinter will come sooner than expected. This means all is not over for Kratos and Atreus as Thor would come to confront them.

11. Resurrection

The hero is faced with greater challenges but with the experience garnered through it all, s/he has to rejuvenate and use everything in their power to be successful (Schell, 2008). All seems to be lost at this point but through a surprising turn of events, the hero is

resurrected and gets another chance to resolve the challenges. *The Last of Us*, *Uncharted 4: A Thief's End* and *God of War* do not feature this stage of monomyth.

12. Return with the Elixir

The final monomyth stage where the hero returns triumphant to the ordinary/normal world with the earning of the treasure is the return with the elixir (Campbell, 2004, p.182). With the resolution of the conflict, the hero is free to go back to normalcy in the ordinary world proudly with the victory. Rewards are offered to the allies who supported the hero as well as punishments to the enemies. Schell (2008) notes that “the journey is now well and truly complete, and the hero’s success has improved the lives of everyone in the ordinary world” (p.274). In romantic films, the boy usually gets the girl and retrieves back to the ordinary world. Joel and Ellie head to Tommy’s settlement away from the dangerous life that has followed them through in *The Last of Us*. In *Uncharted 4: A Thief's End*, Nate returns to his normal life with Elena and Cassie. With the treasure given by Sam, Elena buys the salvaging company from Jameson on behalf of Nate. She even gets the permits to do the job in Malaysia admitting adventure is the only life for them. Years later, he lives in a beach with Elena and their daughter Cassie telling her their adventures. Kratos and Atreus return to their home where they go to sleep in *God of War*.

2.5 Elements of Narrative

Narratives contain elements that work together in the creation of meaning. Chatman (1978, p.19-20) analyzed how structuralists and formalists argued that narrative has two

parts. For structuralists, narrative has a story, which is the chain of events or content, plus the existent (characters, setting), and a discourse, which is the means through which the content is communicated. Formalists used fables (tabula) which are the related events in the narrative, and plot (sjuzet), how the story is told by linking events together. The way the story is relayed to the audience is dependent on the individual elements of discourse as explained by Chatman. These elements in narrative discourse can also be attributed to modern narrative video games.

2.5.1 Point of View

Point of view is a narrative element that is concerned with which perspective the story is told from (Diasamidze, 2014). Hart (2011) stresses that point of view “answers three questions: Through whose eyes do we experience the story? From which direction? From what distance?” (p.43). Point of view varies depending on how much access the audience is given to the story by the storyteller. This comes in the form of first person, second person and third person perspectives.

2.5.1.1 First-person

The first-person point of view involves the author limiting the access to the narrative to a single character, who then refers to him/herself as “I” or “we” and refers to the readers of the text as “you” (Diasamidze, 2014). Hart (2011) notes that nonfiction writers possess the preference of making themselves point of view characters taking readers through narrative experience from their own eyes (p.45). This puts a limitation on what the reader can unfold in the story as they get only the information that falls in the scope of the

character. Literature and cinema have applied first person perspective in their narratives. This perspective finds its use in first-person video games where in many instances the game plays out from the perspective of the protagonist. The player/character is limited in view and only sees directly through the eyes of the protagonist. In narrative video games, first person perspective appears but not often overused like in the shooter games. *Until Dawn* is a good example of narrative based video games, which apply first person point of view. Before beginning new chapters in the game, players always find themselves in a therapy session with Dr. Alan Hill. The story then unfolds from the perspective of Josh; players continue the story from the eyes of Josh understanding the mental effects he has from his sisters' disappearance.

2.5.1.2 Second-person

Second-person point of view in narrative entails “an “all-knowing” narrator firmly imposes himself between the reader and the story, and retains full and complete control over the narrative” (Diasamidze, 2014, p.161). She adds, the second-person narrator places the characters and readers in a scene referring to them as “you” but is neither involved in the plot nor a character in the story. Hart (2011) asserts second-person is rare in narrative, usually a stylistic device rather than an actual direct address. Video games have equally rarely utilized a second person point of view in their development. Due to the interactive and immersion sought by both players and video game developers, the idea of second person seems like a hindrance. Players wish to experience the game from their own perspectives by playing a part, not be on the sidelines waiting to be told by another party.

2.5.1.3 Third-person

In third-person point of view, also referred as limited omniscient, the narrative is told by a character who acts as the center of disclosure and uses the third person pronouns “he”, “she” and “they” without speaking directly to the reader(s) of the text (Diasamidze, 2014, p.162). The reader(s) moves with the character and only knows, sees and hears the events as the character. Third person perspective is the most common in film whereby the camera watches the story unfold from outside. In third person games, the camera stays a few distance behind, in front, or overhead of the protagonist. In *The Last of Us* while following Joel and Ellie, *Until Dawn* playing the eight characters, taking adventures with Nathan Drake in *Uncharted 4: A Thief’s End* and with Kratos and Atreus *God of War*, the camera keeps a distance from the characters allowing the player to control and see unfolding of the events in the environment.

2.5.2 Plot

In narrative, plot is a sequence of events that occur with the emphasis on the causal relationship between these events (Roth, 2015, p. 22). The causal relationship entails how one event or an action leads to another. A narrative can contain many plots and subplots that lead back to the main point the narrative intends to put across. Video games, requiring multiple hours to complete, often contain many plots and subplots. In *The Last of Us*, twenty years after a brain altering fungal infection known as Cordyceps has affected the world’s population, failed vaccines by WHO, civilization fails as citizens become desperate for survival. Joel, a survivor and smuggler, is tasked with the responsibility of delivering Ellie, a teenage girl immune to the infection, to the Fireflies

to procure a vaccine. The journey across the U.S. turns out to be harder than expected. Joel is still hurt from the loss of his daughter while Ellie does not trust him as everyone who ever cared for her either died or left her. Prank gone wrong during a party at the Blackwood Mountains leads to the disappearance of twin sisters Hannah and Beth in *Until Dawn*. A year later, after the disappearance of Hannah and Beth, Josh invites the friends back to the mountains to commemorate the disappearance of his sisters. At the mountains, the eight friends are tormented the whole night until dawn when they can get help from the rangers guarding the mountains. They are tortured by creatures which are former human beings known as wendigos who turned to cannibalism to survive after a cave-in on the miners in 1952 in the mountains.

In *Uncharted 4: A Thief's End*, Nathan Drake has retired from the adventures of treasure hunting. He is now married and leads a normal life with his wife Elena and works a normal job. His long-lost brother Samuel Drake, whom he thought died, appears one day and details how he is in danger. With the lure of finding the fortunes of Henry Avery, the great pirate who enacted the greatest heist in history, Nate embarks on the adventures of treasure hunting around the world one more time to save his brother. After defeating the Olympian Gods in *God of War*, Kratos starts a new life in Midgard with his son Atreus after the death of Faye. In honor of Faye's wishes of her ashes being scattered at the highest peak in the realms, Kratos and Atreus must travel the world filled with dangerous monsters, giants, and gods.

2.5.3 Theme

Theme in narrative refers to the main idea or the recurring message throughout that is being passed on to the reader(s) of the text (Hart, 2011).

2.5.3.1 Family and relationships

In *The Last of Us*, father-daughter relationship between Joel and Ellie is reiterated all through the game, beginning as very weak and gradually growing to a strong relationship. After losing his daughter at the beginning of the game, Joel locks himself up due to a lot of grief for 20 years without talking about Sarah. When together with Tess they are supposed to smuggle Ellie out of the quarantine zone, Joel remains hesitant and tries severally to get rid of her even after agreeing that it is only a job. On her part, Ellie sees Joel as a father figure and someone who cares about her as their relationship becomes better and stronger throughout the game. Eventually, Joel is able to talk about Sarah without being angry showing he accepted to see Ellie as his daughter.

In *Until Dawn*, after losing his twin sisters, Josh is affected by their disappearance and falls into a state of mental disorder. This is revealed later in the game as the one seeing Dr. Hill the analyst. Exactly a year later, Josh invites back the friends to the Blackwood Pines for their annual winter getaway to commemorate his sisters' disappearance. On converging, their true friendships are put to test throughout the game with players being forced to make tough decisions to either break or strengthen their friendships. In *Uncharted 4: A Thief's End*, Nate is living a happily married life with his wife Elena. He

works a normal job at a salvaging company. He vowed to Elena to leave the adventurous life behind and live in safety even refusing a job without official permits in Malaysia when offered by his boss Mr. Jameson. When Sam, his brother presumed dead, appears after 15 years, Nate feels compelled to help his brother stay out of trouble and enjoy the freedom he deserves after being in jail. Nate lies to Elena to have taken the Malaysian job while he goes off with Sam in a bid to save him. As orphans, Sam and Nate have stuck together and committed to carrying on the work of their mother who passed before finishing her adventures. Throughout the game, Nate carries a notebook where he takes notes of every new adventure they encounter paying tribute to his mother who was a researcher and carried a notebook for record.

God of War explores father/son relationships. Atreus was staying with his mother, Faye, before she passed away. It becomes evident that Kratos and Atreus' relationship is not that of a proud father nor an available one. To take him along the journey to honor Faye's wishes, Kratos first tests the preparedness of Atreus to survive the long journey. Their relationship soils even further during the hunting exercise as Atreus hits back at Kratos for not being there to teach him. For the better part of the game, Kratos calls Atreus "boy" and never refers to him as son. At the end of the journey is where he calls him son showing how their relationship has grown from bad to better over time.

2.5.3.2 Betrayal, endurance, and survival

In the post-apocalyptic world of *The Last of Us*, the inborn desire to survive by human beings amid collapsing civilizations innately kicks in. The characters in the game are willing to do anything in order to survive whether it is morally correct or not. As such, the society turns into a dangerous place with people adapting to be heartless killers, and losing any sense of empathy towards fellow beings. The game begins with the destruction of a family unit when Joel loses his daughter from a gunshot from a soldier who in turn is supposed to be protecting them. The confidence and security guaranteed in providing safety becomes apparent it no longer holds any meaning. Players are left to rely on themselves for their own survival. For instance, Joel does not believe the wounded man on the road asking for help is really injured. He decides to reverse the car, which reveals it was an ambush as bandits emerge from hideout. On Ellie inquiring how he knew it was an ambush, he tells her he has been on both ends of the scenario before, showing how far one can go for survival. Ellie is left under the care of Marlene after her mother passed away. For her selfish interests, Marlene is the one about to sacrifice Ellie so that they can find a cure for the Cordyceps as she (Ellie) is immune. This act by Marlene shows how there is no longer safety in people and institutions responsible for it. Ellie further reiterates this when she confronts Joel about handing her over to Tommy to deliver her to the Fireflies. She angrily expresses how either everyone who ever cared for her is dead or left her on her own.

Players of *Until Dawn*, have to survive all night until dawn when they can get help from the rangers guarding the mountains. The masked psycho and the wendigos torment

characters all night long one by one. Betrayal appears repeatedly in *Uncharted 4: A Thief's End*. The biggest of all betrayals is between Avery and Tew. After successfully enacting the biggest heist of all time, Avery, Tew and other pirates bring in their wealth together under the umbrella of The Founders. The Founders end up being poisoned by Avery and Tew who wanted all the treasures to themselves only. Later on, Avery and Tew betray each other again by killing each other as each wanted the treasures to themselves.

2.5.3.3 Hope

Ellie represents the hope in humanity for a possible better future where a cure can be developed that will make humans immune to the fungal infection and survive just like her in *The Last of Us*. She is very determined to see the vaccine manufactured to bring change to stop people from dying, including those close to her like her best friend and Tess. When Joel suggests they abandon finding the Fireflies, turn back, and go live simple lives in Wyoming with Tommy and Maria, she angrily detests showing optimism for a better future by insisting they keep on going.

2.5.4 Setting

Characters exist and events happen in a particular time and place (Edgar-Hunt et al. 2010, p.119). The setting of a narrative thus refers to the time when the story occurs and the environment or place where it happens. The time could be time of the day, a year, or a historical point in time, whereas place is the geographical location or environment of the

happenings of the story. The setting of video games are mainly fictional. They are however created in a way that reflects the reality in the society just like those in cinema. The gap between the setting in cinema and video games is quite narrow as they share the same criteria when it comes to Computer Generated Imageries (CGI). *The Last of Us* takes place in the post-apocalyptic United States. The story takes place in 2033, which is twenty years later after a dangerous fungal infection altering the brains of humans, called Cordyceps Brain Infection, led to a pandemic that spread across the world. The world is in panic as the spread of the infection increases, causing government officials to put stringent measures, including quarantine zones, to prevent further spread. The story then manifests in different parts of the country that have been deserted by people in different weather seasons. In summer, the story begins in quarantine zones in Boston, to Pittsburgh. During fall, they traverse Jackson County in Wyoming where Tommy has settled, to University of Eastern Colorado. In winter, they take shelter in the snowy mountains, hunting for food in the mountains. In the spring, they wander around the deserted city where they meet beautiful wildlife that roam around. They arrive at a hospital in Salt Lake City in Utah where Fireflies were planning a surgery on Ellie. They eventually go back to Jackson County after Joel saves Ellie from the surgery.



Figure 2.2, Screenshot of one of the settings of *The Last of Us*

Until Dawn takes place in 2015, in the woods at the Blackwood Mountains during winter. The mountain is heavily wooded and characters use cable cars to access the lodge. The mountain is home to all kinds of birds and wild animals including wolves, grizzly bears, elves, deer, and squirrels among others. The events take place at night at the Washington lodge, guest cabin, and Blackwood sanatorium. The characters are tormented by dangerous creatures known as the Wendigos, which are human beings who turned cannibals after a cave-in accident that took place there in 1952. Even though the mountain is under protection by the rangers, the torture the eight characters go through the night lasts until dawn when they can be rescued.

The adventures of *Uncharted 4: A Thief's End* takes place in different scenic and adventurous parts of the world from the stormy seas with pirates on the way to the islands of Libertalia. Nate is involved in diving under the water with boats at the salvaging

company. Their adventures then take them across the world including the hilly forests of Madagascar with scenic views. Some scenes take place in the ruins in Spain at the Panama prison where Nate, Sam and Rafe break in to find the old cells belonging to Joseph Burnes, Avery's mate, containing clues to the fortunes. Then clues then set them forth to an auction at the Rossi Estate in Italy, which is a rich people's place, and they require better social status to have access to the auction. Thereafter they go to hilly Scotland looking for St, Dismas Cathedral to find the grave with the insignia of Henry Avery. A flashback takes players back to the catholic orphanage where Nate and Sam were staying until Sam escaped and came back for his younger brother.



Figure 2.3, Screenshot of a market scene in New Devon city in *Uncharted 4: A Thief's End*

God of War occurs in an unknown time in the Nordic Mythology, which is modern day Norway. Kratos and Atreus live in Midgard, one of the nine realms of Norse Mythology. Kratos and Atreus traverse the nine realms to the top of the highest peak to scatter the ashes of Faye. On their adventure, they encounter humans like the dwarf brothers, wild animals, gods, giants and dangerous creatures of all kinds. The events occur under the

environment with a lot of fog and mist throughout the beautiful scenes crisscrossing valleys and mountains.



Figure 2.4, Setting of *God of War*

2.5.5 Characters

Hart (2011) observes that great narratives regardless of the media in which it is told rests on characters as they drive the story and sometimes become the story. He adds that a fiction work that has a long-lived outcome uses the characters in its pages to do so (Ibid, p.75). Characters have classes with different abilities. They can be classified into heroes, villains, enemies, allies, and neutral ones. Domsch (2013) explains the main characters are the protagonists who are the hero in the story and the antagonist, character or forces that opposes the quest of the protagonist to achieve his/her goals by creating obstacles in his/her way (p.95). Similarly, video games have characters that are very sentimental in interaction and immersion into the game world. In narrative based video games, the player either controls the characters or lacks control of the characters. As such, video games group characters into two categories of Playable Character (PC) and Non-Playable Characters (NPCs).

2.5.5.1 Playable Character (PC)

Playable character (PC) is the character that the player controls as s/he plays the game (Dille & Platten, 2007). As discussed earlier, narrative based video games depend on the player interaction with the game to tell the story. In agreement with this, Carlquist (2002, p. 10) notes that video games need to have at least one player who plays and interacts with the game to tell the story as they cannot function on their own. Gerald Farca (2011) affirms that if the players do not move their player character, there would be no events happening in the game, thus no one or nothing to encounter the story (p. 23). In narrative based video games, the playable character is usually the role of the hero as the identification of the player with the hero is more crucial than in other narrative media. Players want to experience the hero and not the villains. Skolnick (2014) stresses that the players want to inhabit the characters' body, controlling it fully as they immerse themselves in the game world. Playable characters are thus very crucial to narrative video games. The players themselves experience the story since the story is only found in the player interaction with the game, not in the game itself.

In *The Last of Us*, the PCs are Sarah, Joel, and Ellie each advancing the story at a given timeline. At the beginning, players control Sarah, then for the better part of the game Joel is the playable character then switches a little to Ellie before coming back to Joel. In *Uncharted 4: A Thief's End* Nathan Drake is the major PC for the better part of the game. Players also play Sam for a little while as he details his encounter with Hector Alcazar as they escaped from prison. In *God of War*, Kratos is the PC. In some games like *Until Dawn*, more than one playable character is controlled allowing progression of the story at

the same time unlike in *The Last of Us* where different PCs serve different timelines. This character switching comes by force at times as the characters' control switches with a triggering event where the player has no choice but to play. *Until Dawn* allows character switching among all the eight characters; Josh, Sam, Mike, Jessica, Emily, Matt, Ashley, and Chris. Just like in other forms of narrative, character development and growth is important in narrative video games. The abilities of the characters, usually in the form of powers, gradually accumulate during gameplay. Many characters begin the game with limited options for their abilities, which gradually increases as the game progresses. Ellie from *The Last of Us* is such a character who grows with time. At the beginning, she is just a naïve teen girl depending on Joel to protect her but later on when Joel is injured, her character proves able to look after him. The relationship of Joel and Ellie at the beginning is that of tension, which grows gradually to that of deep trust at the end. The same goes for the character of Atreus and his relationship with Kratos.

2.5.5.2 Non-Playable Characters (NPCs)

Apart from the character whose role the player controls in narrative video games, there are many other characters in the game world. These characters are important in advancing the story as they interact with playable characters. These characters are controlled through the artificial intelligence (AI) of the game and are referred to as non-playable characters (NPCs). Domsch (2013) defines non-playable characters as those characters not controlled by the player (human being) normally part of the program and are their command is through artificial intelligence (AI) of the system. As much as a player cannot control these characters directly, Dille & Platten (2007) assert that the player can

influence the actions of these characters through the choices they make during gameplay. As discussed earlier, video games are full of choices presented to the player, especially in the non-linear format of storytelling. As observed with the butterfly effect, the decisions taken by the playable character/player greatly affects how the surrounding characters in the game behave. Non-playable characters will always have a relationship with the playable character as; an ally, an enemy or a neutral (Dille & Platten, 2007).

a. Ally

A character who either helps the playable character/player or has to be helped by the playable character/player in the adventures of the game world is an ally (Dille & Platten, 2007). In *The Last of Us*, several characters are allies to Joel and Ellie. Tommy, Joel's brother, is the first ally as he helps the two throughout the game to meet their objectives. Tess, who was Joel's friend and partner in smuggling, the brothers Sam and Henry, Bill, and Maria, Tommy's wife, are allies. The Stranger in *Until Dawn* helps the group by giving them more information on the wendigos and trying to help them survive from the dangerous creatures. Sam, Sully, Elena, and Vargas in Panama prison are the allies in *Uncharted 4: A Thief's End* as they help Nate throughout his adventures of treasure hunting. The Dwarf brothers, Brok and Sindri, in *God of War* are the first allies Kratos and Atreus meet. The brothers constantly upgrade the weapons of Kratos and Atreus. Jormungandr, giant World Serpent, Freya, a witch in the woods, and Mimir are allies in the journey of Kratos and Atreus.

b. Enemy

An enemy is any character that will actively make hostile attempt(s) to the playable character not to accomplish his/her mission and goals (Dille & Platten, 2007). These characters come in different forms. They can be self-motivated with their own agendas which conflict with that of the hero or have levels of powers to offer challenges to the hero. In video games, the enemies are persistent as it is upon the challenges that they offer to the player that keeps the game interesting. The Fireflies, headed by Marlene, are the biggest enemies alongside the Clickers, creatures that have turned due to Cordyceps, in *The Last of Us*. During winter, as Ellie goes hunting for food, David and James become their enemies trying to kill or recruit Ellie into cannibalism. In *Until Dawn*, the wendigos and the masked man are the enemies tormenting the eight characters until dawn. Rafe and Shoreline, headed by Nadine, are the constant enemies of Nate, Sam, and Sully always trying to be ahead in the search of Avery's treasures in *Uncharted 4: A Thief's End*. Baldur becomes the first enemy in *God of War* as he brings the fight to Kratos and continuously seeks revenge with the help of Magni and Modi.

c. Neutral

A neutral character is neither an ally nor an enemy to the playable character (PC) but are very significant to the game world as they give life to the game while establishing the reality in which the game takes place in (Dille & Platten, 2007). The neutral characters in *The Last of Us* begin with their neighbor Jimmy, fellow civilians trying to escape pandemic, military officials, and some bandits stealing from civilians. In *Until Dawn*, Dr. Hill and mountain Rangers are neutral characters. Nate's daughter Casey, Father Duffy,

Sister Catherine, the old lady, Nate's boss Jameson, salvaging colleagues, the prisoners, and the members of the public in New Devon city in *Uncharted 4: A Thief's End* are neutral characters. There is no definite neutral character in *God of War* as the characters are either allies or enemies.

2.5.6 Conflict

Conflict is the foundation of any great story. Conflict is the struggle between two or more opposing forces that gives a story meaning. It is the burning energy propelling the story forward according to Evan Skolnick (2014). This could be a case where a character(s) needs something, but other characters or other forces stand in the way of him/her getting it. He adds, in order for a story to be a story it must have at least one main conflict across the whole story. Conflicts take many forms; complex narratives may have several major conflicts and many smaller ones. In cinema, the audience watches the conflicts played out as the action progresses. In video games, the players themselves participate in the experience of the conflicts. Since video games are based on the agency of keeping the player actively entertained, s/he is presented with multiple conflicts to push the story and the game forward. With the player wanting to win and conquer the game, s/he is presented with a set of objectives as well as the challenges and obstacles as a ticket to proceed to the next stage of the game. These obstacles are in the form of conflicts, which player(s) has to conquer to advance to the next stage. Without a conflict, there is no story in any narrative or any game to say.

2.5.6.1 Types of conflict

Conflicts in narrative come in two categories; internal and external conflicts. Internal conflicts come from within the character while external conflicts are those between a character and an outside force. Dille & Platten (2007) observe these types of conflicts;

a. Man vs. Self

Man versus self is an internal conflict where the character struggles with forces within him/herself. Dille & Platten ascertain the hero is at war with his own demons, such as addictions, phobias, fears, or his/her past which comes to haunt his/her present. In *The Last of Us*, Joel and Ellie face man vs self conflicts. Having lost his daughter due to a gunfire by a soldier supposed to protect them, Joel is caught in deep grief and lack of acceptance for her loss. For twenty years, Joel does not talk about his daughter Sarah to anyone and gets angry at the memory of her. When he is expected to smuggle Ellie out of the quarantine zone, he resists as much as possible as his 'failure' to protect Sarah and his lack of trust in police haunts him. He fears for the repeat of the past with Ellie under his responsibility. Having lost everyone who ever cared for her, Ellie has trust issues and does not trust anyone, as she fears if she does she will be left alone once more. Josh in *Until Dawn* suffers the loss of his sisters at a party he was too drunk to be able to help them. As a result, he undergoes hallucinations and mental problems as expressed through the meetings with Dr. Hill. His mental issues take a better part of him to the extent of planning torturous revenge on his friends to pay up for their adversaries. Nathan Drake, in *Uncharted 4: A Thief's End*, is married to Elena. He has vowed not to go back to the risky life of treasure hunting and become a family man with a normal life. When his long

lost brother appears, who he was in the past and the lure of treasure hunting which he misses are hard for him to pass on. He goes back to the old life of adventures with his brother by lying to his wife Elena. The past of Kratos in *God of War* affects his current relationship with his son Atreus. Out of anger, Kratos murdered his whole family alongside the enemies. As such, he has not been available for Atreus and their relationship at the beginning is not a proud one. Atreus finds out that he is partly a god and a giant weighs on him. His true nature becomes hard for him and he fights it to a point of not taking orders from Kratos and causing harm through his mistakes.

b. Man vs Man

An external and a major conflict in narrative that pitches the protagonist/hero against the antagonist/villain. The antagonist puts constant obstacles on the way of the protagonist as s/he quests to accomplish the goals. Joel and Ellie receive constant threats from The Clickers, James and David's bandits, hunters, and Marlene's Fireflies in *The Last of Us*. These antagonists repeatedly keep the two away from achieving their goals. In *Until Dawn*, the masked man and the wendigos torment the eight characters through the night. Rafe, Nadine, Shoreline, Gustavo and his friends at the Panama prison offer Nate, Sam, Sully and Elena a lot of resistance in *Uncharted 4: A Thief's End*. Nadine and Shoreline, with the help of Rafe's intelligence, seem to always be a step ahead on the way of Nate and Sam. Baldur is a constant menace to Kratos throughout the game in *God of War*. He brings the first major conflict of man vs man in the game to the house of Kratos and Atreus. Modi, Magni, giants and gods are other enemies who come in the way of the protagonists.

c. Man vs Nature

Man versus nature is an external conflict that puts the character against forces of nature such as natural disasters. The hero could be trapped in the wilderness or fighting a storm. Due to the pandemic caused by CBI, civilization has failed in *The Last of Us*. The streets are abandoned, bandits have increased and people are turning cannibals and are ready for anything to survive. This poses a big threat to and makes it hard for Joel and Ellie to find the Fireflies as soon as possible to procure a vaccine for CBI. In *Until Dawn* during the radio call for help from the Mountain Rangers, the characters are left alone to stay until dawn for any help to arrive due to the storm in the area. They lose hope and encounter the evil creatures tormenting them even longer. In Madagascar, Sam insisted on hiring a 4X4 Land cruiser in *Uncharted 4: A Thief's End*. The rains in Madagascar leave parts of the road with stagnant water and slippery roads, which slowed down Nate, Sam and Sully as they struggled severally to make way through the roads. The storm in the seas on the way to Libertalia was hard for Nate and Sam to see in front, as they escape from the Shoreline firing at them. The mist in *God of War* becomes too much to see anything necessitating Kratos to find the torch of Alfheim, which can only enable them to see through the mist.

d. Man vs Destiny/Fate

The character is fighting against forces beyond them determined by destiny/fate, often s/he does not want to fulfill it. Kratos conceals the identity of Atreus for the fear he might turn out like him in *God of War*. He refuses to reveal to Atreus that he is more than human even after Atreus begins to have visions and hearing sounds and Freya advises

him to reveal the identity. Kratos eventually revealed to Atreus his identity after he fell ill to a point of almost dying.

e. Man vs Machine/Technology

This is man in conflict with machines or technology fighting unstoppable machines mainly in science-fiction narratives. The video games analyzed in this study did not portray man vs machine conflict.

f. Man vs Society

Here the protagonist fights against the world or groups of the society such as an unjust government, corrupt judiciary or church. Usually s/he feels misunderstood by the society and cannot get anyone to believe him/her. The games considered in this study did not contain this type of conflict.

2.6 Effectiveness of narrative in narrative-based Video Games

Video games tell their stories very differently from narratives in cinema. As the narrative requires active participation from the player, the means of agency in the narrative is completely different from that in cinema. In that regard, video games contain narrative styles as in cinema but apply them in a unique way such as the nonlinear and branching narratives. Video games apply the branching narrative that is rare in cinema. However, the common narrative denominator between narrative in cinema and in narrative centered video games is the narrative arc. The narrative arc portrayed partly in the analyzed video games go beyond the beginning, middle and end. They contain sequences of events that

push the story forward through player interaction. The three-act structure narrative arc championed by Syd Field has been effectively applied in some sections of these video games to push the story forward and effect the gameplay experience. Unlike cinema where the audience are passive, video games waste no time at the exposition phase. Video games audiences are present for the active action presented to them. The conflicts that keep the player engaged in the game are thus presented early on as soon as possible to keep them interested in the gameplay. It does not however take away from the element of exposition in the narrative. The video games creatively offer enough information required for the exposition to set the pace for the players packed with a sense of direction as to the conflict they are engaged in. The rising action in the video games seamlessly transitions the player from the setup to conflict presented to them. The monomyth structure has been well applied by these video games though not applicable in all narrative based video games. Even though not in totality as in cinema, the phases that featured are effective at giving the player a hero's journey storyline experience.

Until Dawn does well by incorporating branching narratives. The player is presented with tough decisions to make which greatly affects the story. Any slight effect in the butterfly effect has devastating repercussions to the story. Choices are presented to the player allowing them partial freedom to alter the storyline. Even though the branches track back to a predetermined end, the player feels actively informing the story through the decisions made. It equally keeps the player engaged in the story while waiting for the effect presented by their decisions such as trust, distrust, loyalty etc. among the characters.

The characters have been well developed being very crucial to video games as the players take on the character of the hero in the game. Obstacles faced by the main character are intertwined with the character giving the player a preamble experience of the character. For instance, *The Last of Us* starts by building the character of Joel as a single father who eventually loses his daughter again. In a bid to make the player understand the actions of the story to follow later on, the main goal of the game that involves Joel taking care of another girl is tied to the character. In *Uncharted 4: A Thief's End*, Nate, the main character, is introduced in the storm struggling to maintain control of the ship. The story then goes back to explain the reason behind the conflicts that face the main character, the player in this case. Similarly, in *God of War*, Kratos is emotionally introduced at the beginning of the game tied to the main goal of the player. Kratos cuts down a tree that will provide the ashes that need to be taken to the highest realm in Midgard. The video games effectively transform the characters arc over the gameplay. The character growth of both playable characters (PCs) and non-playable characters (NPCs) are seamless and smooth as the games progress. The relationship of the characters in *Until Dawn* is dependent on the decisions made by the player, either to enhance or destroy their connection. The characters of Joel and Ellie, and Kratos and Atreus as playable characters in *The Last of Us* and *God of War* respectively grow gradually from that of distrust to a loyal one where neither of them wants to leave the other. *Uncharted 4: A Thief's End* does very well to build the character of Nate, Sam, Elena and Sully as they all revolve around the PC. Nate grows into a simple man who is committed to normal life as opposed to his taste for adventure in the past. This is reiterated through his constant refusal to engage in risky activities.

Modern narrative based video games do pretty well to create a setting for the player to enjoy as they play the game. The scenes in *The Last of Us* complement the events happening in the story in a post-apocalyptic world. The setting has been designed in ways that enhance the mood of the player in the game. The game being a reflection of the society, a lot of the setting suggests a normal environment human beings can be found in. Events happening in the different parts of the country, the setting are on point to put the player in the specific moods of those scenes based on time, season, light, etc. The setting of *Until Dawn* at the Blackwood Mountains portrays a relatable setting for a horror story. Events happening throughout the night on abandoned mountains, the setting has been right to reflect just that. The ruins from the mountain cave-in accident are seen, the creatures, and wild animals all suggest a dangerous environment where action takes place. This is effective in creating the mood of fear and mystery in the game players as they play. Different settings in *Uncharted 4: A Thief's End* go hand in hand with the story. Being a story that involves pirates, thieves and adventures, the setting does so well to make the story not only believable but also interesting. The characters have been designed to march the different settings such as Young Nate at the orphanage, Nate, Rafe and Sam in the prison and a different look on them years later after the prison scene still after the treasures. The setting of *God of War* in the misty Norse Mythology is effective in enhancing the story. The setting serves to compliment the story making it a great gameplay experience for player(s) as s/he engages the story and game.

The success of narrative in the modern narrative based video games can be partly accredited to the collaboration with experts from cinema. These video games, in order to

appeal much more to the players, have gone further to consult from the skills and expertise in the cinema industry on how to tell the story without distracting the player. *Until Dawn* for example was written by filmmakers Larry Fessenden and Graham Reznick, *The Last of Us* and *Uncharted 4: A Thief's End* boast the expertise and direction of creative writer Neil Druckman who has a background in film while *God of War* benefited from Richard Gaubert a filmmaker and animator. These experts by no doubt brought a lot of expertise to curating the stories told in these video games.

2.7 Conclusion

This chapter has delved into the narrative dispositions in cinema and video games. Definitions, styles and elements of narrative have been broken down to help understand the point of view of video games in line of narrative. This chapter affirms that indeed modern narrative video games are a medium capable of containing great narratives just like cinema though the conventions and applications are different. Video games pose a new way to tell stories different from the traditional norms we are used to. This chapter has carefully analyzed the elements this new media brings in relation to telling stories. The next chapter takes a deeper look into the application of cinematography techniques in modern video games to relay visually these narrative dispositions to the audience (video game players).

CHAPTER THREE

CINEMATOGRAPHY IN VIDEO GAMES

3.0 Introduction

Cinematography is one of the key factors differentiating cinema from other narrative media. Cinema and video games both enjoy the unique visual medium to relay information to their audience. This visual medium is made possible by the use of the camera. The camera is very crucial in the definition of the term “cinematography” as used in cinema. Cinema having been around before video games, the latter seem to learn from the former and includes some of the techniques from cinema in its design and development. One of those techniques is the application of the camera. This chapter goes deeper into the basic and intrinsic styles, rules, and techniques of cinematography, which seem to find their way in modern narrative video games.

3.1 Cinematography

According to many filmmakers, cinema is a language and cinematography is its vocabulary (Brown, 2012). Patrick Keating views cinematography as a craft that connects complementing elements like frame composition, camera movement and planning or/and manipulation of the lighting (2014, p.1). Cinematography is one of the distinct features that characterizes cinema. In the art of recording images, the camera plays an integral part of recording. Camera angles and movements in cinema enhance storytelling for a great experience. In the development of modern video games, cinematography is a basic feature. The quality of the visuals depend not only on great rendering, but also through the presentation of the scene(s) to the player. Camera placements and movements, just as

in cinema, participate as a key role in the experience of the players in modern video games. Modern video games portray exceptional use of cameras in their design. Majek (2011) observes that video games continue to cinematize their gameplay through, programmed camera complete with effects such as lens glare (p.6).

Even though the approach and use of cameras in cinema and video games is extremely different, the principles, purpose and application are more or less the same. In video games for example, the camera is virtual as opposed to physical control in cinema. Even with the slight difference, cinematographic techniques in video games tend to borrow quite a lot from its predecessor in visuals, cinema. Burelli (2016) affirms that “the relationship between game cinematography and its traditional counterpart is extremely tight as, in both cases, the aim of cinematography is to control the viewer’s perspective and affect his or her perception of the events represented” (p. 1). Just as in cinema, Halper et al. (2001) state that camera techniques in computer graphics form a major segment of the storytelling process with the correct utilization of the camera to enhance the experience in the audience.

3.2 Camera Shots

Camera shots are used widely in cinema and refer to the framing size of subjects within the shot/frame. There are various camera shots but the basic, upon which advanced shots are built on are three; the close up, medium shot and long shot (Ascher & Pincus, 2013). The varied use of these camera shots in cinema is to help enhance the narrative and the

overall mood of the film. Close-up camera shots portray the emotions of the characters as well as reveal detailed information about objects in the film. Close-up shots are most considered as being symbolic. In a close-up, “connotation can be of intimacy, of having access to the mind or thought processes (including the subconscious) of the character” (Hayward, 2000, p.328). Filippo (2019) avers that CUs reveal details or information about the setting and objects in the film. Medium shot allows for both detail, body language in the character and their interaction with the environment around them in a scene as the camera is distanced from the subject. Hayward (2000) notes, in indoor sequences this shot allows characters relationship giving a great visual significance to the scene (p.329). Long shots are effective in introducing the setting to the audience to be aware of the story and environment (Mascelli, 1965, p.26). These camera shots have found relevance in their application to modern video games.

3.2.1 Close-Up (CU)

A close-up shot is tightly framed to give emphasis on sole details such as feet, faces, small objects that fill up the screen (Edgar-Hunt et al. 2010). Blain Brown (2012, p.21) points out that the CU appears from the head to the shirt pockets. Often referred to as a choker, an extreme close-up (ECU) shot is tighter than the close-up and includes framing of a facial area just above the eyes and below the lips. A medium close-up (MCU) films a character from just below the shoulders to above the head (Mascelli, 1965). CUs have been used effectively in *The Last of Us* for the purposes of revealing the emotions of the characters and more details of the set. Back and forth CUs of Ellie and Joel surfaces as she confronts Joel about leaving her with Tommy. As Joel tries to fix the car, a close up

shot of Ellie's hand with the scar of the bite is used. This is preceded by a medium shot of a thoughtful Ellie. The CU shot brings the thoughts of Ellie to the player eliciting questions to the player to try to think in line of Ellie's actions and perceived thoughts as s/he controls Ellie onwards. *Until Dawn* uses CUs for detailed information and emotions of the characters. Totems that give the player a glimpse of what will happen in the future acting as a guidance are shown in close up shots. These totems give important information that guide players in making informed decisions when it comes to making a choice in the gameplay. More information is given through close ups in the form of pictures and books. For example, the diary belonging to Hannah contains critical information about the conditions Josh is going through from the therapy sessions. A close up of Hannah's tattoo is sentimental to the game. This information is shown in a close up to give emphasis to the tattoo as later in the game it is revealed she turned into a wendigo through the same tattoo. After Chris falls inside the house, a close up shows his facial expressions revealing how painful the fall was as Josh makes fun of it.

A close up of wipers on the windshield starts in *Uncharted 4: A Thief's End* that gives important information to the player to brace up for a storm as lightning strikes. A close up of Nate struggling to control the ship then follows, involving the player in the emotions of Nate and his thought process in the struggle. Young Nate at the orphanage is introduced in a close up as he details information that lead to having a fight with other children. His facial reactions and body language portrays him as a child who does not give up standing up to the things he loves, which is an important aspect of his character in the game. *God of War* applies close ups for intimate emotion, connection and

information. The hand sign on the trees give important information to the players to know they are after the marked trees for a reason. As the game begins, a close up shot shows Kratos full of emotions as he goes down placing his hand on the marked hand sign on the tree. This immediately informs the player the relationship between Kratos and the tree being important to him. Close up shows emotions on Atreus through the tears as he bids farewell to his departed mother.



Figure 3.1, Screenshot of CU shot of Ellie in *The Last of Us*

3.2.2 Medium Shot (MS)

Mascelli (1965) defines medium shot as “an intermediate shot because it falls between a long shot and a close-up. Players are filmed from above the knees, or from just below the waist” (p.27). Medium shot in *The Last of Us* applies in many scenes to portray body language and relationships between characters. Joel, Tess and the Soldier at the checkpoint where Joel hands over their documents to cross over the checkpoint are

framed in MS. A series of CUs and MSs reveal the emotions as well as the relationships of the characters. A medium shot of Joel and Tommy hugging allows the player to understand the extent of the relationship between the brothers. Medium shots similarly show body language, character relationship with the environment in *Until Dawn*. Chris is framed in a medium shot as he goes through Jessica's phone. MS shows the body language and character relationship of Chris and Josh showing them as best friends from the way they address each other with hand gestures. A MS shows the body language of Ashley as she is excitedly crushing on Chris. A MS of Nate as he and Sam cruise through the stormy seas as they escape from Shoreline starts *Uncharted 4: A Thief's End*. MS introduces Young Nate at the orphanage as Sister Catherine confronts him for starting a fight with other children. MS of Jameson presenting the Malaysia job to Nate shows the environment as well as actions of the characters. On a quest to live a normal life, the body language of Nate shows his reluctance to take the job as he has committed to Elena not to take any risky job again. As Kratos bends down to pick the chopped tree, the bloodstained bandage on his hand hiding scars from his previous blades unties in *God of War*. MS frames him as he ties it back to hide the scars, which he obtained in his previous life. Atreus hesitates at the entrance of their house as he goes to pay his last respect to the body of his mother, seen in the background, in a shot that frames him in a MS. MS shows Atreus carrying a candle and lighting the candles surrounding the body of Faye as he lights the candles. The shot ties the character with the environment. It also portrays emotion as revealed in the body language of Atreus bidding farewell to his mother's body.



Figure 3.2, MS screenshot of Nate's boss Mr. Jameson in *Uncharted 4: A Thief's End*

3.2.3 Long Shot (LS)

Long shot, also referred to as the full shot, is a frame that encloses the whole scene and indicates that we see the full length of the subject (Brown, 2012). Long shot allows a large amount of the surrounding of the scene setting to be seen, in this scenario, the shot is described as an establishing shot (Ascher & Pincus, 2013). Video games apply long shots in a variety of ways especially during gameplay. *The Last of Us* frames in long shots to establish the setting of the game. While looking for Bill, Joel and Ellie enter Lincoln town in a long shot with the landscape and the signpost of Lincoln in the background. Entering Jackson County, a long shot of the landscape introduces the set before Joel and Ellie enter the frame. A signpost bearing the direction and information of entering Jackson County is seen in the long shot. This leads the player in understanding the setting and territory they are entering. Long shots have been used in *Until Dawn* for revealing the environment. As Sam heads towards the Blackwood Mountains, a long shot

shows the environment as the bus makes its way introducing her and the setting of the game to the player. Series of long shots have been used with Mike as he traces Jessica to save her. LS frames the Priest and the Nun as Young Nate hides from them as he executes his escape plan to meet up with Sam in *Uncharted 4: A Thief's End*. The fight between Nate and Gustavo in Panama prison takes place in LS showing other inmates cheering on the fight. Long shot shows the stormy seas as The Shoreline attacks Nate and Sam as they head towards the island. Long shot has been used also to introduce the abandoned city of Libertalia where the pirates who formed The Founders accumulated their treasures. The fight between Kratos and Baldur at Kratos' home takes place for the better part of it in LS in *God of War*. A LS as Kratos and Atreus head towards the boat to take the tree, complements the previous shot in emphasizing the setting of the game.

3.2.4 Medium Long Shot (MLS)

A medium long shot, also medium full or cowboy shot is between the long shot and a medium shot and frames a subject from the head to around the knees (Brown, 2012). *The Last of Us* frames Joel and Tess in a MLS when they finally find Robert. Later on, Tommy and Maria are framed in a MLS as Maria expresses her concerns about Tommy taking Ellie to find the Fireflies. Joel confronts Marlene about sacrificing Ellie to find a cure asking her to find someone else in a shot that entails a MLS. This shot carries on as one of the Firefly men knocks Joel to the floor. In *Until Dawn*, Sam and Chris heading to the cable car are framed in MLS. As Chris tries his shooting skills, MLS applies. MLS frames Matt and Emily as Mike ambushes them on their way to their room to unpack. Mike is framed at the center in LS. MLS applies as the camera follows the characters

around in *Uncharted 4: A Thief's End*. While going after Sam, Nate and Elena are framed in MLS as they go through the abandoned city of Libertalia. MLS frames Kratos as he starts to cut down the marked tree in *God of War*. As they are thrown out of the belly of the giant snake's belly, MLS frames both Atreus and Kratos. Baldur emerges from the waters in a MLS as well to bring the last fight.



Figure 3.3, MLS of Kratos in *God of War* as he starts to cut down the marked tree

3.2.5 Extreme Long Shot (ELS)

An extreme long shot or extreme wide shot takes into consideration much of the surrounding areas as opposed to the subject(s) as they are far much into the background.

An extreme long shot shows a wide area from a vast distance (Mascelli, 1965, p.25).

Extreme long shots within a film are usually to establish the place where action is taking place. The environment depicted is of much importance to the narrative at this point before the characters are introduced (Mascelli, 1965, p.25).

On their way back to Tommy's settlement after finding Ellie who had escaped, Joel, Tommy and Ellie are seen in ELS in *The Last of Us*. Sam travels by bus to the annual Blackwood winter getaway. An extreme long shot of the bus making its way through the road with woods filled with mist on the side is shown in *Until Dawn*. In *Uncharted 4: A Thief's End*, Sam and Nate finally manage to get away from the Shoreline Mercenaries and they escape on a motorbike to meet up with Sully and Elena afterwards. In *God of War*, ELS frames the corpse of the giants from the peak of the highest realm as Kratos and Atreus scatter the ashes of Faye.



Figure 3.4, ELS of Sam on her way to the cable car in *Until Dawn*

3.2.6 Over the Shoulder (OTS)

An over the shoulder (OTS) is either a close up or medium shot in which the camera is placed just behind an actor looking over the shoulder to a CU or MS of the other actor

(Brown, 2012). An OTS ties the two characters together and orients the audience to the scene by putting the audience in the place of the person being addressed. When a character is framed independent of the others, s/he is isolated. In OTS, the characters are connected as they are framed together giving a sense of being on an equal playing field. After shooting Jimmy in *The Last of Us*, Joel explains to Sarah what just happened in a series of over the shoulder shots. OTS also features when Joel and Tess approach Checkpoint South 5 to get clearance to cross over out of the quarantine zone for some business. When David tries to convince Ellie to recruit her into his tribe of cannibalism, OTS shots features severally from the perspective of each of them. Joel is framed in an OTS of Marlene as he regains consciousness and inquires about Ellie. When Chris meets up with Matt to catch up in *Until Dawn*, back-to-back over the shoulder shots of Chris and Matt are used. OTS is used repeatedly from young Sam and Nate after they meet up after Nate escaping from the orphanage in *Uncharted 4: A Thief's End*. Young Nate picked up a fight shown by the bruise on his head, Sam inquires what happened in a series of OTS medium shots. OTS frames Baldur at the door of Kratos' home as he comes to surprise Kratos in *God of War*. An OTS of Kratos has been applied extensively during gameplay following the action around.

3.3 Camera Angles

Camera angles give perspective to the framing of camera shots as all camera shots have distance, height and level/angle. Camera angles give power to camera shots and at times can change the meaning of a simple camera shot into a complex dramatic shot. Mascelli (1965) observes that three factors (subject size, subject angle, and camera height)

determine the camera angle. The camera distance from the subject and focal length of the lens determines the size of the image in the frame. The closer the camera, the larger the image and vice versa. Subject framed at an angle will reveal its three dimensions. Altering the camera height then contributes to storytelling and involvement of an audience in the story. Solarski (2017) observes that eye level camera angle places the subject on a neutral ground and equal level with their surroundings. He adds that low angles make subjects appear heroic, dominant, and strong as if looming over the audience. High angles on the other hand diminish the subject appearing as small, vulnerable and weak from above. Oblique camera angles are used to create dramatic effects of uneasiness, disorientation and/or drunkenness in a film, which evoke different moods on the audience. Mascelli (1965) explains that oblique/dutch angle,

Should be reserved for sequences when weird, violent, unstable, impressionistic or other novel effects are required. A player who has lost his equilibrium, or is drunk or delirious, or in a high emotional state, may be shown to advantage in a tilted shot, or a series of tilted shots, perhaps in pairs of opposing tilts, so that the audience realizes he is behaving irrationally (p.197).

Video games, as will be discussed, borrow and apply these predetermined camera angles in their design following the effect they have on film.

3.3.1 Eye Level Angle

Eye level camera angle “films from the eye-level of an observer of average height, or from the subject's eye-level” (Mascelli, 1965, p.35). Eye level camera angle results in a neutral perspective that imitates how we view people in real life. Mascelli (1965) adds that it is important to frame close ups of a subject, whether standing or sitting, from the

subject's eye level so as to connect with the audience on an eye-to-eye basis. In *The Last of Us*, eye level camera angle features severally throughout the gameplay, which puts the player on a neutral level with the surrounding. Majority of the interactions between Joel and Ellie are done at an eye level angle. Eye level in *Until Dawn* applies repeatedly in many scenes. In the shower a close up of Sam enjoying the music and hot water shows in an eye level camera angle. Dr. Hill's office has actions taking place from an eye level angle. *Uncharted 4: A Thief's End* features eye level camera angles having the player on a normal ground. As Jameson approaches Nate with the Malaysia job for the first time, the camera angle applied is eye level. It also applies when Nate, Sam, and Sully return to their hotel room to find Elena, Nate's wife, already there. Eye level is the most used camera angle in *God of War*. Whenever Kratos talks to Atreus, he goes down on his knees to be at the same eye level as Atreus. When they meet the witch in the woods, the camera angle used is mainly eye level throughout the game.

3.3.2 High Angle

A high angle camera shot is "any shot in which the camera is tilted downward to view the subject" (Mascelli, 1965, p.37). High angles usually create a feeling of inferiority or looking down upon one's subjects. *The Last of Us* features a high angle when Joel confronts Henry for leaving them behind when they were ambushed before by the Fireflies. The shot shows a high angle from over the shoulder of Joel showing his hands on the gun pointed towards a vulnerable Henry on the ground pleading to Joel not to shoot him. In *Until Dawn*, high angle shows Beth holding Hannah while holding on to a wooden rod that seems like a tree root. The high angle shows Hannah and Beth at their

weakest as they struggle to hang on. High angle applies when the radio tower collapses. A vulnerable Emily hanging on a pole of the tower is shown on a high angle as she cries out for help from Matt. In *Uncharted 4: A Thief's End*, high angle is used for increasing perceived height as Young Nate is scared to jump across the roof as he and Sam escape from the orphanage. As Nate fights with Gustavo in prison, the camera angle changes from eye level to high angle as Nate is thrown into the mad and he overturns Gustavo having the upper hand in the fight. An injured Kratos in *God of War* after the fight with Baldur is shown in a high camera angle.

3.3.3 Low Angle

Joseph Mascelli (1965) defines a low angle shot as “any shot in which the camera is tilted upward to view the subject” (p. 41). He further states low angles often emphasize power dynamics between characters by signaling superiority complexes to reveal feelings of fear and dread. As such, low camera angles are used when presenting symbols of law, authority and order. Low camera angles are significant to the narrative especially when a character has to look up to another dominant to the story at that particular moment. In *The Last of Us*, low angle applies in the hospital when Joel wakes up from unconsciousness. When he finds out Fireflies is preparing Ellie for surgery, he confronts Marlene before a Firefly soldier knocks him down. Low angle from Joel then shows Marlene as powerful, relentless and determined to find a cure to save the world. Towards the end, the tables turn and Joel gets the upper hand. Low angle from Marlene as she begs Joel to spare her life applies, putting the player at a stronger and mighty position as s/he ends the life of Marlene to save that of Ellie.

In *Until Dawn*, low angle features as Sam climbs the wall due to a faulty gate. The angle signifies increased height showing the extent of how tough it would be to climb up. At the radio tower, the tower comes crumbling down. Low angle of Emily as she hangs on the metallic rod with objects falling towards her increases dramatic effect as she is in a vulnerable position. In Panama prison in *Uncharted 4: A Thief's End*, a low angle shows Nate disadvantaged as he takes a beating from a powerful Gustavo, a fellow inmate. As Alcazar threatens Sam, low angle effectively plays a part in the story and gameplay as it shows Alcazar as being very strong and dangerous from the perspective of Sam. In *God of War*, as Kratos prepares to cut down the marked tree to use in the pyre of Faye, the camera angle features a low camera angle showing the mark on the tree with Kratos looking at it before beginning to cut it down. On meeting Jormungandr the giant snake, low angle applies to show the mighty and powerful giant snake. As Kratos and Atreus look at it, they seem weak looking up to a giant snake. The choice of this camera angle signifies submission on the part of the player as power dynamics play on.

3.3.4 Oblique/Dutch Angle

An oblique camera angle or a dutch angle is in where the camera is tilted (Edgar-Hunt et al. 2010). In *The Last of Us* when Joel is injured after the fall at the University of Eastern Colorado, he becomes unstable due to loss of too much blood. As Ellie leads him out by supporting him, oblique camera angle is used as he falls down coupled with rushing heartbeat sound effects to show his instability, as he can no longer support himself due to the sustained wounds. This adds a dramatic effect to the scene making the player enjoy the gameplay by feeling present in the action as it occurs. In *God of War*, oblique camera

angle effectively applies as Kratos cuts down the marked tree to be used in the pyre of Faye. As the tree falls down, the camera tilts following the tree in a motion that engages the player making him/her feel the action of the falling tree.

3.3.5 Point Of View (P.O.V) Camera Angle

Point Of View (P.O.V) camera angle is a camera angle that falls between objective and subjective camera angles and views a scene from a particular character's viewpoint (Mascelli, 1965).

3.3.5.1 Objective Camera Angles

In objective camera angles, “the audience views the event through the eyes of an unseen observer, as if eavesdropping” (Mascelli, 1965, p. 14). Brian Hall (2015) observes that it is the most common angle used in film, which allows the audience to see what is happening but not be a part of it. Characters in the scene appear to be unconscious of the camera in the scene and they never gaze into the camera lens. Objective point of view camera angle has been used in *The Last of Us*, *Until Dawn*, *Uncharted 4: A Thief's End*, and *God of War*. The camera trucks behind the PCs viewing the events from the sidelines of an unknown observer for the better part of the game in some and in others throughout the entire game.

3.3.5.2 Subjective Camera angles

Subjective camera angles take the place of one of the characters (Brown, 2012) allowing the audience to be part of the action along with the characters. This ‘subjects’ the

audience to the viewpoint of the character and be the audience as well. Brian Hall (2015) states that the camera takes the character's eye giving the audience the impression of having the perspective of the character and seeing what the character sees. The audience are made to feel like they are actually present in the scene and playing the part. Subjective camera angle is applied in *The Last of Us* giving the player the perspective of Joel shooting the clickers. When Joel and Sam reunite with Henry and Ellie after being separated, bandits with snipers ambush them. Joel goes around getting the better of them. Subjective angle applies as the player sees through the sniper rifle as Joel shoots the bandits and clickers saving Ellie, Henry and Sam. In *Until Dawn*, subjective point of view features severally portraying the characters as being watched by someone. POVs of Mike and Jessica in the guest cabin create a feeling of being watched from the woods by someone tracking all their action. Before beginning a new chapter, the player meets Dr. Hill for a therapy session with Josh seeing what Josh sees. Several characters throughout the game use a set of binoculars giving the player a glimpse of what the character sees. Ashley looks through the binoculars as she spots Emily and Mike having a conversation. Soon after, Matt scares her by standing in front of it, curious to know what she was looking at he takes a look seeing Emily and Mike hugging which upsets him as she lied to him.



Figure 3.5, Subjective Camera Angle of Joel on a sniper rifle shooting bandits in *The Last of Us*

3.4 Cinematography Framing and Composition

Framing and composition are important elements in cinematography to tell effectively a compelling story in cinema. Framing in cinematography refers to the placement of subjects in the camera frame in a scene. Framing techniques in cinematography can be either open, which allows the filmmaker to include or closed that excludes the viewer from the image (Katz, 1991, p.325). Ablan (2003, p.135) elaborates that open frames involve elements which the filmmaker has no control over like birds or scenes of crowds, while closed ones are carefully and deliberately placed. Open framings encloses the subject for emphasis on a point thus including the viewer in the scene space. Closed framings allow filmmakers the freedom to exclude the viewer from the scene. Cinema utilizes both open, especially in many documentary films, and closed framing in much planned fictional genres of film. With everything thought of, planned, and deliberately placed in video games, the frame always tends to be closed.

Composition in film is the arrangement of visual elements in a scene, camera angles, movement, color, lighting, mise-en-scene, that will easily convey an intended and

deliberate message to the audience (Hall, 2015). Through composition, filmmakers draw the viewers' attention to parts of the screen that are more significant to the story at that particular moment. According to Calahan (1996, p. 12), composition collectively describes principles related to each other intended to direct viewers' attention visually. Through arrangement of these elements, Brown (2012, p. 38) affirms the audience is directed where, what and in which order to look at. The way the mind of the audience interprets, combines and organizes information into complete sets is reinforced by good composition. Blain Brown (2012, p. 38) points out that elements are emphasized in composition to create meaning that is far beyond simple and normal. It is apparent from theater, to cinema (film and animation) and now in video games that the role composition plays and its impact on the audience/players perception and significance of environments in a scene is magnificent. Video games as a visual medium have followed suit in the application of cinematic composition. To grab the attention of the player on the go, video games need to apply composition effectively in their design. El-Nasr (2005, p. 18) concurs that the perception of game environment by players relies upon visual composition, including light angles, placement, camera angles, colors, and textures in the environment.

3.4.1 The Rule of Thirds

Rule of thirds is a cinematography framing and compositional technique, which helps filmmakers effectively place their subjects/characters in the frame. It proposes dividing the frame using four lines into nine identical boxes within the frame with the four lines intersecting at four points (Wheeler, 2005). The four points where the lines intersect, as

the red dots in the figure below, are ideal for placing the characters. At these points, the rule states the composition of the frame will appear balanced, pleasing, and desirable to the eye. Placing a character at the center of the frame tends to be dull; instead, positioning the character at one-third width of the screen from either side is desiring and appealing (Ascher & Pincus, 2013).

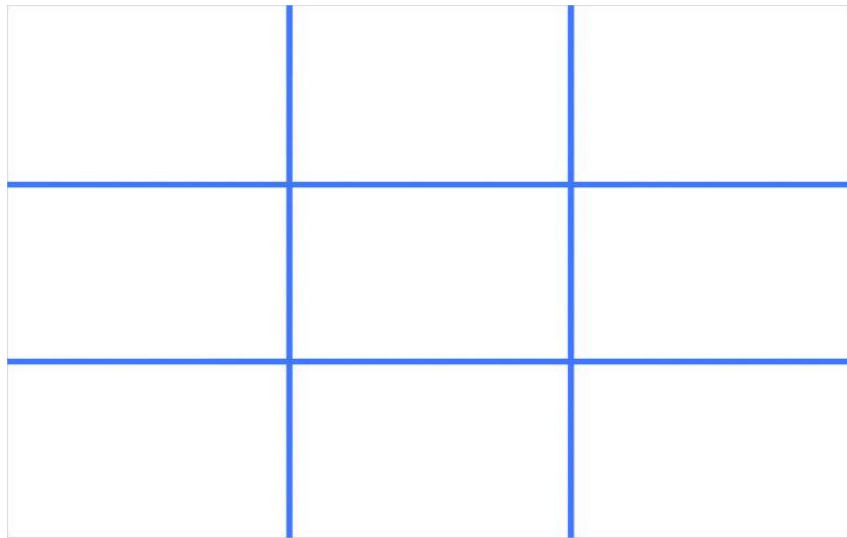


Figure 3.6, Rule of thirds grid courtesy of Spencer Cox

Narrative video games have embodied the rule of thirds in their storytelling especially during cut-scenes. Joel and Ellie in *The Last of Us* are framed using rule of thirds throughout the gameplay. When Joel and Sarah escape from the infected they encounter a military who receives orders to execute them, rule of thirds is used pitching them on one third and the soldier on the other third of the frame. When Joel gives Ellie a rifle for the first time to help out, rule of thirds is used. Rule of thirds finds its application in *Until Dawn* as well. In the scene where Mike and Chris take Josh to the shade, tying him and leaving him there, has applied the rule of thirds. Scenes have adhered to framing

guidelines of the rule of thirds in *Uncharted 4: A Thief's End*. Working as a salvage worker, Nate is framed following the rule of thirds in his office doing paperwork. While catching up with Sam outside Nate's office, they sit on the bench each on the end of the bench respecting the rule of thirds. Rule of thirds features again as Elena treats the wounds of Nate, while he explains to her of their childhood experience, after the fall from the cliff as Rafe tried shooting him. Rule of thirds begins off *God of War*. As Kratos cuts down the tree, rule of thirds is observed all through to him picking it up walking away. As Atreus finishes the kill on the deer, rule of thirds is used. Jormungandr, the World Serpent, is framed using the rule of thirds whenever she appears.



Figure 3.7, CU shot of Nate observing rule of thirds in *Uncharted 4: A Thief's End*

3.4.2 Frame within a frame

Frame within a frame implies using components of framing within a shot to frame characters and subjects to alter aspect ratio as well as focus attention of viewers on important story elements (Brown, 2012, p.50). These framing elements are in the form of doorways, windows, screens, walls among others. In narrative video games, frame within a frame has been used especially when players are hiding from enemies and/or planning an attack to call attention to them. In *The Last of Us*, Joel and Ellie hide from bandits with a truck who kill people as they look to steal from them to focus the players' attention. The action of the bandits executing the people is in frame within a frame using the windows as frames. As Joel checks around to find an exit together with Ellie, Henry and Sam, he triggers a safety gate separating him and Sam from Henry and Ellie on the other side, which indicates the separation between them. Frame within a frame using the gate is applied when Ellie tries to console Sam and Henry as he asks Sam to stay close to Joel showing their loneliness on the other end.

Jessica and Mike are about to make out when they are tormented by a stranger in *Until Dawn*. The stranger takes Jessica through the window breaking the glass. Mike is framed through the same window with broken glass as he approaches the window to find out what has happened to Jessica. This framing of Mike shows the desperation he has of being separated from Jessica. When the Stranger appears to explain about the wendigos, Chris feels guilty about Josh whom they had left in the shade. Together with the Stranger, Chris decides to go find Josh before the wendigos do. Ashley kisses him and closes the door behind them as they get out. She is framed in the door pane and frames, as she looks

worried for Chris. The beauty of Libertalia is revealed in a frame within a frame from a window Sam and Nate climb on in *Uncharted 4: A Thief's End*. As they meet more of the Shoreline mercenaries, they hide with the mercenaries framed through windows and doors as the player plans when and how to attack without being noticed. In *God of War*, Kratos is framed within frames of the door as he stands on the door for a moment before entering the house to pick up the body of Faye ready for her pyre. When Athena torments Kratos about his past, there is a frame within a frame of Athena on the door as Kratos wears his old blades, which he was trying to abandon.



Figure 3.8, MLS of Kratos in frame within a frame at the door of his house in *God of War*

3.4.3 Depth of Field (DOF)

The distance between elements in a frame or a scene that are farthest and nearest and appear to be sharp in focus is the, depth of field (DOF) as defined by Wheeler (2005, p.135). As the name suggests, DOF is an important factor in giving a film the desired depth. Films are filmed in a three-dimensional space, however, on the camera all the action is flattened out into a two-dimensional plane. The environment, scene, and even characters are placed at varying distances to create depth, but the film medium is only

two-dimensional. Calahan (1996) ascertain that depth is only an illusion created and does not occur by default (p.33). It is thus upon filmmakers to make the audience see the perceived depth. Camera placement and the distance to the focus point known as focal point plays a big role in creating perspective for the audience to understand. Changing the focal point can shift the attention of the viewer to specific points as desired by the filmmaker. This change in focal length brings about two types of DOF, shallow and deep depth of field. Ablan (2003, p.14) describes shallow depth of field as blurring anything in front and behind a subject leaving a small area in focus and deep depth of field as clear sharpness in the frame where everything is sharply visible. In shallow depth of field, the focal point is the only sharp and clear part of the image. As such, achieving depth is clear. In deep depth of field, everything being in sharp focus casts challenges to achieving a desired depth. The filmmakers are then required to be creative with the spatial distance and apply simple but creative techniques to bring out the depth. Calahan (1996, p.34) observes that bigger objects are perceived to be closer/nearer. Box (2003) agrees by stating a composition with elements at different distances creates sense of depth and scale (p.133). Similarly, saturation plays a part in bringing out depth as the brightness levels in an object assumes those of the background (Zettl, 2011, p.163).

Depth of field has found its application in modern narrative based video games in both shallow and deep. In *The Last of Us*, both shallow and deep depth of field have been applied. During winter, when Ellie goes hunting for food, deep depth of field is used as she chases the deer around to make a kill. When Joel and Tommy find Ellie, when she escaped after confronting Joel about leaving her with Tommy, is also in deep depth of

field as they head back to Tommy's settlement. On the way, Joel decides to take Ellie to the Fireflies by himself, taking one of Tommy's horses. On seeing the giraffes, Ellie runs towards them where a beautiful scene of giraffes, vegetation and the city in the background is shown in deep depth of field. Cans of baked foods are shown in shallow depth of field as are many other instances during conversations. While encountering Tess, Robert, Billy, Marlene, Henry and Sam shallow depth of field has been used.

Until Dawn has also applied depth of field in their design. Events happening at night and in mist during the winter, shallow depth of field is used repeatedly. Exterior scenes throughout gameplay are mostly in shallow depth of field. When Matt and Emily arrive at the Blackwood Pines, Mike ambushes them as they take in their bags making fun of how scared they were. This happens in shallow depth of field with mist helping to blur out the woods in the background. Deep depth of field applies in interior scenes, as mist does not offer a challenge. When Mike and friends play a prank on Hannah for being in love with Mike, deep depth of field features when Hannah realizes it is a prank. As the friends come out of their hiding spots, deep depth of field shows them emerging from closets and under the beds.

When Nate, Sam and Sully arrive in Madagascar in *Uncharted 4: A Thief's End*, the beautiful sceneries of Madagascar are displayed in deep depth of field. During gameplay deep depth of field has applied throughout the game especially where landscapes are being shown or the locations of the enemies for example at St. Dismas Cathedral while looking for Avery's grave. Shallow depth of field features during conversation scenes.

When Sam shows up at Nate's workplace, they get out of the office to catch up. In their conversations, they are both framed in shallow depth of field being the only sharp point as the background subtly blurs. When Nate finds clues from a coin about where the treasures might have been hidden, he is portrayed in shallow depth of field with Sam and Sully blurred in the background as they listen on. In *God of War*, shallow depth of field has been used extensively due to the misty and foggy setting of the scenes. When Kratos and Atreus meet the World Serpent, using shallow depth of field because of the mist in the environment, only the head and part of the neck of the giant snake is seen. Being able to be outside of their home after a long time, Atreus marvels at the beauty of the mountains surrounding them. The beauty of the mountains and the landscape is seen in deep depth of field.

3.4.5 Selective Focus

Shallow depth of field, as discussed above, allows only a part of the subject or object on screen to be sharp and clear as the rest are blurred. Selective focus is a technique used by filmmakers to present outstanding subject matter in sharp focus and the remaining part of the images slightly soft in focus or blurred out of focus (Mascelli, 1965, p.219). Through shallow depth of field and light (as will be discussed in the next chapter), the filmmaker is able to focus audience' attention to particular components in the frame. Schell (2008) ascertain that our brains uses selective focus, focusing and ignoring other things to make sense of environment around us (p.118). The human eye will then focus on the sharpest image as opposed to the blurry out of focus image. Focus may be pulled from the foreground to the background and/or vice versa to shift the attention of the audience by

accentuating a portion of the subject that is important to the narrative at that moment. Calahan (1996) notes, one focal point should dominate even if there may be more than one in a composition. necessary points of emphasis are required to help organize complicated image elements (p.14).

When Ellie confronts Joel about leaving her with Tommy in *The Last of Us*, the focus pulls from an angry Ellie to Joel who seems to have had enough of her. When they meet giraffes feeding on the vegetation, the focus is on the giraffes as Ellie looks at them then pulls away to Ellie as she turns and follows Joel to continue with their journey. Cans of food are selectively focused on as Joel and Ellie regroup with Sam and Henry and take rest in a building where they prepare food and catch up with stories. In *Until Dawn*, a stranger with a bloody machete appears as the characters are inside the hotel for the party. The focus pulls from Beth standing on the window inside of the hotel to the machete of the stranger who then walks away. After the escape in *Uncharted 4: A Thief's End*, young Nate asks Sam what next as the police will be looking for them. The focus starts with worried Nate, unaware of what the future holds then pulls to Sam offering a solution that they take up names as Francis Drake's heirs. In *God of War* when Atreus falls ill, Freya tells Kratos to tell Atreus of his supernatural powers as it is what makes him ill as he tries to fight it. The focus pulls from Kratos to Freya in the background and back to Kratos as they discuss the tense subject Kratos does not want to confront. Selective focus also appears when Kratos cuts down the marked tree to use during the pyre of his late wife. The focus begins at the marked spot on the tree then pulls to Kratos looking at the mark before cutting down the tree.

3.4.6 Compositional Lines

Compositional lines also referred to as leading lines are either imaginary lines in space or actual contours of objects that are used by filmmakers to lead and direct the viewers' eyes to focus on important parts of the scene (Mascelli, 1965, p.200). Actual lines might be a line of trees which leads the eye to the focal point, or imaginary ones such as careful placement of items within the frame that in the mind of the viewer forms a line (Hall, 2015). Modern narrative based video games feature leading lines in their design to lead players. Paths, stairways, and buildings are effectively used alongside light to direct players' attention. In *The Last of Us*, buildings and dark tunnels with light at the end of it are used to lead or hint the players where they are heading. Joel and Tess walk between buildings as they near a police checkpoint while searching for Robert. The buildings contain contours with straight lines that act as leading lines to the player. While heading to Pittsburg, Joel and Ellie see a bridge, they need to get on to cross to the other side. As they hide from Fireflies and bandits, the bridge is farther at the center of the frame with buildings on the side leading the attention to the bridge.

In *Until Dawn*, staircase and building ruins guide the attention of players to important points of the narrative. When Sam discovers a stranger is watching her while she is in the shower, she decides to look for her friends to ask them to stop playing her. She walks down staircases, which direct the players in moving her around. Pathways leading to the cabins in the game are lit in a way that directs players while moving different PCs as they move around. In *Uncharted 4: A Thief's End* when Vargas takes Nate out of solitary to show him Burnes' cell tower, corridors and staircase are used as leading lines guiding the

player to where the characters are heading. These paths have been used throughout gameplay for example during Sam's escape from prison alongside Alcazar. Stairways in *God of War* have also been used as leading lines. When Kratos and Atreus go hunting to determine if Atreus is capable of the journey, there are several stairs leading into the old temple as Atreus finds the deer. Later when the two finally make it to the highest peak of the realms, there is a long staircase, which they take to get them to scatter Faye's ashes.

3.5 Camera Movements

Camera movements are techniques used by filmmakers to vary the spatial placement of the camera in a scene. Brown (2012) notes that the most basic aspect that differentiates film and video from painting, photography, and other visual arts is the ability to move the camera (p.210). As such, this is the unique element of cinema over other visual media. Camera movements need to be motivated by the story to be effective. Brown (2012) asserts, "a move may reveal new information or a new view of the scene. The camera may move to meet someone or pull back to show a wider shot" (p.210). Nielsen (2007) adds, "camera movement can orient the viewer spatially in different ways and it is possible to distinguish between three main parameters: lending more depth or volume to the image, directing the viewer's attention to salient story information and articulating the scope of action" (p.220). Ascher & Pincus (2013) aver that pans work well when motivated by a subject moving through space. Modern video games have incorporated these camera movements in their development in more or less the same as in film.

3.5.1 Pan

Pan camera movement is the left to right movement of the camera and vice versa on the horizontal axis without changing the camera position (Brown, 2012, p.212). Many narrative based video games allow the player the opportunity to pan their cameras as they please to have a better view of the surroundings in the gameplay. Camera pans from right to left in *The Last of Us* when Joel and Marlene take down the security as they escape an attack to get to Marlene's hideout. While heading to Jackson County, it also pans from left to right from the signpost of Jackson County revealing the path towards the county, which Joel and Ellie proceed to take and make their way towards Tommy's settlement. University of Eastern Colorado is revealed in a pan camera movement panning from left to right. The camera in *Until Dawn* pans to the right from the title of Dr. Hill on the desk reveals the character of Dr. Hill as the analyst in the therapy sessions. Often, the camera tilts up from a close up of Dr. Hill taking notes to his facial expressions as he asks questions and expects answers. During the torture of Chris and Ashley, camera spins around them as they are tied to chairs showing the environment in which they are being tormented. This camera movement is effective for showing the setting of the game and places the player/audience in the mood. As Nate, Sam and Rafe conclude on the clues they gather from the cross of St. Dismas obtained by Nate, they set out to find Vargas so that they can get out of the Panama prison in *Uncharted 4: A Thief's End*. A camera pan from left to right reveals the arrival of Gustavo and his friends to pay revenge on Nate, which leads to a fierce fight among them. Pan from right to left shows Nate being thrown into the muddy water by Gustavo in the Panama Prison. The camera movement adds dramatic effect to the action appearing as if real. The camera pans from Kratos to Atreus

as he explains to him that they are more than the normal human beings are, they are immortal, and gods in *God of War* revealing their emotions.

3.5.2 Tilt

The tilt is up or down camera movement without changing the camera position (Brown, 2012, p.214). In *The Last of Us*, camera tilts as Joel and Tess set out to find Robert who stole their cache of weapons. The shot begins with the view of a tattered American flag and a military police on top of the building moving around with his firearm at hand. It then tilts down to reveal the extent of quarantine with empty streets before Joel and Tess emerge from the building into the street. The tilt applies effectively as it relays important information to the player. Being at the start of the game, it helps the player understand how the law is serious to enforce quarantine rules to keep the citizens safe. When Joel is caught up by Bill's trap, the camera tilts and spins around following the motion suspending Joel upside down. This camera movement is effective for adding dramatic effect to the gameplay making the player feel involved actively. While trying to power on the generator at the basement of a hotel, the camera tilts up and down following the hand of Joel pulling the generator starter. The same camera movement applies at the Eastern Colorado University and engages the players actively as if they are the ones pulling the action physically. In *Until Dawn*, Dr. Hill the Analyst presents a card with images on the other side for analysis by the player. The camera tilts down showing Dr. Hill's hands pushing the card towards the character then it tilts back up to show the face of Dr. Hill. The camera tilts as Sam gets out of the shower to look for Josh to turn on the generator to get hot water in the bathtub. The camera tilts from the lights in the roof in *Uncharted 4: A*

Thief's End when Nate is taken into solitary confinement after the prison fight with Gustavo. A tilt down reveals the Rossi Estate where the black market auction of the crucifix is to happen. The tilt is effective for introducing the setting of the gameplay to the player. In *God of War*, the camera tilts as the marked tree cut by Kratos falls down. This movement captures the attention of the player being at the beginning of the game to expect a great experience. Tilt camera movement when Kratos picks up the marked tree he cut down actively engages the player in the activity by the playable character. It makes the player have a sense of being inside the game and enjoying the action.

3.5.3 Long Take

A long take is a single shot taken for a long duration that allowing action to unravel in real space underlining video editing as the meaning comes from filming and not from editing (Ascher & Pincus, 2013). Once the camera starts rolling, it rolls uninterrupted for a long duration before a cut is made. Long takes utilize many different camera movements to keep the audience on toes and not make the action boring. Long take is one of the hardest techniques to pull in filmmaking and not so many directors and cinematographers can boast of achieving in their films. Marshall (2013) notes that Alfred Hitchcock is credited for being the first director to use the long take technique in the film *Rope* (1948). Hitchcock made the film to appear as if it has no cuts yet there are ten hidden cuts. At the time, no film technology would take footage longer than ten minutes. One of the few films filmed on a single continuous shot without any cut is *Victoria* (2015) directed by Sebastian Schipper. *1917* (2019) directed by Sam Mendes and cinematography by Roger Deakins is one of the recent films that successfully applies the

long take cinematography technique. The film features a sequence of long takes that are creatively edited together with hidden transitions to appear as if the film is done in one take only between scenes. Following in the steps of cinema, long take has found its way in narrative based video games. Director Cory Barlog of *God of War* (2018) brought the idea of a long take to the franchise. The game is creatively designed with the long take technique to appear as a single take throughout the gameplay. The camera moves incorporating the different camera movements to reveal different aspects of the scene, reveal characters in the variation of camera angles, and frame the scenes in the cinematography framing techniques.

3.6 Conclusion

This chapter has outlined the formal and structural elements that comprise cinematography in cinema. These elements have been broken down into different forms to understand them further independently. These forms have been pegged against the availability of cinematography techniques in the selected modern narrative video games. Indeed cinematography is a creative process that composes and tells the story in well thought of and planned formats to get the best of it. This chapter proves that modern video games on their quest to be cinematic possess these cinematic elements. Later chapters will inform on the application of these elements in the development and design of modern video games. As cinema and cinematography cannot be detached from each other, it is becoming apparent that modern video games cannot be separated from great cinematography. In the next chapter, lighting techniques in modern video games is keenly analyzed. Cinematography and lighting go hand in hand, thus, the next chapter builds up

on the previous chapters of narrative and cinematography in video games as they work together to give the player(s) a desired experience.

CHAPTER FOUR

LIGHTING TECHNIQUES IN VIDEO GAMES

4.0 Introduction

This chapter analyzes another key cinematic element that plays an important role in modern narrative based video games experience. The previous chapter looked at the incorporation and elements of cinematography in modern video games. Light is very crucial to cinematography. The camera does not see without the light. Even better, filmmakers creatively use light to affect deeply the presentation of the story to the audience. This chapter digs deeper into the different styles of lighting techniques that filmmakers use effectively to tell great stories. These lighting techniques are then sort out in the selected narrative based video games to determine their availability and use in modern video games.

4.1 Cinematic Lighting

David Landau (2014) notes that in cinema, no matter how good the newest cameras are, we cannot make good pictures without good lighting. Calahan (1996, p.12) notes cinematic lighting is primarily for storytelling. She further adds, “good lighting can make a well-composed image stunning” (Ibid, p.13). Mehmet Arslantepe is cited by Mehmet Sefa Dogru (2016), stating that the first application of light as an art is in the art by painters even before cinema existed. He asserts that lighting techniques were developed by paint artists who provided meaning on canvas to the issues affecting their times through light and colors. When cinema came into existence, it borrowed those lighting

techniques from art (drawing and painting) and turned them into an instrument for narration. The same light arrangements used by painters were transferred into cinema in organizing the images in their narration. Herbert Zettl (2011) affirms that lighting is the deliberate manipulation and control of the lights and shadows to communicate intended and specific purposes and articulates our perception of the environment (p.19). Harry Box (2003, p.131) adds that much of the artistry of light by cinematographers in the control of light is to expose characters and objects selectively to give varied shades and tones as desired.

In visual storytelling, lighting is not only for making the action visible in a scene, but to provide aesthetic meaning for the underlying story. Cinematic lighting is majorly concerned with manipulating the lighting techniques to create realistic imitation of world experiences and evoke different moods to the audience (Jackman, 2010, p.157). Herbert Zettl (2011) adds that this cinematic lighting informs how we see and feel about a scene or an event (p.20). Blain Brown (2012) is of the view that the power and effectiveness of light and color is in their capacity to get the audience at an emotional level. He adds that this gives light and color the added advantage of being able to affect the viewers on one level, while the story is being interpreted by the brain on an entirely different plane of consciousness. Jeremy Birn (2013) states that the audience while enjoying the story, will most likely not see the light but will feel it instead. David Landau (2014) on his part asserts that cinematic lighting gives an acumen of emotion that then acts on the sub-consciousness of the viewers and produce a response (p.10).

Narrative video games, in understanding the power of lighting in cinema, seek to give the player/audience an immersive experience during gameplay. Game designers have developed lighting design approaches that enable them to offer the effect of cinematic lighting. Sharon Calahan (1996) affirms that most of these approaches in lighting design borrowed largely from lighting techniques in cinema. Wisessing et al. (2016) state that lighting in computer graphics derives from cinematography to convey emotion or drama, (p.25). The agency of video games and the power of immersion calls for more creativity in game design to give the player an experience that will see him/her through to the end of the game. In visual arts, lighting has proven to be very effective in evoking different moods that resonate with the audience and the underlying story. Computer graphics is believed to have taken these practices, techniques and principles from the traditional art (drawing, painting, theater and cinema) objectively to create similar emotional experiences and impacts. Sarah Ann Martin (2018, p.10) points out games takes from traditional lighting sources and apply for greater player experience.

4.2 Properties of Cinematic Light

Sharon Calahan (1996) points out that range of tone values from light to dark within the frame dramatically affects the character and mood of an image (p.25). This range of tone values in quantity of light results in either hard light or soft light. In cinema, the hardness or softness of light is described by the type and amount of shadows it casts on the subjects and the scene as a whole (Ascher & Pincus, 2013).

4.2.1 Hard Light

Hard light is characterized by the harsh, abrupt, and sharp shadows it creates (Brown, 2008, p.49). Ascher & Pincus (2013) define hard light as a specular light, like direct sunlight on a clear day that is made up of parallel rays that produce clean, hard shadows that neatly outline the shapes of the objects.

4.2.2 Soft Light

A light is considered “soft” when it can “wrap” around the contours of the subject making the shadows indistinct and gradual in falloff (Brown, 2008). Soft light is less directional, made up of rays going in many different directions and produces much softer, gentler shadows (Ascher & Pincus, 2013). In cinema, light source size in relation to the subject plays a very important factor in categorizing light as either hard or soft. Brown (2008) affirms this by stating that the larger the source emitting light in relation to the subject, the more the light will wrap around the subject, thus, resulting in a soft light (p.49). As such, a source that is smaller than the subject cannot provide shadows with a softer gradual falloff of light. Narrative video games similarly follow this technique although the application may be different from that of cinema. With a virtual environment to work with, video games may have the flexibility of playing around with the quality of the light as well as its size relative to the subject.

4.3 Lighting Techniques

As outlined above, light is needed for an image to be registered on the camera. With light used for varying purposes in film, the direction, quantity, and quality of light is very

crucial to how the viewers will interpret and understand the scene and the whole story in a film. Ascher & Pincus (2013) affirm this by stating that the way a scene is lit by the directors and cinematographers influences how the scene will be seen, understood, and experienced collectively with storytelling. The ways used by the filmmakers to arrange, place, and direct light in a scene whether artificial or natural light are what is termed as the techniques of lighting in cinema. Cinematic lighting approaches are often visible in modern video games. Menard (2012) is cited by Daniel Willis (2014, p.9) stating that the process of creating a game's light rig is similar to techniques used by filmmakers. Even though the approach of lighting in video games is different from cinema, the conventions and principles guiding the cinematic lighting techniques are similar.

4.3.1 Light Contrast

Lighting contrast is the light intensity relationship and difference between the shadow areas and the brightly lit parts in a scene (Ascher & Pincus, 2013). This results from the difference in light intensity between the key, and the fill light (Ibid). Light contrast, depending on the amount of shadows to appear in a scene, leads to having high-key lighting and low-key lighting.

4.3.1.1 High-key lighting

A brightly lit scene with very few (if any) shadows is the high key lighting (Hayward, 2000, p.210). As per Boardwell, Thompson & Smith (2017), the three-point lighting was well suited for high key used in classical Hollywood cinema that uses fill light and backlight “to create relatively low contrast between brighter and darker areas. Usually,

the light quality is soft, making shadow areas fairly transparent” (p.129). This lighting appears flat and uniform throughout the frame. It reflects the normalcy of life as it minimizes suspense in the audience as nothing is left into imagination since the audience can see everything happening on the screen. Since no part of the scene is underexposed, high key lighting is suited for lighthearted daytime scenes, T.V news, and comedy in cinema (Zettl, 2011, Ascher & Pincus, 2013).

High-key lighting is applicable in video games. Narrative based video games especially apply this technique creatively to advance the storytelling and immerse its audience to the scenes. *The Last of Us* features high key lighting in exterior scenes and especially during spring. When Joel and Ellie encounter the beautiful wildlife feeding on the vegetation during spring, high key lighting has been used. *Uncharted 4: A Thief's End* features many exterior scenes with high key lighting. As Nate and Sam wait for a signal from Sully to make their entry into the auction in Italy and as they proceed to the auction, high key lighting is used. The scenes in Madagascar are mostly lit in high key lighting technique. In *God of War* high key lighting is used as well in exterior scenes for example when Kratos and Atreus go hunting to determine whether Atreus is ready to tag along with Kratos. *Until Dawn* does not feature high key lighting based on the genre and the narrative of the game.



Figure 4.1, High key lighting following treasures in Madagascar in *Uncharted 4: A Thief's End*

4.3.1.2 Low-key lighting

Low-key lighting relates to tension, mystery, and nighttime and has very high light contrast between the highlights and the shadows, the scene appears dark with only few brightly lit spots emphasized (Calahan, 1996, p.25). The art of lighting in classical art (drawing and painting) and cinema is more than just making things visible to the audience for the action in a scene. Light is purposefully arranged in a way that suits the storytelling aspect to help carry the narrative forward. In cinema, especially the horror and thriller genres, the darkness and the brightness are equally important. Susan Hayward (2000) affirms this by adding that in low-key lighting, the key light does not dominate as in the three-point lighting leaving the scene dark and full of shadows. Herbert Zettl (2011) observes it has few sources of light compared to high-key lighting (p.31). Boardwell, Thompson and Smith (2017) add that low-key lighting “creates stronger contrasts and sharper, darker shadows. Often the lighting is hard, and fill light is lessened or eliminated altogether” (p.129).

For many narrative based video games, low-key lighting is essential. The power low-key lighting has in storytelling is immense. In *Until Dawn*, all the scenes in the game are lit in low-key lighting technique. The game is a horror with events happening at night and players have to survive all night. In *The Last of Us*, low-key lighting applies extensively in several scenes, which are crucial to the immersion of players in the game's story. The game begins with a low-key lighting with Joel and his daughter Sarah at their home. As the number of infections increases, they are left with the only option of leaving to stay alive. Together with Tommy, they leave to get into safety, being at night, low-key lighting technique is used to tell the story. Low-key applies when Ellie is introduced to Tess and Joel as the one to be smuggled out of the quarantine zone. Young Nate in the orphanage all the way to escaping from the orphanage with the help of Sam in *Uncharted 4: A Thief's End* is lit in low-key lighting. The scenes in the prison and in the auction as they steal the cross are lit in low-key. In *God of War*, inside the house of Freya saving her boar, which Atreus shot, as well as when Atreus gets a fever and Kratos takes him back to Freya to be treated, and when Athena torments Kratos on his past are lit in low-key lighting.



Figure 4.2, Low-key lighting in *Until Dawn*

4.3.2 Ambient Light

Ambient light is the overall present light in a location and may come from either natural sources or artificial light. Brown (2008) notes, “outdoors, the ambient might be the daylight reflected from the sky and the surroundings. In a location room ambient might be an overall fill provided by bouncing a light onto a white ceiling” (p.47). One quality of light is to bounce off any surface it falls on. The lights in a scene bounce back which then creates the ambience of a space. Harry Box (2003) explains that when light bounces off or diffuses from a large plane, soft light is created (p.184).

Ambient light has been used extensively in narrative video game environments. Many of the environments on the exterior are lit using the ambient light while those on the interior are reflected to create the ambience. *The Last of Us* features a lot of bounce lighting creating the ambience in the interior scenes. Windows, doors, lamps, and spotlights are bounced on the walls, floors, and ceilings throughout the game to create ambience in

different environments. Joel's room when Tess visits him is lit by ambient light that is coming through the windows and bounced across the room using the walls. While going after Robert, Joel and Tess pass under some passage in the ruins, which have no light at all. Using spotlight torches, the light hits the walls and bounces back creating an overall available light enough to make the players see the environs the game is taking place from. On meeting Dr. Hill, the Analyst, for the first time in *Until Dawn*, he stands close to a window that allows light into the room. The light then bounces off the floor, creating the ambient light of the room. The Blackwood Pines is misty and has very low light that is the ambience of a forest set-up. Ambient light in *Uncharted 4: A Thief's End* has been used to create the feel of the environment the specific scene applies. Nighttime lighting is used when Sam helps Nate escape from the orphanage as they go after their mother's belongings. The ambience of the scenes comes from the moon coupled with streetlights at night reflecting on surfaces. Spotlights have also been used to create ambience by bouncing off the walls making the scene either visible or partially visible. Ambient lighting in *God of War* applies in the majority of the scenes. Many events in the game take place in the exteriors, which are lit by the ambience of natural lighting either a reflection of light from the clouds, on the icy grounds or through the fog. Either many of the interiors contain very huge windows and doors to let in light or light is bounced off the walls from the wall lamps and fires creating the ambience in the room.



Figure 4.3, Light bouncing off surfaces to create ambient light in *The Last of Us*

4.3.3 The Three-point Lighting

The three-point lighting is the most basic and acclaimed lighting technique in cinema. As per Bordwell, Thompson & Smith (2017), the Classical Hollywood filmmaking developed and popularized the custom of using at least three light sources for a shot. The three light sources are; key light, fill light and backlight.

4.3.3.1 Key light

The key light is the brightest/strongest and directional in the three-point lighting set up. As per Bordwell et al. (2017, p.127), the key light provides the brightest light that acts as the primary source, and casts strong shadows. Susan Hayward (2000) notes that the key light is usually “placed to the front and side of the subject who is looking between the key light and the camera” (p.209). The key light and the angles of shadows cast as the light strikes the subjects have a great effect on how emotions and associations on the

audience are evoked. Harry Box (2003) states that conventionally, the key light is usually positioned at 45 degrees above and 45 degrees to 1 side of the actor. Jackman (2010) affirms this lighting angle creates shadows of the nose across the opposite side of the face, puts light in the eyes and models the nose, lips and cheeks in a nice way.

4.3.3.2 Fill light

The fill light is “a less intense illumination that “fills in,” softening or eliminating shadows cast by the key light” (Bordwell, Thompson & Smith, 2017, p.127). Hayward (2000) explains that the fill light is a soft light that is placed near the camera and on the opposite side of the key light so that the shadows cast by the key light fall off and are filled smoothly, thus decreasing the contrast between lights and shadows in the image (p.209). In low light levels, Box (2003) observes that the ambient light level may be sufficient to fill in the shadows often accomplished by bouncing the light using a white board into the shadow areas of the face (p.155). The combination of key and fill light can be controlled as per the director’s or cinematographer’s needs in creating a satisfying feel that will have great effect to both the audience and the narrative.

4.3.3.3 Backlight

Backlight is the most effective light for filmmakers to create the three dimensional effect in cinema. Susan Hayward (2000) states that, it is placed facing the camera and behind the subject showing its the edges (p.209). A kicker light is a backlight that is from a low angle from the side. Box (2003) states that it comes from the side of the face giving form to the cheek, jaw, and hair separating that side of the subject from the background. A rim

light on the other side “is a high direct backlight that rims the head and shoulders, pulling the actor out from the background” (Box, 2003, p.155).



Figure 4.4, Rim light highlighting Matt from behind in *Until Dawn*

The three-point lighting has found its place in narrative video games usually during cut-scenes, which help push the narrative forward. In *The Last of Us* after a successful escape, Joel, Ellie, Henry and Sam take cover in a building as they wait for the right time after sunset to cross to the other side when the guards guarding the bridge are not active. Three-point light features in the room for all of them. The room is full of windows that light the characters from the key light position and the backlight. The direction of fill light reflects from the light on the walls. Marlene is lit in three point light as she sits next to the bed where Joel recovers from unconsciousness at the St. Mary’s Hospital where the surgery of Ellie is to take place. The key light comes from the front right side with the ambient light filling in the shadows. A backlight comes from the back directly opposite to the key light based on the rim light hitting her on her left shoulders and backside. This

three-point lighting in this scene continues all the way to the end of the scene where Joel kills Marlene and escapes with an unconscious Ellie.

In *Until Dawn*, in the cable car, Sam and Chris are lit in three-point lighting as they make their way to the Blackwood lodges. At the radio tower, Emily and Matt are lit in three-point style of cinematography lighting as they call for help from the rangers guarding the mountain. The light at the center of the tower beautifully lights their back highlighting a very sharp hard light around their edges. The light from the outside through the window becomes the key light while the ambiance for the room acts as fill light. Nate, Sam and Rafe in the Panama cell in *Uncharted 4: A Thief's End* look for some privacy for Nate to reveal the crucifix he found from the cell of Avery's mate. Where they find the privacy inside the prison, they are lit in three-point lighting. This lighting technique features all the way to the office of Vargas when he takes them in after the fight after he finds out Nate deceived him about what he found in the cell. Also at home, when Elena and Nate have dinner and play bandicoot afterwards three-point lighting is applied. In his office while doing paperwork, Nate is lit in a three-point light with the table lamp being used as the key light. The window on the left side caters for both the fill light and the backlight. *God of War* has equally applied this lighting technique. Coming from hunting practice with Atreus, Kratos collects the ashes of his late wife Faye from her pyre using marked trees she specifically marked before dying. Natural light is used to give the effect of three-point lighting with direct light from above acting as backlight and the ambiance being both key light and fill light. It also features on their journey to the mountains when

Kratos and Atreus meet more Draugr with beams of sunlight being the key light in the scene.



Figure 4.5, Three-point lighting on Elena in *Uncharted 4: A Thief's End*. The key light comes from left, fill light on the right, and backlight on her hair, neck and shoulders

4.3.4 Background Light

Background light is different from the backlight. As the backlight lights the subject, background light makes the background lit and not the subject. At times, the key and fill light are not able to adequately light the background, in this case a special light is added to provide the background with light (Ascher & Pincus, 2013). Background light in narrative video games is used strategically depending on the level of obscurity desired by the game directors and developers. The background is either lit or not at all. Tunnels, hallways, building interiors and environs where game scenes take place, mainly represent these backgrounds. In *The Last of Us*, backgrounds are lit or not lit in some cases interchangeably. The hallways Joel and Tess use while looking for Robert are lit partly

allowing the background to be seen in full or not lit to obscure the details of the background. In *Until Dawn*, the whole scene is selectively lit and due to high levels of obscurity, backgrounds are not lit as much. Backgrounds at the orphanage are lit by lanterns as Young Nate escapes in *Uncharted 4: A Thief's End*. Kratos' house in *God of War* has the background lit with candles. In interior scenes, the hallways are lit with practical lights, which provide sufficient light for the backgrounds.



Figure 4.6, Kratos house is lit in the background by well-placed candle light in *God of War*

4.3.5 Motivated/Practical Lighting

In narrative storytelling, light is intended to be as real and natural as possible. A motivated light also referred to as a carrying lamp or practical light is a lighting technique in cinema where a light may be shown or suggested on screen but is not sufficient to light the characters and the scene (Brown, 2008, p.56). To make the light sufficient, a stronger light is put in its place. A key way to make these lights appear natural and real is to make the light sources be “motivated” to be effective. Brown (2012, p.120) further describes motivated light in cinema as, light that is visible on the frame but is not enough to expose

the scene and thus motivates an additional off-screen light. As such, the practical light sources are rarely able to contribute enough light, which is sufficient illumination for a certain storytelling. As such, lights are placed off-camera to light the scene (Barzel, 1997, p.1).

Though the practical light is applied differently in video games from cinema, the effect is more or less similar. With a virtual environment to work with, video game developers have more freedom than the actual environment in cinema. Instead of adding off camera lights in a virtual environment, game developers only need to light the scene with the lights visible on screen. The first scene of *The Last of Us* portrays practical lighting. As Joel walks in to his daughter Sarah sleeping on the couch waiting for him, he lights a table lamp beside the couch Sarah was sleeping as he sits on it. The light from the lamp is then used as the source to light the scene. Cars' headlights and streetlights are used as they flee to safety from being infected. During therapy sessions with Dr. Hill in *Until Dawn*, he turns on the light on his table, which then acts as the source of light for the scene. Candles are used as practical lights when Josh, Chris, and Ashley summon the spirits to know what happened to Beth and Hannah. Ashley afterwards picks one of the candles and uses it to light as she moves around with Chris as they find the library at the lodge. Young Nate and the Nun at the orphanage in *Uncharted 4: A Thief's End*, are lit by the practical table lamp in the room. While in his office doing paperwork, Nate is lit from the table lamp and his computer, which are on the same side of his table. While looking for a way to the power source to shut it down at the Rossi Estate in Italy during the auction of the crucifix, Sam and Nate encounter a room with barrels from which they

have to find a way. Sam lights his cigarette lighter, which is then used to light the scene as a practical light. In *God of War*, many interiors are lit using practical light. Lamps and fires in the rooms and along the corridors and pathways are applied as sources of light. When Atreus goes to pay his last respect to his mother, he lights the candles and use them as the light in the room. These candles are used as practical lights as the direction of the light on characters, even as Kratos joins, indicate them as the source of light.



Figure 4.7, Candles around the body of Faye, Atreus' mother act as motivated lights in this scene of *God of War*



Figure 4.8, The two table lamps in the motel of Nate in *Uncharted 4: A Thief's End* act as practical lights providing the light for the scene

4.3.6 Chiaroscuro Lighting

David Landau (2014) defines chiaroscuro lighting as the use strong of light contrast between bright areas and shadowy ones within the frame. The effect obscures as much as it reveals of a subject or a scene. Susan Hayward (2000, p.210) adds that chiaroscuro emphasizes this highlight and shadow contrast, is associated with psychodrama, horror, film noir, and thriller films. This kind of lighting was used in paintings during the Baroque era and was termed “chiaroscuro” which is an Italian word meaning light and dark (El-Nasr et. al, 2006, p.4). At the time, this lighting was meant to create a sense of modeling the image and giving the illusion of depth and dimension to the image (Jackman, 2010, p.92). Zettl (2011) asserts that, “the basic aim of this type of lighting is to articulate space, to clarify and intensify the three-dimensional property of things and the space that surrounds them (p.38).



Figure 4.9, Chiaroscuro of Annunciation by Matthias Stom courtesy of Arts and Culture

Narrative video games have equally embraced chiaroscuro lighting in their designs. Chiaroscuro applies in *The Last of Us* when Marlene introduces Joel and Tess to Ellie for them to smuggle her out of the quarantine zone. In addition, when James captures Ellie and locks her up as he waits for her to join her cannibalism and give out Joel, chiaroscuro lighting features between Ellie and James. *Until Dawn*, a horror game, has greatly applied chiaroscuro in lighting the characters as well as the scenes at large throughout the game. Scenes at the Blackwood Pines are mainly lit in a chiaroscuro design. The way light strikes specific places in the location is intentional by the game designers. As the friends hide under the beds and in the closet, they remain darkly lit with only strips of light hitting Mike and top of the bed. Hannah and Mike are then lit with one side of their faces having extreme shadows as the other side contains sharp highlights. Hard light has been used creating very sharp shadows on the other side of the face making the contrast between the highlights and the shadows very distinct such that we cannot see the features of the other side of the face.

Nate in a Panama prison is taken into solitary after a fight with another inmate, Gustavo, in *Uncharted 4: A Thief's End*. In the solitary cell before Vargas gets him out, it is lit in chiaroscuro style. The lighting continues in the stares as Vargas leads him out so he can check out Avery's mate cell for any clues on the fortunes stolen from the greatest heist in history. The story of Sam with his encounter with drug lord Alcazar in the prison cells is purely done in chiaroscuro lighting where there is very high contrast between shadows and highlights. Chiaroscuro lighting also features at the Rossi Estate where the crucifix of St. Dismas is being auctioned. In *God of War*, in the house where the body of Faye lies as

Kratos and Atreus give their last respects before her pyre is lit in high contrast between shadows and highlights. Many interior scenes with pathways and staircases have also embraced this lighting throughout the game. As Athena torments Kratos over his past as he goes for medicine that will help cure his son Atreus, chiaroscuro lighting applies.



Figure 4.10, Chiaroscuro light on Hector Alcazar in *Uncharted 4: A Thief's End*

4.4 Effectiveness of Lighting in Narrative-based Video Games

In cinematic storytelling, light serves more than just illumination for a scene. It is an art form to create a unique experience and communicate information to the audience by filmmakers. Jackman (2010, p.8) explains that failure to connect with the viewer translate to the failure of the art. As such, for light to be effective in any form of storytelling it has to fit into the story. The light should not be out of context that it calls attention to itself and causes uneasiness on the audience in comprehending the story. Jackman (2010) avers that a great lighting “will reinforce the emotional or psychological impact of what is

happening on screen” (p.9). For instance, high key lighting has a neutral effect while extreme use of it can create a sterile atmosphere like a hospital. Low-key lighting on the other hand portrays a sense of mystery and drama due to uncertainty contained in the shadowy areas.

With the influence of cinema, video game designers have identified light design functions, which are similar to that of cinematic lighting based on cinematic theories. Calahan (1996) and El-Nasr (2005) point out these functions as being similar to those in cinema as outlined by John Alton (1995). These functions include;

1. Directing the player /viewer’s attention by establishing visibility to important elements in the scene.
2. Establishing atmosphere and mood.
3. Creating a sense of depth and perspective by making the scene appear three-dimensional.
4. Maintaining visual continuity and creating aesthetic pleasure.

To understand fully the effectiveness of the cinematic lighting techniques in modern video games, it is imperative to analyze based on these functions of light to contribute to storytelling.

1. Visual attention and direction

The primary objective by filmmakers for good lighting that complements the story is to direct the eye of an audience where to look to create meaning on their own. Sharon

Calahan (1996) puts it in a clear way that in film, shots appear on-screen briefly, as a result, the effectiveness of storytelling from a shot depends on how quickly viewer(s) sees the key elements of story (p.12). Hayward (2000) attributes the contrast value in brightness (highlights and shadows) of the light for being the factor that makes it easy for the eye to see. Bordwell et al. (2017, p.125) add that, brightly exposed parts catch our attention while details are hidden in the shadows to create suspense at the right moment. Low-key lighting being very selective on what should be seen or/and not seen is used to help direct the attention of the viewers to parts of the scene more purposeful to the story. In this manner, the hint given to the detail enriches the story more than if it was lit well (Calahan, 1996, p.25). This effect creates suspense and tension in the audience. It is important for narrative based video games to understand this powerful effect of light in their game design. El-Nasr (2005) found in a study that due to poor lighting that did not support good visual direction, subjects were unable to spot enemies fast enough and would die very quickly. Players would then quit out of frustrations for not being able to proceed.

In *Until Dawn*, low-key lighting, which is more common with horror films, is used entirely in the game. The deep light and shadows contrast in the game is dramatic and makes it easy or hard for the players to see. The dark shadows obscures the enemies hiding around making the players active as they expect anything from those shadows. The lighter parts on the other hand offers visual direction to the players as it contains actions. Motivated lights on the path leading to the cable car as Sam gets into the mountains helps to direct the viewers' attention. This is a crucial element for storytelling

as it enables the player to see the path and prepare accordingly to what is to come. Tunnels are also lit in a way that offers visual direction to the player. For instance, when Mike is going after Jessica, the tunnel is lit to make it easy for the player to see where they are headed. With that lighting, it is easy to spot the mysterious man who is assumed to have taken Jessica.

The fusion of low-key lighting and high -key lighting in *The Last of Us* effectively works in favor of the player in as far as visual direction in gameplay and storytelling go. The high contrast in low-key lighting adds a dramatic effect for the story. When Joel is caught up by Bill's trap, a dramatic lighting is used alongside the dramatic moment. From the dark comes the clickers and the infected to attack Joel and Ellie. The contrast enables players to see the enemy soon enough to terminate them before getting to them. In the high key, the light is sufficient for players to see what is going around them and where they are headed. As Joel and Ellie traverse the different parts of the United States setting, the fusion of high key and low key enables players to have a view of where they are headed. The use of spotlight enables visual direction and attention to important elements in the game. Practical lights in the hallway of the hospital are aligned to help direct the players' attention where action is.

Uncharted 4: A Thief's End utilizes low-key and high key lighting in different seasons of the game for visual direction specific to those seasons. Low-key lighting at the orphanage where Young Nate stays is strategic in that the contrast makes it easy for the player to see. The paintings of the Founders are lit giving them visual dominance over the others in

the scene. These images are very significant to the story and the gameplay as they contain critical clues to the players. Practical and background lights in the game offer visual dominance from the contrast making the players spot enemies easily at the same time obscuring them in the dark. During the escape of Alcazar, practical lights in the corridor provide direction to the player seeing the escape route and making haste to escape.

Similarly, in *God of War*, the high contrast of light coupled with selective lighting offers the players' visual attention and direction. As Kratos and Atreus pay their last respect to Faye, the lighting in the house is low-key with high contrast between light and shadows. Pathways have been lit with practical lights that help get the attention of the players directing them to important action on the gameplay and storytelling. In the final scenes of the game, the walls containing drawings and the story of Faye and Atreus, which Kratos did not know, are on display. They are lit in a manner that commands visual attention over the rest and are sentimental to the story of the game.

2. Evoking mood and setting the atmosphere

To filmmakers, setting the mood and atmosphere right is key to creating emotional participation in the audience. Lighting used plays a crucial role in making it possible for evoking different moods in the audience to be flawless. According to Harry Box (2003, p.132), light unconsciously locates the scene in time and space evoking varied moods on us. As per Dogru (2016), light affects time and space as bright weather might give a sense of delight and rainy and/or dark the impression of depression or sadness (p.630).

Showing the time of day and weather seasons are important in placing the story in a specific setting/time zone putting the audience in the feel of that period in time. Calahan (1996) states that lighting can suggest a feeling for a certain shot or scene even before understanding the story. She further depicts that light itself expresses symbolism in life. Alton (1995) concurs stating candles are good for mystery, bring back memories for the old and symbolizes romance for the young (p.52). In horror films, light is sentimental in inflicting fear, maintaining vulnerability, and sadness on the audience. The lack of light is equally important to its presence in a scene. Unlit and dark areas command attention just as the lit areas. Bordwell et al. (2017) note that low-key lighting is often applied to somber, threatening, or mysterious scenes common in horror films and film noirs (p.130). Hayward (2000) adds that the use of low-key lighting with deep shadows and oblique angles create a sense of dread and anxiety (p.129).

Low-key lighting of *Until Dawn* helps to set the mood of the game. Being a horror game, the aspect of mystery and creating fear is important to the story as well as the gameplay. With the obscurity that comes with the lighting, it puts the players in the space of not knowing what to expect and being vigilant for any outcome. The scenes take place at night and the lighting used supports that making the players feel in an environment at night. As players head to the mountains the environment feels real with mist in the surrounding. The lighting applies effectively into putting the players in the mood of being alone in a cold place being watched by certain creatures. Carlquist (2002) states that candles have a specific feel that reminds the old of their youthful days and are loved by the young for being associated with gay scenes such as romantic dates as well as in

church. This is crucial in *Until Dawn*, as candles have been used for the same reasons. While summoning the spirits, Josh, Chris and Ashley are lit using candles, which creates an intense mood of memory and guilt as the spirit of Beth asks for help. In the romantic scene between Mike and Jessica in the guest cabin, they light a bonfire that serves as the scene's primary source of light putting the player in the mood of romance. Flares of light providing the ambient light in Dr. Hill's office bring the mood of normalcy found in the hospitals as the players seek mental help from the analyst.

The lighting in *The Last of Us* is suitable for evoking different moods. With ambient and bounce lighting being the major lighting technique in the game, light is bounced off surfaces to give different feels for different settings. When Tess goes to check in on Joel, ambient light bouncing off surfaces gives the feel of morning chills as Joel wakes up. The light suggests optimism as the day begins in their journey. After the death of Tess, Joel and Ellie pass through tunnels as they hide from the military police after them. They come across a tunnel infected with clickers and if they breathe the air, they too become infected. The lighting used is misty with the air filled with infectious air putting the player in the same mood as Joel and Ellie. In spring, they encounter animals and vegetation growing back and the light feels fresh. High key lighting with sun in the vicinity offers the player a sense of normalcy giving a feeling of hope and optimism. During winter, the light is misty and high key as Ellie struggles to survive and feed a wounded Joel. The setting feels cold and hard on the players as they control Ellie. The low-key light contrast inflicts the mood of fear on the player as it obscures the vision of the player with enemies hiding in the dark.

Low-key lighting in *Uncharted 4: A Thief's End* has been used for somber and dramatic moods in the game. Right at the start of the game during a storm with heavy lightning and thunder, low-key lighting places the player at the center of the storm feeling part of the action. While in solitary confinement at the Panama prison, Nate is taken into a room that is very dark and locked up alone. The light puts him in darkness away from the light, which secludes him from the rest of the prisoners. This puts the player in the feeling of being lonely and disadvantaged. The dramatic chiaroscuro used with Alcazar puts the player in a frenzy mood, as it is mysterious and full of uncertainty with a dangerous man full of mystery himself. In the chapter Normal Life, three-point lighting is used deliberately to reflect the normalcy of life as it is associated with normal light. The characters are equally trying to lead a normal life that they are not used to. High key lighting is used in Madagascar, which puts the player at ease and in the mood and energy of a safari adventure in the summer. *God of War* carries a very sad and somber mood of a family in agony of losing their loved one and trying to fulfill her wishes. While preparing her body for the pyre, Atreus lights candles around his mother's body. The candles become the primary source of light putting the players in a sad mood as they reminisce about the good old times with their loved ones. Low-key lighting with high contrast as Athena torments Kratos about his dark past is dramatic, putting the player in the mood of reflecting and embracing the past however dark it is.

3. Establishing depth and perspective

For film and television, Jackman (2010) states that the only available tools for conveying depth are shadows and highlights created by lighting, depth of field, and camera movements (p.92). Lighting in cinema plays a very big role in giving the perception of three dimensionality; depth, shape, and perspective. Blain Brown (2012) observes that for filmmakers, making a flat image seem as being three-dimensional is the biggest job (p.106). Ascher & Pincus (2013) state that the angle from which light strikes an object has an effect on how shapes and textures are seen. The three-point lighting harmoniously works together to make the images on screen desiring and compelling to complement the narrative. The backlight in three-point lighting accentuates the lines that separates the background and the subject by highlighting the edges of the face, shoulders and hair of the subject.

Modern narrative-based video games use the backlight widely to give form to the characters, clearly separating the characters from the background helping players to see their game world environment with ease. Three point lighting and background lighting techniques in *Until Dawn*, *The Last of Us*, *Uncharted 4: A Thief's End*, and *God of War* apply in giving dimension and perspective to the gameplay environment. The characters are lit in three-point lighting throughout the game with the backlight delineating the characters from the background. Background light across the paths, tunnels, hallways add depth to the game environment allowing the players to see different depths and distances of objects. The light offers shape and texture to the characters as key light spills over to the fill side. For instance in the welcoming note in *Until Dawn* by Josh to his friends for

their annual winter getaway, there is use of three point lighting creating a dramatic effect as there is very high contrast between lights and shadows. At the hospital in *The Last of Us* where the operation was to be done, three-point light and background light are effective in adding depth on a plane that would otherwise appear flat. In *Uncharted 4: A Thief's End*, three-point lighting during dinner between Elena and Nate is used to add depth in their living room which without the lighting there would not be any shape and depth. In *God of War* as Kratos cuts down the marked tree to be used for Faye's pyre, three-point lighting gives perspective to the character. Rim light and side lighting in *Until Dawn* have also been used to add depth such as in Fig. 4.4 with a shot of Matt in rim light. The high contrast in the low-key lighting adds depth to the characters.

4. Maintaining visual continuity

Keeping the audience on toes in following the story and inflicting suspense of what is to come next throughout the film is very crucial in storytelling. Calahan (1996) notes that the decision to use hard or soft light usually arise from the quality of drama contained in the story and should be consistent or may vary with the time of day and/or location (p.25). The light can be consistent throughout the film or can vary from locations and different seasons in the story.

In *Until Dawn*, the light is consistent throughout the game. Events happening at night until dawn, the low-key lighting used suits the mood of the gameplay and storytelling. The light thus creates a continuous flow of the visuals from the beginning to the end. The lighting technique does not confuse the players as it is maintained throughout. In *The*

Last of Us and *Uncharted 4: A Thief's End*, the light varies from different locations to another. With events happening in different seasons of the year and different locations far apart, it is eminent to have the unique representation of the different seasons. The games perform very well to transition from one scene to another as well as one location to another without affecting the gameplay and distracting the player. The design of the games transitions smoothly from indoors to outdoor scenes appearing as natural as in cinema. The light in *God of War* equally maintains visual continuity in the game. Throughout the journey of Kratos and Atreus, the light is consistent and adapts to the scene. For instance, while entering the belly of the giant snake, the light gradually transforms from light to dark in a way that seems so natural.

4.5 Conclusion

This chapter has endeavored to discuss the cinematic lighting techniques in cinema and if they are applied in video games. It started by describing what is referred as cinematic light, then delved deeper into the different lighting techniques in cinema. This chapter sought to find out if these lighting techniques apply to narrative video games, and indeed modern video games are influenced by the lighting techniques in cinema. Even though cinema has equally borrowed some lighting techniques from other media, especially painting, video games have been inspired by cinema more than any other traditional media. This chapter brought forth relevant examples from sampled modern narrative based video games that can stand the test of comparison in terms of lighting techniques against great films. The following chapter analyzes how effective these aspects of cinema (narrative, cinematography and lighting) are to modern video games.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter relays the summary of findings and conclusions reached upon by the study. Recommendations are given as far as the study of incorporation of cinematic aspects in modern narrative based video games is concerned.

5.1 Summary of Findings

Narrative based video games have made tremendous effort in ensuring aesthetic pleasure as well as offer one of a kind gameplay experiences to the players. This study, Aspects of cinema in modern video games: Analysis of Sony Interactive Entertainment video games, sought to investigate the influence of cinema on these video games as they both share the visual narrative media. Cinema being around longer has influenced in one way or another how video games view and apply certain aspects for greater returns in player experience.

The study had objectives that aimed at;

1. Identifying the aspects of cinema used in modern video games.
2. Exploring how modern video games employ aspects of cinema in their design.
3. Evaluating the effectiveness of aspects of cinema on modern video games.

From the first study objective, elements of cinema including narrative, cinematography and lighting techniques were relied upon to analyze aspects of cinema in modern narrative based video games. The study finds that indeed these identified aspects of cinema are available in modern narrative based video games.

From the second study objective of exploring how modern video games employ aspects of cinema in their design, narrative based video games clearly incorporate aspects of cinema in their design. However, in some aspects they do not apply and fulfill them the exact same way as in cinema. For instance, in narrative, they incorporate some narrative structures as in cinema. In video games, the narrative structures do not apply in full as in cinema. The hero's journey structure by Joseph Campbell does not feature fully but in part in some video games with the theme of heroism. Many of the phases of the journey do appear as many video games are based on the aspect of heroism, but not all the phases are relevant. The context of having a beginning, a middle and an end in the three-act structure qualifies narrative in the video games in the realm of three-act structure. However, video games tend to differ by including branching narratives, which take away from the linearity of many cinema narratives into the unique nonlinear form. With the three-act structure, the exposition bit is prolonged in cinema, in video games, keeping the player active as soon as possible is key to keeping them engaged and interested in the gameplay. As such, video games do not offer a prolonged expository sequence as in cinema. They make them short and provide the player with conflicts and challenges, which is exactly video games' main purpose. Interactivity is the basis upon which video games are centered. In cinema, the audience is passive as opposed to an active audience in the form of the player in video games. Thus, a story can continue running in film even if the audience is not present. In video games, the story is solely dependent on the actions of the player. Nonlinear narrative structures become relevant to video games to offer the player the satisfaction of being in control of their actions. The story can take the traditional linear structure adding on to the nonlinear formats to live and deliver the story

firsthand. The player experiences and carries forward the story. If the player does not engage with the gaming console, nothing happens and as a result, there is no story told.

As for cinematography techniques, video games employ a variation of camera shots and angles, framing, composition and camera movements used to advance the storyline and gameplay. Just as in cinema where the camera angles, shots, movements, framing and composition communicate a message to the audience, narrative based video games use sequences of different camera shots, movements, angles, framing and composition to pass information and message to the player. These cinematography techniques are deployed in a manner that complement each other to fully maximize storytelling similar to the Kuleshov effect in cinema editing. Long shots and wide shots have been used in introductory scenes of these games, coupled with camera movements, the camera shots change swiftly to medium and close up shots keeping in mind the composition rules. These kind of sequences do well to align the player in the narrative setting as well as introduce the characters they interact with in the gaming experience. In some instances, these cinematography techniques interfere with the player experience during gaming. This is especially in the use of quick time events and cut scenes, which are similar to short films. During cut scenes, little or no control at all is accorded the player in the gameplay. Games will deploy cut scenes with varied camera shots such as long shots as establishing sequences at the beginning. This is the case in the selected games for the study. All the four narrative based video games open with exposition sequences using cut scenes where the player has little or no control to gameplay. Narrative based video games have not struck an effective balance to this to have the story relayed to the player using

the same creative cinematography techniques while still having the player actively engaging with the gameplay.

On lighting, narrative based video games spend a good time on game design dedicated to the lighting team. This is in recognition of how powerful lighting is to storytelling. The lighting team spends hours and days configuring the lighting sources, positions, and color to create a desiring mood and atmosphere for the game/story world that appear trustworthy to the scene. El-Nasr et al. (2006) explain that with the Expressive Lighting Engine (ELE) based on studies from lighting techniques in cinema and theater, game designers can achieve cinematic lighting. ELE is an automatic intelligent lighting system that uses theories from film to select and configure the lighting technique in video game design. Many modern video games rely on ELE to light their scenes to create different moods for players. Vivian Ding, the head of lighting design for *The Last of Us* echoes the sentiments of El-Nasr on how ELE is used to design lighting techniques in the game. As such, based on the knowledge of lighting in cinema, these video games do their best to apply the techniques effectively.

From the third objective, evaluating the effectiveness of aspects of cinema on modern video games, the study finds out that some modern video games have done well in effectively applying aspects of cinema even though more needs to be done to reach full potential. The growth and progress is immense, however, some still struggle in effectively applying aspects of cinema in their design. As for narrative in video games, it is unique in its own way. The means, which the story is narrated in video games, is very

different from that of cinema. As such, the application of narrative in video games is effective in its own way as it forges its own unique way of telling the story in the new forms. With the story relying upon the actions of the player to proceed, poses new ways of the story are told differently from that of cinema. Modern video games effectively apply cinematography in their design. This could be as a result of all types of video games relying upon cinematography. Narrative based video games analyzed in this study have effectively incorporated different techniques of cinematography that creatively build up to create unique stories and deeper meaning to the players. These sequences orient the player in the setting of the narrative, introduce the characters and offer pleasure in the gaming experience. The only downside in cinematography is the interference with player experience during gaming. This comes through cutscenes and quick time events, which are similar to short films that take away from gameplay. The lighting in these video games have been done effectively to appear as realistic as possible. The light changes smoothly across the gaming environment without being noticeable by the player. The lighting is evident it has been created to create different moods for different occasions, enriching the story.

Just as in cinema, in video games these aspects of cinema (narrative, cinematography and lighting) work jointly in a form of symbiotic relationship. The individual aspects rely upon the other to be effective. It is prudent to point out that without these aspects of cinema, there would be no narrative based video games at all. Without the involvement of the camera, any narrative in the script remains in the category of literature and comic books. Without the narrative, the camera will just wander around without any focus or

meaning, and without the light, the camera sees nothing, which then informs nothing on the visual medium. Thus, in narrative based video games, the narrative provides the basis for the conflicts to be encountered and the story to be told by the player. Cinematography provides the means through which the story is portrayed. The art of lighting brings the game world, setting and gaming experience to life as in the selected video games.

Technology advancement plays a very crucial part in the realization and effectiveness of the aspects of cinema in modern video games. The clarity in terms of resolution differs from one console to the other. With the advancement in technology of PlayStation (PS), gaming consoles from PS3 to PS4 to the recent upgrade of PS5 in 2019 dictates the complexity of immersion as far as aspects of cinema are concerned. With PS5 being able to hold up the ultra-high definition (UHD/4K) resolution, players prefer to play games on it connected to a screen of the same resolution for the higher clarity and the environment seeming real leading to deeper immersion. The artistic craft of cinematography and lighting then gets to be appreciated even more in the higher resolution. This enables the players to spot their enemies and targets easily compared to PS3 with a resolution of medium high definition (720p). As a result, players spend longer time playing the game from higher resolution compared to frustrations from low-resolution consoles. Technology being a mediating variable in the study, the study finds that application of aspects of cinema in narrative based video games will vary with technological advancements in both hardware and software.

5.2 Conclusions

This study, *Aspects of Cinema in Modern Video Games*, concludes that, indeed video games have immensely grown over time and incorporate aspects of cinema in their design. Starting as a product to pass time and have fun, video games have positively grown to offer more than just enjoyment. Great stories and themes on issues affecting society such as parenthood and responsibility are being tackled by narrative-based video games. Modern narrative based video games are at a point of being able to be compared to great films in line with the aspects of cinema as evidenced by the awards nomination and recognition. As a result, modern narrative based video games have been influenced greatly by cinema. Cinema being an older visual media has influenced narrative video games in the way of storytelling and immersion. This study finds that modern narrative video games incorporate aspects of cinema in their development and design, though not exactly the same as in cinema. Video games have borrowed narrative, cinematography and lighting techniques from cinema and deployed them in games to get the better of audience enjoyment and engagement in gameplay and understanding of the story.

In application of aspects of cinema, video games have made steadfast growth in correctly applying these cinematic techniques. Some video games are excellent at correctly applying the aspects of cinema that the effect is seamless. As video games continue advancing and taking on the lessons from previous failures, it is very clear that the application of these aspects will be on point. There are improved graphics and cinematography coupled with lighting techniques in video games that improve how the narrative is relayed visually to the players. Screenplay writers from film are sought after

in video game narrative design to give insights on how to relay the narrative to the audience in the most effective means possible. As such, narrative based video games are still going to need cinema for a while as a reference organ in their promising growth.

5.3 Recommendations

The study recommends;

1. Further Studies

There are several aspects of cinema, which did not fall in the scope of this study such as sound design, editing, color among others. This study recommends other studies be done in line with these other aspects of cinema in relation to modern narrative video games.

With the adaptation of video games into films and vice versa, there is a need to conduct more studies on the relationship between the two narrative media. In light of aspects of cinema being incorporated in video games, this study recommends studies to be done on the aspects of cinema during the adaptation from one to the other. For instance, if a video game adapts narrative from film, does it equally apply the aspects of cinema the same way the film applied them or do they deviate and make their own? As it goes for film, does it enhance the aspects of cinema in the adapted video games and make them better, or do they undermine them and focus on the story only?

2. Game developers and Filmmakers

The study recommends to video game developers and designers to apply cinematic aspects effectively for a creative course that advances the storytelling and complete

pleasure in gameplay. Video games need to find a balance on how to relay key information to the player without interfering with gameplay using cut scenes. They can seek advice from experts, study and incorporate techniques in cinema to take full advantage of game play and storytelling.

It is clear there exists a very thin line between cinema and modern video games. This is accentuated by the incorporation of the two in each other's medium. For instance, *Free Guy* (2021) film incorporates the aspect of video games in its storytelling. The story revolves around Ryan Reynolds who plays the character of Guy, who is an NPC in the game Free City in the film. Scenes crossover from film world into the game world characters in the film playing the PCs in the game. The thin line between cinema and video games getting even narrower is a true testament of close ties between the two. As such, this study recommends the industry players to employ each other's expertise, get more creative, and take advantage of the visual medium of storytelling to tell even more great stories. In the development of films and game design can incorporate the skills of the other.

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APPENDICES

Appendix I: Observation guide

ASPECTS OF CINEMA		NOTE YES/NO	DESCRIBE APPLICATION	EVALUATE EFFECTIVENESS
Narrative	Narrative structure			
	Elements of narrative (Plot, Theme, Character, Conflict, Setting, Perspective)			
Cinematography	Camera shots and angles			
	Composition and framing			
	Camera movement			
Lighting Techniques	Hard and soft light			
	High key and low key			
	Three-point lighting			
	Bounce lighting			
	Chiaroscuro			

Appendix II: Research Authorizations



KENYATTA UNIVERSITY GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke

Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 020-8704150

Internal Memo

FROM: Dean, Graduate School

DATE: 1st October, 2020

TO: Mr. Franklyne Manono Mudulia
C/o Department of Communication, Media,
Film & Theatre Arts

REF: F67/38972/2017

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

=====
This is to inform you that Graduate School Board, at its meeting on 11th September, 2020, approved your Research Proposal for the M.A. Degree entitled, "Aspects of Cinema in Modern Video Games: Analysis of Sony Interactive Entertainment Video Games."

You may now proceed with your Data collection, subject to clearance with the Director General, National Commission for Science, Technology & Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking and Progress Report Forms per semester. The forms are available at the University's Website under Graduate School webpage downloads.

Thank you

EDWIN OBUNGU
FOR: DEAN, GRADUATE SCHOOL

CC. Chairman, Communication, Media, Film and Theatre Arts Department

Supervisors:

1. Prof. John Mugubi
C/o Communication, Media, Film and Theatre Arts Dept.
Kenyatta University
2. Dr. Eliud Situma
C/o Communication, Media, Film and Theatre Arts Dept.
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P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 020-8704150

Our Ref: F67/38972/2017

DATE: 1st October, 2020

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

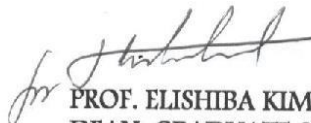
**RE: RESEARCH AUTHORIZATION FOR MR. FRANKLYNE MANONO
MUDULIA – REG. NO. F67/38972/17**

I write to introduce Mr. Franklyne Manono Mudulia who is a Postgraduate Student of this University. He is registered for M.A. degree programme in the **Department of Communication, Media, Film and Theatre Arts.**

Mr. Mudulia intends to conduct research for a M.A. thesis Proposal entitled, **“Aspects of Cinema in Modern Video Games: Analysis of Sony Interactive Entertainment Video Games.”**

Any assistance given will be highly appreciated.

Yours faithfully,


PROF. ELISHIBA KIMANI
DEAN, GRADUATE SCHOOL

ED/sww