Nemesis Narratives

The relationship between embedded and emergent narrative in *Middle Earth: Shadow of Mordor*.

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Abstract

As digital games have become a potent cultural and economic force, they have come under more scrutiny from a variety of academic disciplines. A point of contention has been the role of narrative in digital games, in large part due to the fact that the interactivity inherent to games presents a problem for more traditional conceptions of narrative structure. Narrative in games can be broadly categorized in two forms: **embedded narrative**, which is pre-scripted and designed as a property of a game itself; and **emergent narrative**, which is the experiential narrative constructed by the player as they play the game. These two forms are observed as being closely related and connected in a relationship of necessity characterized by the reliance of emergent narrative on embedded narrative elements for its generation. This relationship represents a pattern across games which tell an explicit story, specifically action/adventure and roleplaying games. *Middle Earth: Shadow of Mordor* challenges this standard because it contains a gameplay system (the Nemesis System) which generates dynamic characters that grow and change due to the player's actions. The system also produces events which are specific to these characters, and unique to a given player's experience of the game. The player's emergent narrative, made unique by the dynamic nature of the Nemesis System, influences the embedded narrative of the game. In this way, *Middle Earth: Shadow of Mordor* represents a break from the strict relationship of necessity between embedded and emergent narrative. The Nemesis System represents a new development in the structure of game narratives, and indicates the potential of game systems for the generation of emergent narrative which is not strictly bound to embedded or pre-designed narrative.

Keywords

games, embedded narrative, emergent narrative, narrative structure, emergent characters, emergent events

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table of contents

CHAPTER I // INTRODUCTION

Digital games have emerged in the last decades as a potent cultural and economic force, as well as the subject of a new academic field. Within the study of games, one of the most challenging questions has been whether or not games are narratives, and how interactivity affects the telling of a story. The question of whether games are narratives or not is not the focus of this thesis. Instead, this thesis seeks to explore how games tell their stories and to identify how this is changing.

Within the academic discussion regarding games and stories, many scholars have contributed their observations. Across the literature, we see a fundamental distinction between two forms of narrative that exist in games. Salen and Zimmerman describe these two forms by using the terms *embedded narrative* and *emergent narrative*, originally proposed by Marc LeBlanc (2004, 382-384). Embedded narrative refers to pre-scripted or pre-generated narrative content, which has been specifically designed by the game's makers. Aarseth refers to four dimensions which games and narratives share (the world, objects, characters, and events), which are in essence all embedded narrative elements (2012). Emergent narrative, on the other hand, refers to the narrative which arises through gameplay. Emergent narrative can also be described as the player's experiential narrative. Calleja terms this form of narrative *alterbiography*, a narrative generated through the player's interaction with a game and actuated in their mind (2009, 2011). In action/adventure or role-playing games, the settings, characters, and events which define the story are all embedded narrative content, while the player's experience of playing the game brings about an emergent narrative. But while these two forms of narrative seem to be different in kind, they are also closely related. A player's personal narrative is framed within pre-scripted embedded narrative content, and is therefore never truly free and unique but always limited to that narrative content. While embedded and emergent narrative are two distinct phenomena, they are not mutually exclusive. In games which tell a distinct story, emergent narrative is generated in the context of embedded narrative content. The reliance of emergent narrative on embedded narrative is pervasive in the design of game narratives, and is certainly present in most action/adventure and role-playing games.

In this thesis, a game which features a seemingly unique narrative structure will be analysed in the context of the distinction and relation described above. *Middle Earth: Shadow of Mordor* (Monolith Productions 2014) was widely applauded for the innovation it displayed in its Nemesis System, a system which populates the gameworld with dynamically generated enemies that are connected through a network of internal power struggles. The signature feature of this system is that the dynamically generated Orcs are unique for each and every play-through of the game.

In addition to this, the player's actions influence the network and continuously affect the balance of power between these Orcs. Interaction with the Nemesis System constitutes the majority of gameplay, and the dynamically generated enemies and events are integrated seamlessly into the game's narrative progression. This thesis seeks to understand the workings of this device in terms of the distinction and relation described above, by answering the following question:

> *What is the role of the Nemesis System in the narrative structure of Middle Earth: Shadow of Mordor?*

In the following chapter, the academic positioning of this thesis will be laid out, and the case in question will be described in more detail so as to frame the central research question.

ACADEMIC POSITIONING

Many digital games tell a story of one kind or another. They vary wildly in their gameplay, design, and budgets, but they share the common feature of a narrative. The strength of digital games that tell stories, and the reason for their critical and economical success, is that they draw players into fictional worlds that the players can adventure in and interact with.

Despite this success, the connection between stories and games has been the focus of a great deal of academic debate in the last twenty years. To talk about games and stories is to talk about the relationship between narrative and interactivity, two concepts which seem to be in conflict. The root of this conflict lies in the perceived tension between the notion of the linear narrative flow of a story and the interactivity inherent to games. The relationship between interactivity and narrative has been described as a dichotomy of two opposing concepts:

> "Interactivity is almost the opposite of narrative; narrative flows under the direction of the author, while interactivity depends on the player for motive power." (Adams 1999)

> "There is a direct, immediate conflict between the demands of a story and the demands of a game. Divergence from a story's path is likely to make for a less satisfying story; restricting a player's freedom of action is likely to make for a less satisfying game." (Costikyan 2000)

> "Narrative meaning, moreover, is the product of top-down planning of a storyteller or designer, while interactivity requires bottom-up input from the user." (Ryan 2006, 99)

These quotations put forward the idea that narrative has a clear flow from its creator to the receiver or audience. A story is structured; it is carefully crafted by its author

and is communicated to the receiver the same way, every time. Events occur in the order the author or director intended, controlled by what Ryan describes as a top-down structure. A rigid top-down structure, as Costikyan suggests, would indeed make for a very boring game. Digital games are interesting precisely because they allow the player to explore the possibilities of the game and play within its structure. A digital game which tells a story must allow for the player's potential actions, and the story that the game tells must be designed with these actions in mind. In this way, digital games are truly different artefacts than novels and movies, which impose a tightly structured experience in order to tell their stories. In departure from the thinkers above, the position I wish to take in this thesis is that interactivity is not an obstacle for game narratives, but an asset.

The form of interactivity that is inherent to games and problematic for traditional notions of tightly controlled narrative is referred to by Eric Zimmerman as *explicit* interactivity (2004, 158). This form of interactivity is characterized by participation with designed choices in a text. The interactor, by making decisions within the structure of the text, plays an active role in its progression. Instead of simply absorbing a story as it is told or shown, a player actually engages with (and plays a role in) the story. This is what I consider the defining characteristic of stories in games. However, the nature of interactivity in game narratives is not without nuance. In her chapter "Toward an Interactive Narratology" in *Avatars of Story*, Marie-Laure Ryan discusses interactivity in game narratives in terms of the player's influence on the story world and their position in it (2006, 107-108). The case study of this thesis, *Shadow of Mordor*, is a game which places the player in what Ryan would call an *internal-ontological mode* of interactivity. In this mode, the player is positioned in the gameworld where their actions play a role in the evolution of the world and story. In *Shadow of Mordor,* this mode of interactivity essentially means that the player has control over the game's main character, the protagonist of the narrative. Whereas in a novel or film the actions of the protagonist are strictly described or depicted, a game cedes control over this character and by association the progression of the story, to the player.

Interactivity in the form of player control over the story's protagonist gives the player **agency** in that story. In my view it is critically important to discuss player agency in narrative, because it is what makes games unique among storytelling media. My assertion is supported in part by the observations of Ken Perlin (2004), who compares agency in the narratives of novels and games. Perlin outlines what I see as the key difference between a notion of agency in terms of a novel or film, as opposed to a game. He makes clear that when reading a novel, the reader experiences the agency of the protagonist as they move through the story. Perlin notes that novels ask their readers to set aside their agency and observe the agency of the protagonist (Perlin 2004, 13-14). Because the reader sets aside their agency, they are able to

absorb a carefully constructed story. In contrast, games rely on the player's agency being mapped onto the protagonist. Janet Murray (2004) also discusses player agency, and frames it as the bridge between games and stories. In Murray's view, the merging of player action and plot brings about dramatic agency. Dramatic agency is what digital games, as interactive systems with rich virtual environments, allow the player to experience: "When the world responds expressively and coherently to our engagement with it, then we experience agency" (Murray 2004, 10). In order to determine the player's agency in a game, it is essential to look at how the game's narrative is structured. When applied to the aforementioned distinction of embedded and emergent narrative, agency highlights the difference between the two. Embedded narrative is scripted, and therefore any agency the player has is limited by the design of this narrative. Emergent narrative is defined in large part by the player's agency, as it arises from the gameplay, yet only exists in the player's mind. While games are unique as storytelling media because they incorporate the player's agency into their narratives, the way this is done is constantly being refined and improved upon. Murray calls for investigation into how different games go about implementing player agency in the story they tell. The goal of this investigation should be to "identify what works, especially what works in new ways" (*ibid*, 10).

Shadow of Mordor seems a fitting case to do precisely what Murray has called for: to identify a combination of story and interactivity that pushes the boundaries of what game narrative can entail. The game offers an example of a system that incorporates player action into the evolving state of the game world. More precisely, the player's influence on the gameworld facilitated by the Nemesis System represents a new way in which player's agency is incorporated in a game's narrative. This paper will investigate whether the structure of player agency in the narrative in *Shadow of Mordor* potentially problematizes the relationship between embedded and emergent narrative typical of game stories.

CASE IN QUESTION

Before moving forward with the Theoretical Framework which will guide this analysis, this case must be described in a more detail. While I have played the game at length, I cannot assume my reader has done the same. For the sake of clarity common ground must be established.

Shadow of Mordor is a game which takes place in the fictional world of Middle Earth imagined by J. R. R. Tolkien (Doughan n.d.). Set between the events of *The Hobbit* and the trilogy *The Lord of the Rings*, the game tells a story that never took place in Tolkien's books. The player's character is a ranger named Talion who is murdered alongside his family by the lieutenants of Sauron, the embodiment of evil in Middle Earth. Though the game opens with Talion's death, it is only the beginning of the player's journey. In his death, Talion's body becomes the host of a mysterious wraith,

and the two set off to exact vengeance upon Sauron's followers and sow chaos into the ranks of his army of Orcs. Throughout the game, the player slowly discovers who this wraith is, and why the two of them have been connected.

As mentioned above, the Nemesis System is what makes *Shadow of Mordor* unique, and it plays a central role in the gameplay and story. In a 'making of' video marketing the game's release, multiple Monolith designers speak about their desire to create something new within action-adventure games, "something that reflected your actions back to you, but not in a scripted way, in a way that gives you the freedom to play the game however you want to" (ShadowofMordor 2014). To this end, the designers developed a system that makes the player's interaction with Sauron's army more than a straightforward process of fighting nameless bad guys. Just like in most action-adventure games, much of the gameplay in *Shadow of Mordor* revolves around combat with a seemingly endless supply of enemies. But unlike the thugs in the *Batman: Arkham* franchise (published by Warner Bros. Interactive Entertainment 2009-2015) or the soldiers populating historical cities in *Assassin's Creed* games (published by Ubisoft 2007-2015), the Uruks that Talion faces are not generic non-player character 'mobs' (computer controlled enemies) that merely stand in the player's way (Tronstad 2014, 363). Instead, the Nemesis System uses dynamically generated orc enemies and dynamically generated events to create conflicts which are unique to a given play-through.

The team behind *Shadow of Mordor* had a clear vision about what they wanted the Nemesis System to achieve. In the words of Michael de Platter, the design director for *Shadow of Mordor*, the dynamic systems which make up the system were intended to "create unique stories at the same time as proposing varied and challenging gameplay scenarios" (Quoted in Amini 2014). In a postmortem report on *Shadow of Mordor* posted on Gamasutra, de Platter also stated that Monolith's first goal was a "commitment to creating systems which empowered players to create and share their own stories" (de Platter, 2015). From its inception, the Nemesis System was intended as a gameplay system that would allow the players to experience their own narratives in an otherwise authored storyline.

As stated, what motivates the research in this thesis is the new and unprecedented way in which the Nemesis System weaves the player's agency into the story of *Shadow of Mordor*. This warrants an investigation into how present theory on games and narrative can describe what is going on in this game.

CHAPTER II // THEORETICAL FRAMEWORK

The purpose of this chapter is to construct a provisional theoretical toolkit for the analysis of narrative in games. Because a theory on game narrative currently don't offer such a toolkit, this framework will synthesize existing theoretical work in order to address a pattern which exists in the literature. As was laid out in the Introduction, this framework is based around the distinction and relationship between embedded and emergent narrative. It is important to note that this framework will not apply to all games, and it is by no means a definitive or unified theory of game narrative. It does however offer a structured understanding of how narrative functions in action/adventure and roleplaying games in terms of emergent and embedded narrative. Once I have clearly defined this relationship, the resulting theoretical framework will be applied to the analysis of *Shadow of Mordor* and the Nemesis System.

INTRODUCTION - NARRATIVE OPERATORS

To to open this discussion, I will address a number of ways in which narrative operates in games as opposed to other media. Narrative in games is complex, and before embedded and emergent narrative can be discussed, it is necessary to clearly delineate what levels of narrative I will be considering. For this purpose, I draw on the work of Celia Pearce, who defined six different narrative operators in her article *Towards a Game Theory of Game*. The distinctions that Pearce discusses form the basis for my understanding of how narrative is associated with games. Outlining these operators will assist in narrowing the scope of this theoretical framework.

The first operator that Pearce discusses, which she claims is "a component of all games by definition," is *experiential narrative* (*ibid,* 145). This is the narrative that develops from the inherent conflict of the game as it is played, the narrative that is experienced by players. *Performative narrative* is that which is seen by spectators of a game in progress, similar to experiential narrative, but it exists outside of play. *Augmentary narrative* consists of "layers of information, interpretation, backstory, and contextual frameworks around the game" and serves primarily to enhance other forms of narrative (*ibid,* 145). *Descriptive narrative* refers to the potential retelling of game events to a third party, which is external to playing the game. A game's *metastory* is the overarching narrative structure or "obvious 'storyline'" a game may possess. And finally, Pearce defines a *story system* as a "kit of generic parts that allows the player to create their own narrative content" (*ibid,* 145). Examples of story systems are simulation games such as *The Sims* (Maxis, 2000) or grand strategy games as can be found in the *Total War* franchise (designed by Creative Assembly 2000-2016). In *The Sims*, players are given a number of tools which allow them to create characters and settings (the homes of their Sims) which then play a part in an

unfolding narrative based on interaction with the rest of the gameworld. In *Total War* games, the player commands an empire on the battlefield and in diplomacy. There is no set, strict storyline to these games, but as the player engages with the gameplay mechanics, narrative content (the rise and fall of world powers) is generated. Using the narrative operators listed above, Pearce breaks down the potential narrative analysis of all manner of games, from *The Sims* and *Everquest* (989 Studios and Verant Interactive 1999) to Chess, as well as a game of basketball.

As a framework, Pearce's six narrative operators seem to cover all the bases of potential narrative a game can include, or bring about. For the present discussion, however, not all are equally useful. As was noted above, performative and descriptive narratives refer to narrative that is external to the game itself being played. Gordon Calleja cautions that "A constructive analytical framework needs to differentiate between the narrative experienced by the player actively engaged with the game and a derivative, secondary narrative that is produced out of this, which becomes, in effect, a form of synopsis" (2009, 3). I agree with the assertion that performative and descriptive operators are secondary to the player's experience. However, I would add that they are also removed from the narrative inherent to the game itself, what the average gamer would refer to as the game's story. Because this thesis is concerned with the structure of narrative inherent to *Shadow of Mordor*, the performative and descriptive operators will not be considered.

The narrative operators that are relevant to the distinction of embedded and emergent narrative are the experiential narrative, metastory, and story system that Pearce discusses. For the purposes of this framework, these should not be considered concepts which are exclusive of one another, but rather as terms which can describe layers of narrative in games. Moving forward, experiential narrative will refer to narrative which comes about through play and exists in the mind of the player; metastory will refer to a game's authored storyline and its plot; and story system will be used to describe a systematic structure that allows for the creation of narrative content. These three operators are a starting point for the discussion of embedded and emergent narrative that will follow.

EMERGENT AND EMBEDDED NARRATIVE

The concepts of emergent and embedded narrative - whose first mention is commonly attributed to Marc LeBlanc's presentation at the 1999 Game Developer's Conference - are pervasive throughout the literature on game narratives. As stated in the Introduction of this thesis, these two terms constitute the central distinction this framework is concerned with. In *Rules of Play*, Salen and Zimmerman discuss embedded and emergent narrative as the two forms of narrative associated with games (2004).

Salen and Zimmerman define embedded narrative as "pre-generated narrative content that exists prior to the player's interaction with the game" (*ibid*, 383). As suggested by the etymology of the term embedded, embedded narrative is narrative content which has been **put into** the game by designers; it is pre-scripted and is a property of the game itself. Salen and Zimmerman frame embedded narrative as the story context of a game, as it is designed to "provide motivation for the events and actions of the game" (*ibid,* 383). In my view, embedded narrative is synonymous to the 'authored narrative' of a game. Pearce's earlier discussed notion of the metastory is an aspect of a game's embedded narrative. This is because the 'obvious storyline' of a game is also a pre-scripted, pre-determined aspect of the game (Pearce 2004, 145).

While Salen and Zimmerman discuss embedded narrative, they do not specify what elements of games should be considered part of that narrative. For insight into what should be considered the narrative elements of games, I turn to the work of Espen Aarseth (2012). He focuses on the shared constituent components of games and stories. Aarseth's approach is to "see the ludo-narrative design space as [having] four independent, ontic dimensions: WORLD, OBJECTS, AGENTS, and EVENTS" (Aarseth 2012, 130). Aarseth contends that every game and every story contain these elements, but games configure these elements in unique ways. The world of a game can be divided into the playable space, or ludic space, and the extra-ludic space which can be seen but not played in (*ibid*, 131). Game spaces can vary from a limited labyrinth structure in which players can only move in straight lines, to open-world structures which allow for non-linear exploration. When discussing objects, Aarseth notes that some games allow the player to manipulate or even create objects, such as weapons or armor in *World of Warcraft* (Blizzard 2004), though these are usually not connected to the game's story (*ibid*, 132). In many cases, games include objects which are important to the story of a game, such as a key which opens the door barring progression in dungeons in *Legend of Zelda* games (Nintendo 1986-2016). The agents, or characters, in a game are analogous to those in any story, as they can be shallow or deep, and their influence on the progression of the story can vary (*ibid*, 132). Finally, events are an integral part of games just as they are in stories. When discussing events, Aarseth refers to Seymour Chatman's view that events "have not only a logic of connection, but a logic of hierarchy" (Chatman 1978, 53). This hierarchy refers to the fact that some events are essential for the recognition of a story, which Chatman calls kernels, whereas others are supplementary, or satellite events. For instance in *Final Fantasy X* (Square 2001), an example of a kernel event would be defeating the final boss (because without this event the story of the game would not be complete); while defeating an optional boss would be considered a nonessential satellite event. The world, objects, characters, and events discussed above constitute the narrative elements of games which I will consider throughout this thesis.

With this in mind, **embedded narrative elements** are part and parcel to nearly all games. They are the pre-generated characters and objects that populate a game world, the designed spaces that the character can navigate through, and the pre-scripted events which define the plot of the game's story. In a large, open-world game such as the *Fallout 4* (Bethesda Softworks 2015), every environment, character, and minor or major storyline has been carefully crafted: the hallmark of embedded narrative content. Even though the player character is customized at the outset of the game, giving the player influence in the narrative, pre-recorded dialogue associated with this character (specific to their gender and regardless of their physical appearance) places this character firmly in the embedded narrative framework of the game. Embedded narrative elements certainly play a prominent role in *Shadow of Mordor*, as my analysis will show.

If embedded narrative is pre-generated and pre-scripted, then emergent narrative represents its converse. Emergent narrative is described by Salen and Zimmerman as arising from the set of rules governing interaction within the game system (2004, 383). This is the narrative that is constructed while the game is being played: the challenging opponent which must be overcome in a battle, or the journey of the player (embodied in the playable protagonist) through the game world. Salen and Zimmerman link emergent narrative to the coupled and context-dependent nature of interaction with a game system (*ibid*, 384). Narrative elements are linked recursively, coupled in a way that gives rise to patterns of interaction, which can then be interpreted as narrative patterns. At the same time, interactions are context-dependent, which means that as situations change over the course of play, the emergent narrative evolves. For example, a once challenging enemy may over the course of the game (as the player grows in skill or the character becomes more powerful) become easy to defeat. Emergent narrative is analogous to Pearce's experiential narrative, in that both are the product of the game being played (2004, 145). Additionally, story systems can be understood as generators of emergent narrative, because they provide players the resources to create their own narrative content.

PROBLEMATIC DISTINCTIONS

Throughout the literature, the categorization of narrative as emergent or embedded seems to be viewed as a spectrum on which games can be plotted as either one or the other. Such a spectrum is present in Marie-Laure Ryan's distinction between *narrative games* and *playable stories* (2009, 45-47). Ryan views narrative games as games in which story is merely meant to enhance the gameplay experience (ibid, 45). This story is embedded into the game, and frames the goals as story context for player action. An example which would fit Ryan's notion of a narrative game is *Super Mario World* (Nintendo 1990), where the player's actions resemble running an obstacle course, but this action is framed as a journey to save the princess. Playable

stories, on the other hand, are games in which the gameplay brings about a story (Ryan 2009, 46-47). Ryan describes that in a playable story "there is no winning or losing: the purpose of the player is not to beat the game, but to observe the evolution of the storyworld" (*ibid*, 47). She makes reference to *The Sims* as the archetypal example of a playable story.

Henry Jenkins also discusses emergent and embedded narrative in his article on environmental storytelling, where he seeks to outline a middle path for discussing games and narrative[1]. In his framework, embedded narrative is associated with 'detective games' where the player must sort through the environment to find clues that construct the narrative. When discussing emergent narrative, Jenkins chooses to speak about *The Sims* as well, and describes it as an "authoring environment within which players can define their own goals and write their own stories" (2004, 128). Both Ryan and Jenkins put forward frameworks that seek to divide games that either emphasize embedded or emergent narrative. Thus, the distinction between these two forms of narrative is used as a categorical classification of games.

However, Salen and Zimmerman problematize such a distinction when they point out that embedded and emergent narrative are not exclusive to one another: "Ultimately, the unique narratives games produce come from a balance of both these approaches" (2004, 384). The embedded narrative of a game works in concert with a given play-through's emergent narrative to produce the eventual overall narrative experience. Salen and Zimmerman point to mission-based games as good examples of a combination of embedded and emergent narrative (*ibid*, 384). In this example, the overall narrative frame is pre-scripted, but the moment to moment gameplay of a given mission represents an emergent narrative. What Salen and Zimmerman make clear is that embedded and emergent narrative are not separate phenomena and that games cannot be so easily categorized as either one or the other.

While I agree with this view on embedded and emergent narrative, I feel that there is still something missing from the framework Salen and Zimmerman provide. They do not go far enough in discussing how these two forms of narrative relate to one another. They discuss a balance between emergent and embedded narrative, but not how each of these distinct forms of narrative weighs on the scales. In order for these concepts to be more than descriptive terms, the way in which they interact must be taken into account. In the next section, the relationship between embedded and

[1] The debate which characterized the beginning of the study of narrative in games and came about as a result of a number of theorists, referred to as ludologists (Aarseth, Frasca, Juul, and Eskenlinen most notably), calling for games to be studied as phenomena independent of other narrative media. This came about as games were being studied from within other scholarly disciplines. Their call to action for a new field of study, namely the study of games themselves (hence the name ludologists) was frequently interpreted by proponents of narrative in games (among them Jenkins, Murray, and Ryan) as excluding stories from games. Though this debate is still ongoing, a number of the ludologists have addressed the fact that such an exclusive outlook was not their intention (Aarseth 2012, Frasca 2003).

emergent narrative will be analysed in order to construct a comprehensive understanding of their role in this thesis's framework.

DISCUSSION

In his 2005 article, Espen Aarseth describes the relationship between games and stories as a "hierarchical one: game engines [are] potential storytelling devices, but not vice versa. [The] game system is the more basic, fundamental, encompassing structure; the story is merely one of its possible uses" (Aarseth 205, 503). While Aarseth seems to regard narrative games as subservient to game systems, he does allow for stories to come about through games. Aarseth identifies the *quest game* as a structure which has the potential to synergize with narrative. He defines quest games as having a concrete goal that is more than simply 'winning' the game (*ibid,* 497). Aarseth's description of these goals seems to place them as part of a game's embedded narrative, "a fixed sequence of predetermined events that cannot be circumlocuted through gameplay" (*ibid*, 497). He describes the quest as the best 'story-like device' available to game designers. Quests provide the player with narratively framed goals, and push them to move in the direction intended by the game's designers (*ibid*, 503).

Considering Aarseth's assertion that quests provide a narrative context which motivates the goals of the player's character, they can be understood as embedded narrative structures. Further synthesizing the concepts and approaches I have discussed so far, we can draw other parallels and connections. Quests are in essence the mobilizers of the 'story context' Salen and Zimmerman attribute to embedded narrative (2004, 383). Because quests provide the narrative framework for the player's action in a game, they convey the metastory of a game and embody the overarching structure of embedded narrative. These kinds of quests are often referred to in gamer parlance as 'story quests' or 'story missions', terminology which is indicative of their connection to a game's embedded narrative. Additionally, 'side quests' or 'side missions' are also examples of embedded content, even though they do not play a role in the overarching story of a game. This discussion of story or side quests mirrors the distinction between kernel and satellite events put forward by Chatman (1978) and assimilated in Aarseth's (2012) work applying narrative theory to games. A side quest is not essential to a game's story in the same way that a satellite event does not need to occur in order for the story to stay recognizable. On the other hand, game stories rely on story missions to advance the narrative of a game in the same way that kernel events define a story. Aarseth's quests are a concrete manifestation of embedded narrative in games, but it is important to note that quests are framed as the motivating force behind player action. As has been discussed, emergent narrative is a product of player action in a game. Taking this into account, the experiential, emergent narrative a player constructs can be understood as motivated by the underlying, embedded narrative quest that the game

presents. In order to support this understanding, the construction of emergent narrative needs to be elaborated upon.

Gordon Calleja, in his 2009 article, focuses primarily on the experiential aspect of a narrative in games.[2] As Pearce's definition makes clear[3], emergent narrative is synonymous with experiential narrative. Calleja coins the term *alterbiography*, a distinction which refers to the narrative generated by the player's interaction with the events occurring in the game environment, the objects and agents that they encounter, and the game's rules (2009). The elements that Calleja explicitly describes as necessary for the generation of alterbiography are the same elements of embedded narrative which feature in Aarseth's discussion of narrative elements in games (2012). In order to construct an emergent narrative, the player must interact with the game, and its embedded narrative properties. Calleja considers the alterbiography as unique to the player's interpretation, but this narrative is generated by their actions in a game which has been designed and filled with embedded narrative elements. In a subsequent essay, Calleja refers explicitly to the role of scripted narrative elements of games in the construction of the alterbiography (2011). In doing so, he points to the relationship between embedded and emergent narrative that this section is seeking to explore. In Calleja's view, the scripted narrative elements give context and shape to the alterbiography, but the alterbiography in turn influences the interpretation of the scripted narrative. This leads Calleja to describe the relationship between the alterbiography and scripted narrative as circular. In my opinion this characterization is problematic. We cannot say that embedded narrative is influenced by emergent narrative to the same degree, this relationship is not symmetrical. Embedded narrative is a property of the game itself and is therefore static. No matter what emergent narrative a player constructs, embedded narrative elements will stay constant. Calleja's alterbiography is a good concept for the overarching consideration of emergent narrative, but his framework does not address smaller, individual moments of gameplay and their role within emergent narrative.

A useful concept to better understand the relationship between embedded and emergent narrative, is the distinction between the layers of narrative arcs in games, as introduced by Jim Bizzocchi. He refers to the narrative arc of a game as "the framework for the sequence of events that make up the plot we see, and the story we

[2] Referring to the work of Salen and Zimmerman and Pearce that was discussed earlier in this chapter, Calleja warns against the broad application of experiential narrative to all forms of gameplay experience (2009, 3). He states that these authors "stretch the notion of experiential narrative beyond its limit as a useful concept when they fail to make the distinction between abstract games, sports, and virtual game environments." (*ibid*, 3) I am in fervent agreement with Calleja on this, and this is a central reason that I have not included theories that seek to apply to abstract games (such as Chess) in this framework.

[3] "*Experiential:* The **emergent narrative** that develops out of the inherent 'conflict' of the game as it is played, as experienced by the players themselves." (Pearce 2004, 145)

imagine" (Bizzocchi 2007, 3). Within this thesis's framework, the narrative arc is a clear example of embedded narrative. Bizzocchi puts forward the notion that a game's narrative arc can be broken down into units of narrative. Games which tell stories have a *primary narrative arc*, which correlates to the player's progression through the game as a whole, but also can contain *subsidiary arcs*, which exhibit their own narrative progression and cohesion (Bizzocchi, Nixon, DiPaola and Funk 2013). Jenkins was the first to refer to this structure in relation to spatial storytelling in games, and described them as localised arcs, suggesting the term *micronarratives* (2004, 7). Bizzocchi et al. consider these smaller narrative units to be organized in layers: "Narrative units range from the game-long story framework that forms the backbone of the experience, down through all varieties of game levels, missions, and side quests, which are in turn made up of a number of individual micronarratives" (Bizzocchi et al. 2013, 1).

The relationship between narrative arcs is best illustrated by an example. In a game like *Call of Duty: Black Ops* (Treyarch 2010), the player progresses through the missions that make up the structure of the game. While the game as a whole has an overarching embedded narrative arc, each of these missions also have embedded narrative arcs. These smaller narrative arcs contribute to the primary arc, providing the player with a cohesive experience of the embedded narrative. Emergent narrative comes about through what Bizzocchi et al. refer to as the micronarrative arc, which comes about through gameplay itself (2013, 10). The experience of the player as they tackle a given challenge within a mission or level constitutes a micronarrative. In the context of this thesis's framework, micronarratives are the constituent elements of the emergent narrative a player constructs. It is important to note that these small moments of emergent narrative still rely on embedded narrative elements in order to come about. The gamespace of the mission, the enemies the player faces, and the narrative context of the mission are all embedded narrative content. Without these elements, there would be no mission, and therefore no emergent narrative could be constructed.

The notion of micronarrative is useful for an understanding of how emergent narrative comes about through gameplay, and how it plays a role in narrative cohesion. It supports the claim put forward by Salen and Zimmerman that emergent narrative works in concert with embedded narrative in order to produce the unique narrative experience games provide (2004, 384). Micronarrative illustrates the relationship that this discussion has been working towards: that emergent narrative relies upon embedded narrative for it generation.

A RELATIONSHIP OF NECESSITY

As the previous section has shown, embedded narrative is a distinction which includes the dimensions of games outlined by Aarseth (2012, 131-132), Pearce's

notion of metastory (2004, 145), the quests discussed by Aarseth (2006, 497-503), and the primary and subsidiary narrative arcs described by Bizzocchi et al (2013). Embedded narrative, or authored narrative, refers to a game's obvious story or plot, as well as the elements which constitute this story. Embedded narrative is designed, it is scripted and as such is a property of the game itself.

While narrative elements in games are embedded, the player's interaction with these elements brings about emergent narrative. Emergent narrative includes the experiential narrative which emerges from gameplay at its smallest scale, at the level of micronarrative (Jenkins 2004, Bizzocchi et al 2013), and coalesces into a player-specific story, or alterbiography (Calleja 2009, 2011). Emergent narrative is constructed on the fly, as the game is played, and reflects the choices and actions of the individual player during play. It is important to note, that any emergent narrative will be rooted in the embedded narrative properties of a game: a game's characters, spaces, events, and quests. Because it arises through gameplay, emergent narrative serves to connect the player's action, or agency, to a narrative.

Throughout this chapter, I have discussed the relationship between embedded and emergent narrative. These two forms of narrative represent two sides of a dichotomy present across game narrative. As noted above, multiple theories which address narrative in games discuss elements of both of these forms. While Ryan (2009) and Jenkins (2004) frame this distinction as a dichotomy which implies categories of games based on these two forms of narrative, this conception is not sufficient. Ultimately a game cannot be classified as either an example of emergent or embedded narrative, as both exist side by side. Emergent and embedded narrative are two different phenomena: one is property of the game, the other a property of the player's experience. However, this does not mean that these two forms of narrative are completely unrelated. In action/adventure and role-playing games, embedded and emergent narratives are not mutually exclusive and independent of one another. To the contrary, any possible emergent narrative relies on embedded narrative elements in order to be generated, while the opposite is not true. By definition, embedded narrative content is a property of the game itself, whereas emergent, experiential narrative is activated by the player, and framed in whatever embedded narrative content is inherent to the game. If a player does not activate a particular embedded narrative event or encounter a particular character, it does not mean these embedded narrative elements do not exist. They are still part of the embedded narrative structure which provides the potential for emergent narrative to come about. Emergent narrative depends on embedded narrative elements for its generation, and while it colors the play through, it is of no consequence to the overarching narrative.

From this we can conclude that the relationship between emergent and embedded narrative is not one of mutual exclusivity, but rather that embedded narrative is a necessary condition for any emergent narrative. From here on out I will refer to this as a relationship of necessity between embedded and emergent narrative. With this framework in place, we have a means by which we can approach the narrative of *Shadow of Mordor* and the Nemesis System's role within it. This investigation will address the consequence of integrating dynamically generated characters and events into the progression of the game's narrative. These events and characters are not embedded, and not pre-scripted: they are a product of the game's systems at work. The question becomes whether the case chosen in this thesis fits within this framework, or whether it challenges and problematizes it.

CHAPTER III // METHODOLOGY

In the previous chapter, prevalent theory regarding games and narrative was placed in a theoretical framework which can be used to address the structure of narrative in *Shadow of Mordor*. Before any analysis can take place, however, the methodological approach used in this case must be outlined.

Espen Aarseth (2003) describes computer games as simulations which are capable of portraying anything. When considering a methodology for approaching digital games, Aarseth states that "this omni-potential for simulation means that computer games can portray, in principle, any phenomenon we would care to think about, and so, also in principle, no research area is excluded" (*ibid,* 1). Egenfeldt-Nielsen, Smith, and Tosca outline five main perspectives within game studies (2013, 10). The first of these perspectives is to look at the *game* itself, analyzing the components and structure of a particular game in order to say something about its design. Another area of study focuses on *players*, with interest in the activity of play and the trends associated with it, as well as the social space constructed by some games. Game *culture*, or the subcultures associated with particular games are also provide an interesting dimension for study. Discussions which deal with the *ontology* of games are concerned with the philosophical foundations of games and try to present general observations which apply to various examples, such as the relationship between rules and fiction that Juul (2005) explores. Finally, there also exists the data-driven approach which focuses on *metrics*, in order to provide insight to the connection between game design and actual player activity through quantitative analysis.

Because the question guiding this thesis concerns the narrative of *Shadow of Mordor*, the perspective I have taken in this analysis is to look at the *game* itself. The common methodology which is employed to study games as artefacts is a textual analysis (Egenfeldt-Nielsen 2013, 10). Clara Fernandez-Vara provides a framework for analysis of games in her book *Introduction to Game Analysis* (2015). She outlines three areas of analysis which can yield insights about games: Context, Game Overview, and Formal Aspects (2015, 13-16). Vara's areas of analysis list the dimensions of games which can be studied and do not constitute a concrete methodology. As such, I have drawn upon some of the elements she describes in order to give structure to my textual analysis. In general, this analysis has focused on the formal elements of *Shadow of Mordor*, which I will describe in more detail below.

Problematically, an established typology of the formal elements in games does not exist. The 'formal elements of games' are usually discussed in very broad terms. As

an example, Calleja refers to the formal properties of a game as its "representational, mechanical and medium specific qualities" (2009, 4). Defining the formal properties of a game is seemingly indiscriminate from describing the game itself, so what should an analysis of the formal elements of a game entail? Vara outlines several elements which can be considered to be formal properties of a game. Among others, she refers to the rules of the world, the procedural or hard-coded nature of content, the game dynamics, level design, and choice design (Vara 2015, 122). The formal properties of a game are a broad category which range from aspects of the game's rules to its representation, and as such, a selection must be made. this thesis's methodological approach to the analysis of *Shadow of Mordor* is tailored to the theoretical framework established in the previous chapter.

The theoretical framework established in the previous chapter centers around two forms of game narrative: embedded and emergent narrative, and the relationship of necessity which exists between them. As such, one of the main goals of this text analysis will be to identify the embedded narrative elements and mechanisms that influence the generation of emergent narrative in *Shadow of Mordor*. But perhaps more importantly, this analysis will focus on what effect the Nemesis System, a complex network of rules and mechanics, has on the narrative of *Shadow of Mordor*.

Many of the formal properties of games which Vara discusses are related to the rules of the game and the player's interaction with them, an interaction which is inherent to the Nemesis System. Vara explains that while the rules of a game "describe the game in formal terms, (...) games with complex rules and rich game worlds may be better served by explaining what the player can actually do" (*ibid*, 98). The mechanics of a game are 'what a player can actually do'. Vara refers to Salen and Zimmerman's notion of *core mechanics* to explain this further: "A core mechanic is the essential play activity players perform again and again in a game" (Quoted in Vara 2015, 98). *Shadows of Mordor* definitely falls into the category of games with complex rules and rich game worlds, and thus the mechanics governing gameplay will play a central role in my analysis (*ibid*, 98).

Investigating the interaction of the player with the Nemesis System will lead to observations of the dynamics which come about in *Shadow of Mordor*. Dynamics are part of the Formal Elements of games that Vara outlines, which she defines as "how the game plays out, the type of strategies that the game invites, and even the kinds of exploits that can derive from the rules; these are all the result of the rules in action" (*ibid*, 137). While questions of dynamic exploits and strategies are interesting when regarding what rules produce when they are in action, this is not really the focus of this thesis. Instead, the dynamics which come about through interaction between the rules of the Nemesis System and the mechanics available to the player will be

evaluated in terms of their narrative significance. The dynamics which result through play will be investigated as to see how they contribute to emergent narrative.

In order to discuss these elements, my Analysis will contain descriptions of the embedded narrative elements in *Shadow of Mordor* as well as the Nemesis System in action. I feel that in order to convey the significance of my observations, these descriptions must be present. Without them, critical context would be missing and my analysis would lack depth. Games are very difficult to imagine when they have not been played, and my intention is to provide enough context for a coherent argument. While I do utilize description in the following chapter, my focus is always on how the elements of *Shadow of Mordor* and the Nemesis System relate to the core framework guiding this research.

Finally, it is important to discuss how I played the game as well. Aarseth, has discussed the importance of self reflection of the 'playing analyst' (2003). He refers to Richard Bartle's (1996) four modes of play (the killer, the explorer, the socializer, and the achiever) as indicative of the main goals which can guide play. Additionally, he outlines a typology of different strata of engagement, ranging from light, or superficial play to hardcore, total completionist play (Aarseth 2003, 6). Ultimately, his strata are too broad to be applicable, but they have informed my own approach to the analysis of *Shadow of Mordor*. My engagement with *Shadow of Mordor* was centered around two goals. The first was the completion of the game's main story, in order to have a first hand account of how the game's narrative develops and is structured. Besides this, I interacted with the Nemesis System extensively in order to gain a better understanding of how it functions from a mechanical point of view. I sought out conflicts with Orcs and kept track of how my actions changed the power dynamics between them. My intention was to observe the role the Nemesis System played in the narrative of *Shadow of Mordor* and look specifically at its potential for generating narratives on its own. I did not spend much time maximising my characters weapons through side missions, nor did I delve deeply into the game's upgrade system.

CHAPTER IV // ANALYSIS

Thus far, this thesis has been concerned with organization of a number of theories into a cohesive framework centered around emergent and embedded narrative. When considering authored or pre-scripted narrative content in games as opposed to the generation of an experiential narrative through play, describing these two as a dichotomy seems logical. Embedded narrative, in the form of quests, characters, events and settings, has been authored or designed and as such is a property of the game itself. Emergent narrative is generated through the experience of play and as Calleja puts it, is "actuated in the mind of the player" (2009, 4). One form is inherent to the game, the other is inherent to the player's experience. In this sense, these two forms of narrative seem to be distinct phenomena.

However, this dichotomy is complicated by the fact that the two forms of narrative are closely connected. Previously, I have described this connection as a relationship of necessity, where emergent narrative **depends** upon embedded narrative content in order to be generated. To put it differently, emergent narrative can only be experienced when the player is interacting with embedded narrative content. A game with a large, open world with many potential quests to embark on provides the player with ample opportunity to experience a unique emergent narrative, but that narrative will always be set within an embedded narrative framework. In the hypothetical example above and in most modern games, the embedded narrative content of a game gives rise to the generation of emergent narrative.

This chapter will seek to identify if the narrative of *Shadow of Mordor* fits within this framework or if it is structured differently. The focus of this analysis will be the Nemesis System, as it is the feature of *Shadow of Mordor* which sets it apart from other action/adventure games.

EMBEDDED NARRATIVE IN SHADOW OF MORDOR

From the outset, it is important to note that the narrative structure of *Shadow of Mordor* resembles many other action/adventure games. The game exhibits all the elements of embedded narrative which were discussed in this thesis's theoretical framework. There is a clear metastory (Pearce 2004) which is framed in an embedded quest (Aarseth 2005) to disrupt the armies of Sauron and weaken his grip on Mordor. To borrow from Bizzocchi et al.'s terminology, this primary story arc is divided into two subsidiary arcs which take place in distinct playable spaces (2013). The gameworld is comprised of two levels: large, open world regions which the

player explores and adventures through. This ludic space is filled with Orc encampments and strongholds: settings which are yet more examples of embedded narrative content (Aarseth 2012). Players can only move from the first region (Udun) to the second (The Sea of Nurnen) once they have completed a number of mandatory story missions which are smaller subsidiary narrative arcs in their own right. Likewise, in order to proceed to the final battle of the game, The Sea of Nurnen's story missions must also be completed. These missions are quintessential embedded narratives: the player has a specific goal and a pre-mission cut-scene frames this goal with a pre-scripted narrative motivation. For the purposes of this analysis, I will refer to these missions as **embedded events**.

As the player makes their way through Mordor, they come in contact with many different characters which help them along their journey. These characters are only really present in cut-scenes or story missions, where the player is limited in movement to a specific area of the world and made to perform specific tasks. These fights should also be considered embedded narrative content, as they are important for the game's metastory and are required for progression and ultimately completion of the game. The main antagonists of the game, The Hammer, The Tower and The Black Hand, are only encountered during the game's three corresponding boss fights. These fights are embedded events which are required and crucial for the advancement of the story. The characters discussed above, will be referred to as **embedded characters** in order to highlight the fact that they are part of the embedded narrative of the game.

Shadow of Mordor, like most action/adventure games, has a number of embedded narrative elements which make up the backbone of its story. While this is the case, this game was not selected for study because it showcases embedded narrative elements.

THE NEMESIS SYSTEM

The elements discussed above are important to the embedded narrative of *Shadow of Mordor*, but they are but a fraction of the characters the player will meet or the events the player will experience when playing the game. What makes *Shadow of Mordor* a unique example of game narrative design is the way in which the ordinary enemies which populate the game world change and bring about events as the player makes their way through the game. The operation of this system challenges the relationship of necessity between embedded and emergent narrative. In order to illustrate the significance of this, it is necessary for me to describe this system in detail.

The Orcs in *Shadow of Mordor* are all part of a dynamic society that the player disrupts and shapes through their actions. As was mentioned in the previous section,

the gameworld of *Shadow of Mordor* has two levels, the regions of Udun and the Sea of Nurnen. Each of these regions has its own corresponding army of Orcs, and these armies are organized according to a hierarchy. The strongest are the Warchiefs, who must be drawn out of their strongholds, followed by Captains, who patrol the game world and lead groups of Soldiers, the weakest and most numerous enemies the player will face ("Uruk" n.d.).

What must be made clear is that the Orcs that populate the game world are **dynamically generated** and **unique to a given play-through**. This dynamic generation involves multiple factors: orcs are given a physical appearance (a face, body type, personality and voice), and assigned a class which defines the way they fight (berzerkers use two axes and cannot be blocked, defenders have a shield which must be broken) ("Uruk" n.d.). Captains and Warchiefs are given a name and title as well as specific abilities and strengths and weaknesses to particular attacks or environmental factors. These more elite enemies posses a Power Level, which is the metric which describes how dangerous they are. A Captain with a high Power Level will have more strengths and less weaknesses. Fighting elite Orcs can be incredibly challenging and the player is incentivised to collect intel by finding documents or interrogating orcs throughout the world. Because the Orcs are dynamically generated, defeating them is an process of discovering their unique weaknesses exploiting them accordingly. As the player is going about this process, they are constructing an emergent narrative of their own, what Calleja would call an alterbiography (2009).

The dynamic generation of the Nemesis System is elegant in that the attributes that define an Orc are not merely randomly assigned, but correspond to one another. Michael de Platter, the design director for *Shadow of Mordor*, describes this correspondence as follows: "To name just some examples, uniquely generated elements like visual appearance, personality, skills, abilities and power level, become connected to an Uruk's battles, relationships, dialogue and location within the world; each of these influences the others to ensure that they are generating memorable characters who continually evolve" (Quoted in Amini 2014). This evolution comes about as a result of the player's action in the game. The Captains and Warchiefs are able to grow and change: "Each dynamically generated enemy remembers the interactions players (and other enemies) have with him and reacts accordingly when they meet again." (Quoted in Amini 2014). The potential interaction between player and Orc occurs naturally as a result of the game being played: actions have consequences which change the dynamics of the Orcish society.[4] The Orcs of *Shadow*

[4] The following examples illustrate the kinds of interaction facilitated by the Nemesis System. If the player dies by the hand of a Captain or Warchief, the Orc will become the player's 'Nemesis' and remember their victory the next time they face one another and mock the player. In some cases, defeated Orcs will return, albeit a bit battered by their loss. A good example of this is in the situation that the player defeats a Captain with an arrow to the head (an efficient method if that Captain possesses the weakness 'Vulnerable to Ranged Attacks'), there is a chance he

of Mordor are very different than the embedded characters discussed in the previous section. These Orcs are not pre-scripted, they are the product of a system reacting to the input of a player: they arise from the game being played. In this way, the Orcs of *Shadow of Mordor* can be considered **emergent characters** as opposed to the static, embedded characters confined to cut-scenes and story missions.

The evolving hierarchy of Sauron's army serves as the backdrop for many missions that the player can undertake in *Shadow of Mordor*. Orcish Captains, engaged in a constant struggle for dominance in Sauron's armies, engage in Power Struggles. To name a few examples, Captains will *Duel* one another for dominance, go on a *Beast Hunt* to show their strength, or throw a *Feast* to celebrate their victories ("Power Struggles" n.d.). These events are missions which can take place anywhere in the gameworld and are not required such as the story missions discussed in the previous section. The player's goal in these missions is to undermine or interrupt whatever activity the Captain is undertaking. Allowing a Captain to successfully complete a Power Struggle will raise their Power Level, giving them access to more abilities and making them harder to kill in the future. If the player dies before taking on a given mission, time will advance and each Power Struggle will resolve itself. When Talion returns from the dead (accounted for in the game's story through his possession by the wraith Celebrimbor), the hierarchy of orcs will have changed and new missions will be available. Each of these missions is unique because the Orc in question, as well as the location of the mission will always be different. Just as the Orcs are emergent characters, the missions that come about through the player's actions should be considered **emergent events** within *Shadow of Mordor*. These emergent events also contribute to the construction of a given player's alterbiography, creating the potential for dramatic conflict unique to that narrative (Calleja 2009).

In the second half of the game, the player is given access to a mechanic which adds a whole new dimension to the Nemesis System. The player is given the ability to *brand* Orcs, dominating their minds and turning them from Sauron's servants, into their own. Now, instead of merely defeating and killing a Captain or Warchief, the player is able to claim them and their followers. Once this has been done, the player can direct the Orc to perform a number of missions. As an example, a branded Captain can be ordered to attack a former ally, or betray a Warchief of whom he was a bodyguard. With the addition of branding, a whole host of strategic options become available to the player, which in turn facilitate more potential emergent events. The decision of whether to dominate or kill Orcs is up to the player, which adds yet another layer to the emergent narrative the player experiences. At this point in the game, the Nemesis

will return with a metal plate on his head and a score to settle with the player. Ordinary Orcs also have the potential to rise in the ranks. Defeated Captains are constantly being replaced and if the player dies to a common Soldier, that Orc will receive a promotion and become a Captain in their own right.

System becomes not only a network of adversaries, but a network of allies for the battle against Sauron.

The Nemesis System is little more than a number of rules acting upon one another and the player's actions in the world, yet it generates a potentially infinite amount of unique characters and events. The question which must now be addressed is what this means for the narrative of *Shadow of Mordor*.

NEMESIS NARRATIVES

In the previous section, two terms were put forward to describe the narrative content which is generated by the Nemesis System: emergent characters and emergent events. I call the events and characters brought about by Nemesis System emergent in large part to highlight that they are in contrast to exclusively embedded narrative content. Characters and events are two of the four dimensions outlined by Aarseth (2012) as constituting game narratives, which in most games exist as embedded narrative content. In an action/adventure game such as *Batman: Arkham Asylum* (Rocksteady Studios, 2009), there are only embedded characters: Batman, Joker, Poison Ivy, Scarecrow, the list goes on. These characters are presented to the player as the embedded primary narrative arc progresses, and because of how the game's narrative is structured they will always perform the same actions in the story. The events in which these characters are presented (cut-scenes and boss encounters) are also embedded, they are what Aarseth would call kernel events (2012, 132). Whether I play *Batman: Arkham Asylum* or another person does makes no difference when considering embedded characters and events. The story will play out in exactly the same way, with only slight differences in player's experiential narrative given the variability of actual gameplay (such as combat and player skill). Any alterbiography that can be constructed in a game which structures its narrative in this way does not provide a truly unique story since the majority of the elements which influence this emergent narrative remain the same regardless of a player's choices (Calleja 2009).

The significance of *Shadow of Mordor*'s emergent characters and events lies in the player's ownership of that experience. To put it in terms of my own experience: the Orcish characters that I encountered in my play-through of *Shadow of Mordor* belonged to me. The *Feasts* I interrupted or the *Duels* that I influenced were specific to my experience, and my choices had repercussions that were specific to my instance of the game. The degree of potential variation in the emergent narrative a player can construct is what makes *Shadow of Mordor* unique. This kind of variation is fundamentally different than branching narrative paths in games such as *Fallout 4* (Bethesda Softworks, 2015). While *Fallout 4* posses a narrative structure which provides choices to the player (usually in the form of an A or B choice), this does not mean that this narrative unravels in an emergent way. Each of the potential options is merely a different embedded narrative path. This means that although the player

has control over where the story will go next, their experience is still bound to a scripted story and they are not really playing a role in its construction. In contrast to this, the variation in *Shadow of Mordor* is produced by both the game and the player in concert. Because of the influence a player has in the generation of emergent narrative content, the Nemesis System in *Shadow of Mordor* is an example of Pearce's story system (2004, 145). However, the key difference between *The Sims* (an archetypal story system) and *Shadow of Mordor*, is that the story system in this case plays a prominent role in the progression of the game's embedded metastory.

The primary narrative arc of *Shadow of Mordor*, to disrupt Sauron's armies and subvert his control of Mordor, plays out in a strikingly emergent way. Certainly, there are several aspects of embedded narrative that the player must work their way through, but these are not what defines the majority of the gameplay in *Shadow of Mordor*. In the game's final story mission, the player goes to battle with the five Orc Warchiefs they branded and defeats Sauron's principal lieutenant, the Black Hand. While every player will experience this embedded narrative event, the Orcs that they have by their side will be different for each and every individual player. Not only this, but each player's journey up until that point: the means by which they managed to defeat or dominate Orcish Captains; the battles they fought; and the Nemeses they overcame will be unique to their experience. This emergent narrative does not rely solely on embedded, pre-scripted narrative content because this narrative was never pre-scripted to begin with. The Nemesis System facilitates actual player agency in the narrative of *Shadow of Mordor*, producing a story that the player has had direct influence on. Instead of an experiential narrative that is confined to the mind of the player, the game reflects the choices made by the player during play. The player's choices impact the Orcish society which lies at the heart of the gameplay, and the game's narrative is populated by different emergent characters and events as a result.

The Nemesis System provides a challenge to the core pattern which was identified in the Theoretical Framework of this thesis. The conventional relationship of necessity which exists between embedded and emergent narrative does not seem to apply in this case. In fact, it appears to be turned on its head. The designers of *Shadow of Mordor* have created an embedded narrative that relies upon an emergent narrative shaped through gameplay for its completion. The result is that to experience the narrative of *Shadow of Mordor* is to play an active role in its generation. The emergent narrative is not merely a construction in the mind of the player, it is actuated on screen. This interplay represents a marriage of embedded narrative, a clearly defined quest framed in embedded narrative content, to an emergent narrative in which the player's choices have dynamic repercussions in the world.

CHAPTER V // CONCLUSION

The sentiment which drove this research was a strong belief that games represent a new frontier for storytelling. The unique property of games which tell stories has been to insert the player directly into a narrative that they must drive forward. Player agency in these stories is the defining trait of the game as a new form of narrative medium. When an audience watches a film or piece of theatre, they can play no part in its resolution. Likewise, reading a novel is a passive process where the story unfolds before one's eyes. There is a distinct difference between the experience of a story in these older media vis a vis the digital game. Games are able to make the player and protagonist one and the same, inserting them into grand adventures in richly defined virtual worlds.

The promise of interactivity in stories is that the player can play an active role in the development of the narrative. The potential of this new storytelling dynamic is still being explored, though patterns in game narrative have surfaced. The Theoretical Framework of this thesis sought to pull together theory which has addressed narrative in games, and identify commonalities. The result of this effort was to observe two broad forms of narrative associated with games: embedded and emergent narrative. These two forms are associated with different phenomena: embedded narrative is a property of the game, while emergent narrative is property of the player's experience. But despite this difference they are closely connected. As was observed, the trends in game design and narrative have accentuated a relationship of necessity between embedded and emergent narrative. A player's experience, as well as their emergent narrative, is framed in a game's fictional world, which is composed of embedded narrative elements. Not only the objects, characters, and settings of game narratives are embedded, but the events which define a story have often been specifically authored as well. This means that while a player has agency within a narrative, this agency is confined within a pre-scripted structure.

What this thesis's analysis of *Shadow of Mordor* has attempted to make clear is that this game is doing something different than the norm which theory points to. While in many ways the game fits the mold of embedded narrative elements defining its story, *Shadow of Mordor* also represents a step forward in game storytelling. The question which was asked at the outset of this thesis was what the role of the Nemesis System was in the narrative structure of *Shadow of Mordor*. The answer to this question is as follows: the Nemesis System serves as a generator of emergent

characters and events which make each play-through a unique experience. The player has a direct influence on this system, which manifests in relationships between the playable character and the Orcs that they defeat, dominate, or die to. As the player explores Mordor and engages with the armies of Sauron, they experience a unique narrative populated with dynamically generated characters and events. Critically, this emergent narrative does not exist in a vacuum, it is also an essential part of the overarching storyline of *Shadow of Mordor*. In this way, the game challenges the framework of hierarchical association flowing from embedded to emergent narrative, and proposes an alternative structure. The marriage of an embedded narrative framework with an emergent narrative journey makes this game a compelling example of how players can be given a truly active role in generating the story of a game. The narrative they experience is not merely unique in their minds, but reflects a unique instance of the game itself.

As a point of reflection, I would like to address the methodology which I employed in this research. My chosen methodology was a textual analysis, which I selected due to the nature of my question: focusing on the role of a game system in narrative. Textual analysis allowed me to focus on the game's formal properties and the narrative structure which these implied. This method, while excellent for a close reading of a particular game from a theoretical point of view, could not tell me about the actual experience players had while engaged with *Shadow of Mordor*. Certain questions remain unanswered, such as whether the Nemesis System fostered a deeper level of immersion, or whether it was even as engaging as it potentially could have been. The drawback of textual analysis are that it solely focused on the text itself, and does not engage with the human element of games: the player. I think that a study into player attitudes and responses to the intricacies of the Nemesis System would have yielded interesting insights as well.

Looking to the future, I believe that what *Shadow of Mordor* was able to accomplish with the Nemesis System represents a step forward for game narratives. The promise of interactivity in storytelling is the story in which we are not confined to embedded paths but are rather **exploring** networks of possibility. While far from its potential, the way that the Nemesis System brings about emergent characters and events feels fresh and new. It tests the frontier of player agency in a narrative, and pushes the possibilities forward. The principles of the Nemesis System could be applied to all manner of contexts and facilitate the emergence of compelling, personal narratives. I for one, am excited to see how this new trend grows and changes the way that games can, and perhaps will, tell stories.

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