UNIVERSITY OF TARTU

DEPARTMENT OF ENGLISH STUDIES

NARRATIVE IN *MASS EFFECT 3*

MA thesis

KARL JAAGOLA

SUPERVISOR: Assoc. Prof. RAILI MARLING

TARTU

2016

ABSTRACT

Video games have become one of the most popular forms of entertainment over the last few decades. Not only have video games developed in terms of graphic fidelity but they also exhibit increasingly sophisticated narratives. This has made video game narratives an object of academic study

The thesis aims to contribute to the existing body of work concerning game narratives by analyzing the narrative of the video game *Mass Effect 3* (2012) from the point of view of cognitive narratology. Cognitive narratology is transmedial in scope and focuses on the cognitive mechanism we rely on to comprehend narratives as well as on storytelling techniques that narrative texts employ to further facilitate our ability to interpret them. The goal of the thesis is to identify such narrative techniques and the purposes they fulfill in the context of video game narratives by performing a close narrative analysis of *Mass Effect 3*.

In the introduction of the thesis the reasons behind choosing *Mass Effect 3* for the analysis are presented. In the theoretical section the ways in which narrative content can be presented in video games are outlined, the principles of a cognitive approach to narrative are established and narrative techniques common to the medium of film, which serves as a point of reference in the analysis, are elaborated on. The discussion relies on the works of Sebastian Domsch, Jan-Noël Thon, Marie-Laure Ryan, Alan Palmer and Kristin Thompson. The empirical section first provides details on the game and the methodology of the analysis and a close examination of select sequences of the game that feature prominent examples of storytelling techniques that create narrative clarity for the player then follows.

TABLE OF CONTENTS

INTRODUCTION

Narrative in the medium of the video game has received a considerable amount of attention in recent years as video games as well as their potential for storytelling are developing at a rapid pace (Ip 2011: 104). Narrative elements in games are both evolving in sophistication and rising in importance regarding the overall gaming experience (Ip 2011: 104, Domsch 2013: 14). It is also undeniable that in the English-speaking world video games have reached a massive audience over the last decade. The annual report by The Entertainment Software Association (2014: 2, 13), a gaming industry trade group, reported that 59% of Americans play video games and consumers spent 21.5 billion dollars on video games in the United States alone between 2013 and 2014. While these statistics do not inform us about the quality of the narratives contained in the games which were purchased, they do demonstrate the popularity that modern video games enjoy.

The increases of narrative potential and the growing popularity of video games should lead us to conclude that more and more people are experiencing video game narratives, which also makes the study of video game narratives an increasingly relevant subject. Neitzel (2014: para. 38) states that even though much work has been done in the field of game studies, "the narrative analysis of computer games/…/is still at its beginning". Similarly, Ip (2011: 104) argues that "there is comparatively little understanding of the extent to which traditional methods of storytelling are used in games". In light of the preceding arguments the thesis hopes to provide insight into the storytelling methods used in video games by analyzing the 2012 third-person action role-playing video game *Mass Effect 3*.

Firstly, *Mass Effect 3* has been quoted as having "provoked a bigger fan reaction than any other video game's conclusion in the medium's history" (Franich 2012: para. 4).

The ending of the game was particularly controversial among the fanbase resulting in a campaign pressuring the game developer Bioware to change the ending of the story which, among other things, was accused of not providing proper closure to the characters the players had come to deeply care about during the course of the trilogy. The protest was reported on by all major games news outlets for its entire duration and only a month after the release of the game Bioware announced an extended cut of the ending that would bring a deeper sense of closure to the series (McLellan 2012: para. 1–2). Further debates were incited about the status of video games as an art form with regards to how changing the ending of a game due to consumer pressure threatens artistic integrity and sets a dangerous precedent in the medium of video games (Kain 2012: para. 1–2). Although the current thesis does not focus on said topics, the strong fan reaction, which was specifically related to the characters and the story of the game, would suggest that the *Mass Effect* games managed to resonate with players on an emotional level because of the narrative elements the games presented. It would, therefore, seem that *Mass Effect 3* does make for a relevant game to study in terms of its narrative.

Secondly, *Mass Effect 3* has been chosen for the analysis due to the level of interest the previous installments have generated in the field of narrative studies. *Mass Effect 2 (2010)* has been described by Jim Bizzocchi and Joshua Tanenbaum (2012: 393) as a game that is "widely considered to be an excellent example of contemporary game narratives by both the scholarly and the vernacular communities". Bizzocchi and Tanenbaum (2012: 393–404) have analyzed the design strategies of *Mass Effect 2* in terms of how they balance player agency with authorial intent to create a narrative. Kristine Jørgensen (2010: 315–331) has examined the characters of *Mass Effect 2* "as distributors of narrative information" and Samuel Zakowski (2014: 58–79) has focused on the aspects of time and temporality in the three-part trilogy.

Narratology has "played a prominent role in the emergent field of game studies", because games employ visual narration making them similar to film, which is "the most thoroughly researched medium beyond literary texts in contemporary narratology" (Neitzel 2014: para. 6; Thon 2014: 71). Cognitive narratology, in particular, is suitable for the study of video game narratives because it is transmedial in scope. A cognitive approach to narrative is also useful because not only does it help us identify narrative techniques, it also addresses the purpose of these narrative techniques in terms of the way they contribute towards the player's comprehension of the narrative. The current thesis aims to add to the existing body of work concerning narrative in video games by identifying and analyzing the narrative techniques as well as the context in which they appear in *Mass Effect 3* to gain insight into the way the game aids the player in interpreting the narrative. The hypothesis of the thesis is that as games have advanced graphically, they have also become more cinematic i.e. film-like in their presentation and have borrowed narrative techniques commonly used in films. The fact that games, like movies, are nowadays marketed with trailers that emphasize visuals and story first lends credence to the hypothesis (Domsch 2013: 31). By using film, arguably the predominant audiovisual medium, as a point of reference, the thesis aims to outline the narrative forms and techniques that aid the player's comprehension process.

The thesis is divided into a theoretical and an empirical section. The theoretical section consists of four subchapters. In the first chapter classical structuralist narratology is discussed to explain the term "narrative". The second chapter starts with a discussion on the topic of whether games can be analyzed as narratives, then moves on to the exploration of various narrative forms, either borrowed from other media or medium-specific, found in video games and concludes with an examination of perspective in video games. The third chapter considers the applicability of a cognitive approach to the study of video game

narratives. The differences between cognitive narratology and classical narratology are addressed, the cognitive abilities that the readers, viewers and players rely on to interpret narratives are discussed and the specifics of video game characters and storyworlds – gameworlds – are outlined. The fourth chapter focuses on narrative techniques in films. Analysis of the narrative of *Mass Effect 3* follows in the empirical section.

VIDEO GAME NARRATIVES

1.1 Classical Narratology

Due to the emergence of various new types of media and new interdisciplinary and transmedial approaches to narrative the term "narrative" has accumulated many possible definitions, some of which differ considerably from the definitions prevalent during the heyday of a strictly language-based classical structuralist narratology that focused on the structure and constituents of narrative. Nevertheless, discussion of the term "narrative" in the context of classical structuralist narratology serves as a starting point for the following chapters of the thesis.

In its simplest sense, which is also commonly accepted among literary scholars, narrative means "telling somebody that something happened" (Ryan 2006: 184). This definition suggests a person doing the telling, a narrator and the act of telling, narrating. Additionally, telling somebody that something happened involves verbal communication or, in other words, a speech act from the narrator.

At first it would be possible for one to arrive at the conclusion that everything told by a narrator counts as narrative (Fludernik 2009: 2). However, telling someone that "the sky is blue" is not a narrative. The established definition clearly refers to something having happened – an event. H. Porter Abbott (2002: 13) states that "event" is the key word when defining what counts as a narrative i.e. something needs to happen for us to be able to speak of a narrative. If nothing happens then we may be dealing with a "description", "an argument", or something else entirely, but not with what could be called a narrative (Abbott 2002: 13). Christoph Bode (2013: 1) also sees narratives as being concerned with past events, with things that have happened either in real life or in fiction. Bode (2013: 1) considers events as the minimal units that narratives operate with and Marie-Laure Ryan

(2006: 7) identifies events as "the raw material out of which stories are made". While Abbott (2002: 13) would argue that a single event is all that is necessary for a narrative, there are also many scholars who insist that there needs to be at least two events with one following the other and they have to be causally connected. Monika Fludernik (2009: 2), for instance, appears to fall into this group of scholars when she describes narratives as being "based on cause-and-effect relationships that are applied to sequences of events". Similarly to Fludernik, Bode (2013: 1) points to the causal links between events by claiming that narratives endow events with meaning "by discursively aligning them" and, in turn, suggesting a meaningful story. This notion leads us back to classical narratology and more specifically to the discussion of story and discourse.

The distinction in its present form can be traced back to Gérard Genette who distinguished between three levels of narrative – *narration*, *discours* and *histoire* (Fludernik 2009: 2). The first two levels make up the narrative discourse and the third one is what we conceive of as the story. Narrative discourse includes the act of narrating and the utterance itself while story is that which is reported by the narrative discourse (Fludernik 2009: 2). To put it another way, narrative discourse is the expression and story is the content that is being expressed (Chatman 1978: 19). The content includes events as well as the relevant involved characters and settings (Chatman 1978: 19). The difference between discourse and story becomes apparent when we consider achronological narration. The order of the actual events in time remains the same but the narrator has chosen to present the events in an achronological manner.

If we had to summarize what constitutes a narrative in classical narratology then we could say that there needs to be a narrator who, by way of a speech act, is telling somebody else a story, which involves events, either fictional or real, that have already transpired (Ryan 2006: 5). Additionally, we can distinguish between narrative discourse, the

representation, and the story that is being represented. The way in which narrative is understood in classical narratology provides insight into some of the arguments of ludologists opposing the idea that games should be considered narratives and also serves as a point of comparison to the way in which narrative is understood in cognitive narratology.

1.2 Video Games as Narratives

Although it is widely accepted that both film and written texts, among other forms of media, are or at least contain narratives, this notion has been contested in the case of video games. Namely, there is a group of game scholars within the larger field of game studies, who are against the notion of studying games as narratives (Neitzel 2014: para. 8). Espen Aarseth (2004: 362), for example, argues that narratology does not recognize the "intrinsic qualities" of games that make them different from stories. Furthermore, studying games as narratives can lead to games being viewed as forms of "inferior narrative art" (Aarseth 2004: 362). Janet H. Murray (2013: para. 7) states that this ideology, which is often associated with the term "ludology", could be called game essentialism as scholars who share these sentiments claim that games "should be interpreted only as members of their own class, and only in terms of their defining abstract formal qualities". Even though Sebastian Domsch (2013: 12) and Britta Neitzel (2014: para. 9) both agree that arguments that either strictly state "games are narratives" or "games are not narratives" are "too narrow in scope" and seem to do little to further meaningful investigation into the matter, the relationship between narrative and video games still remains an ongoing topic of discussion in the field. It would then follow that before moving onto an actual narratological analysis of a video game, some of the main arguments put forth in the so-called narratology versus ludology debate should be examined in some detail first.

Domsch (2013: 13) is of the opinion that there is a certain amount of miscommunication between the two opposing schools of thought which has made the two differing viewpoints seem mutually exclusive when they need not be. When ludologists say that games are not narratives then what is really meant is that the essence of video games is not truly captured by categorizing them as only narratives (Domsch 2013: 13). Ludologists feel that when narratologists choose to categorize games as narratives then the narratologist side is in risk of disregarding the differences between video games and narratives (Neitzel 2014: para. 9). On the other hand, when narratologists claim that games are narratives then what is meant and what should be specified is that video games contain narratives (Domsch 2013: 13). Furthermore, as ludologists would argue that there are games that do not contain any narrative elements at all then it is necessary to clarify the narratologist point of view by stating that not all, but some games contain narratives (Domsch 2013: 14). Here, Domsch (2013: 15) is quick to point out that the empirical overview of the existing video games shows that most games do indeed contain narratives, however. Mare-Laure Ryan, a prominent narratologist, is also of the same opinion with regards to narrative in video games saying that

In the vast majority of computer games, especially recent ones, players manipulate avatars with human or humanlike properties situated in a world with features inspired by real geography and architecture /.../ computer games present all the basic ingredients of narrative: characters, events, setting and trajectories leading from a beginning state to an end state. (Ryan 2006: 182)

Nevertheless, ludologists Espen Aarseth, Gonzalo Frasca, Markku Eskelinen and Jesper Juul have argued against games being narratives (Ryan 2006: 183). Eskelinen (2001: para.10) argues that we are not dealing with a narrative if there is no narrator or narratee present. This requirement would also exclude all films that do not include narratorial speech acts (i.e. a voice-over narration), however (Ryan 2006: 185). For film theorist David Bordwell, for instance, narration includes the arrangement of signs in a way that evokes "the mental construction of a story" and a narratorial speech act is not

necessary (Ryan 2006: 185). Similarly, Domsch (2013: 2), who is influenced by cognitive narratology when discussing video games, defines narrative as "anything that is conducive to the user's mental linking of (at least) two events and the creation of a storyworld" choosing to focus on "what can be a narrative to a recipient".

Another feature of narrative that ludologists find lacking in games is the rearrangement of events which marks the distinction between the story level and the discourse level (Ryan 2006: 185). Juul (2005: ch. 4), for example, points out that in case of narratives "the discourse presents the story, but often achronologically". Games, however, are almost always chronological (Juul 2001: para. 40). They rarely if ever employ flash-forwards or flashbacks, at least as far as interactive gameplay sections are concerned (Juul 2001: para. 40). The reason for this is that a flash-forward would mean that the outcome of the game is determined and removes a sense of agency from the player whereas a flashback, specifically an interactive one, could render the present of the story impossible if the player should, for example, fail a given task during said flashback (Juul 2005: ch. 4). Games do, however, make increasing use of flashbacks in cinematic cut scenes (Ryan 2006: 185). Cut scenes or cinematics are filmic sequences "in video games that unfold without the interaction of the player" (Domsch 2013: 32). "/.../ their purpose is usually to provide narrative content presenting pre-scripted events, characters in characteristic actions, dialogues, or giving background information on the storyworld" (Domsch 2013: 32–33). Therefore, despite gameplay limitations, achronological narration is possible through the use of this narrative form.

Thirdly, the order of events in narratives is fixed but may not be in games (Ryan 2006: 186). For example, while the movie *Pulp Fiction* employs achronological narration, it is possible to reconstruct the chronological order of events based on the information given to the viewer "about the causal and temporal connections between events" (Domsch

2013: 75). The narrative of the film is, therefore, unilinear meaning that it has a fixed order of events whereas game narratives can also be non-unilinear (Domsch 2013: 75). However, events that cannot be unambiguously placed into a fixed sequence will become a problem for the story only when they result in an incoherent storyworld (Ryan 2006: 186). As the "free-floating events" found in games are often not relevant for pushing the narrative forward then they are less likely to cause incoherencies (Ryan 2006: 186).

Frasca (2003: 3) argues that we are in the role of observers when we engage with traditional media. Additionally, in narratives we are dealing with events that have already happened whereas games deal with "what may happen" (Frasca 2003: 11). In other words, games put players in the roles of active participants, who are invested in "what happens next" (Simons 2007: para. 5). Similarly, Juul (2001: para. 36) draws attention to the grammatical tense commonly found in verbal narrative used to indicate events as having happened in the past and states that even films and plays, despite lacking this grammatical tense, still convey a sense that the events told are not occurring in the present. This notion is not shared by film theorists and reader-response researchers who argue that in reality readers experience events in novels and films as if they occurred in the present and that they are just as concerned as game players about what will happen next (Simons 2007: para. 5). Moreover, readers "adopt the outlook of the characters" and then experience the story "by looking forward, from the point of view of the characters" (Simons 2007: para. 6; Ryan 2006: 187). Therefore, it would appear that there is no clear distinction between the "external observers" of the more traditional varieties of narrative and the active participants i.e. players of a game who literally assume the role of a character inside a fictional storyworld.

Ludologists also claim that narratives are representations whereas games are simulations (Ryan 2006: 187). Frasca (2003: 5) states that video games differ from

"traditional narrative media" because stories in video games can be modified. Ryan (2006: 187) notes that indeed "[games] are different every time they are played". Domsch (2013: 48) also shares this opinion arguing that it is, in fact, nearly impossible to play the same game in the exact same way twice. Ryan (2006: 188–189) also acknowledges that while games, which could also be understood as simulation machines, cannot themselves be categorized as narratives, they are capable of generating narratives. Each individual "run" of a game "produces a fixed sequence of events that actualizes one of the possible stories allowed by the system" (Ryan 2006: 189). This seems to reaffirm Domsch's views on the narratologist position on whether games are narratives – games are not narratives in and of themselves but they contain narratives. Furthermore, Domsch (2013: 1) chooses to view video games as examples of a special type of narrative altogether termed Future Narrative. The minimal unit of a Future Narrative is not an event but instead a node – a situation that allows for multiple different continuations (Bode 2013: 1). A single run of a game can, therefore, be understood as a "retrospectively realized narrative" that has been made possible after "the nodes have been exploded into events that can be narratively linked – and often are, automatically" (Domsch 2013: 48).

Lastly, there is the issue of retellability of games. Often players recount what happened during a run by telling a story (Ryan 2006: 191). Domsch (2013: 29) provides an example by recounting his experiences in the action role-playing video game *The Elder Scrolls V: Skyrim* "Because I learned the shout 'dragonfall' I could fight the dragon Alduin who, before that, was invincible." Moreover, Murray (1997: 144, referenced by Ryan 2006: 192) would claim that stories can be told even about highly abstract games like *Tetris.* Ryan (2006: 192) herself argues that there are games that have narrative design and there are those that do not. Some games lend themselves "naturally and effortlessly to retelling" while others are resistant to narration. Domsch (2013: 5) uses the term "narrative

proclivity" which he defines as "a measure of the ease with which an object lends itself to being conceived in terms of a (fictional) storyworld". A fictional storyworld includes characters, situations and events and the player starts to create an imagined world in which said characters exist and events happen (Herman 2009a: 17, Domsch 2013: 19). A game with highly rendered graphics, cut scenes, voice acting and embedded narratives can be narrativized much more easily than an 8-bit game like *Space Invaders* that just includes half-abstract shapes on the screen (Domsch 2013: 5).

1.2.1 Narrative Forms

If we recognize that games contain narratives then the next step is to examine the way in which narrative has been incorporated into the game. As was already mentioned, games contain cut scenes that are essentially mini-movies within the game and their aim is to provide the player with narrative content, often doing so by presenting pre-scripted events in the storyworld. Due to their use of advanced 3D computer graphics modern video games could be described as being cinematic in their presentation. Indeed, games, in a similar manner to films, are nowadays marketed with trailers that emphasize visuals and story (Domsch 2013: 31). However, while both films and video games are multimodal in nature and cinematic techniques common to film may now also be observed in video game cut scenes, games make use of numerous additional narrative forms through which they are able to contain narratives.

1.2.1.1 Passive Narrative Forms

Passive narrative forms i.e. forms that cannot be interacted with by the player make up a significant amount of the narrative content in video games (Domsch 2013: 31). Domsch (2013: 31) also notes that as passive narrative forms are "in themselves

experienced as passive", they remain identical to the media from which they have been taken e.g. film, written text and audio. Besides cut scenes video games also include embedded textual, visual and auditory narratives, exposition and loading screens.

Firstly, passive embedded narratives can be included in artifacts like diaries, video and audio logs or books that the player has to find in the gameworld before being able to read, view or listen to them (Domsch 2013: 31, 105). The player can choose when to read, view or listen to these embedded narratives and in many cases the order in which the player encounters these artifacts containing embedded narratives is not pre-determined (Domsch 2013: 31). The scattered embedded narratives can be parts of a single bigger narrative like pages from an account of a sea voyage or they may contain encyclopedic information that is not in any particular sequence but helps to flesh out the storyworld. For example, in the video game *Dragon Age: Origins* the player gathers an encyclopedia called the Codex. Lastly, in some cases the embedded mini-narratives can also trigger events in the overall narrative when, for example, a letter contains a message asking for help (Domsch 2013: 106).

Narratively conveyed exposition is another passive narrative form common to video games. As it appears before the actual gameplay it is also called an intro and it is used to introduce elements like the storyworld or the characters of the game to the player (Domsch 2013: 32). An intro can be written or spoken text or a cinematic sequence not unlike a cut scene, the only difference being that an intro precedes gameplay (Domsch 2013: 32).

Many video games also include loading screens. Loading screens appear when the game needs to load data and they are disruptive to gameplay (Domsch 2013: 32). However, loading screens may provide the player with "background information on the storyworld" (Domsch 2013: 32). Furthermore, in some games like *Metroid Prime* or *Mass Effect* some

loading screens have been hidden and presented as parts of the storyworld in the disguise of elevator rides (Domsch 2013: 32).

1.2.1.2 Actively Nodal Narrative Forms

While video games can present a large part of their narrative content via passive narrative forms, it should not be forgotten that video games are actively nodal dynamic systems for interaction (Domsch 2013: 35). Video games are actively nodal in the sense that there are events in the gameworld which are dependant on the player's actions and they are dynamic because they also include events happening independently of the player. In the case of actively nodal narrative forms like quick time events, dialogue trees and event triggers both the player and the game system collaborate in order to make narrative events happen (Domsch 2013: 35).

Quick time events are actively nodal cut scenes or, in other words, they are video sequences that the player can interact with (Domsch 2013: 35–36). A passive video sequence is shown to the player until a visual prompt appears on the screen that notifies the player that they are now able to interact, usually by pressing a certain button. Interaction is possible for a limited time only until the prompt disappears (Domsch 2013: 36). In the case of branching quick time events different visual continuations are shown depending on whether the player decides to act or not and none of them end in a game-over state i.e. in failure (Domsch 2013: 36–37).

Another way to include narrative information in video games is through dialogue between the player-controlled character and other non-player characters present in the gameworld (Domsch 2013: 38). When the player character walks up to a non-player character then they can be engaged in conversation that is not presented as part of a cut scene (Domsch 2013. 38). The player then has a number of dialogue options to choose from and, therefore, has the ability to "influence the course of the conversation" (Domsch

2013: 38).   The dialogue options, all of which are displayed simultaneously on the screen in written form, make up what is called a dialogue tree (Domsch 2013: 38). Before moving on to the examination of dialogue trees it should be noted that in the *Mass Effect* games dialogue trees do not only appear after the player has decided to initiate conversation with a non-player character but they also appear within cut scenes. Additionally, in the *Mass Effect* series as well as in some other newer games the exact words that the player character will respond with during the conversation are not known to the player before the choice is made. Instead, shorter paraphrases of the full responses are displayed on the screen for the player to choose from. Each paraphrase differs from the others in terms of tone. In such a way the player is mostly responsible for the tone of the responses only (Domsch 2013: 38–39). Bizzocchi and Tanenbaum (2012: 397) add that the player interacts with her character "at the level of attitude". In the *Mass Effect* games the player character named Commander Shepard "has a fully formed identity that is independent of the player". Shepard has a core of character traits that the player has no control over (Bizzocchi and Tanenbaum 2012: 397). However, as has already been mentioned, through making certain dialogue choices that express a certain kind of attitude "the specific personality traits" of Shepard are to an extent dependant on the player (Bizzocchi and Tanenbaum 2012: 397).

The third actively nodal narrative form is the event trigger. A certain event in the gameworld is triggered when the player character reaches a certain location in the navigable space of the game (Domsch 2013: 41). Similarly to a cut scene, the event is pre-scripted but what separates it from a cut scene is that it does not interrupt gameplay – it happens during gameplay in the navigable space when the player still has control of their character (Domsch 2013: 41–42). Such an event could be, for example, a bridge that collapses just before the player character reaches it or right after they have crossed it (Domsch 2013: 41). Event triggers are hidden from the players as they aim to create the

illusion that something happens by chance independent of the player whereas in reality it is the player who makes the event come to pass by moving to a certain spot in the navigable space of the gameworld (Domsch 2013: 41). In other words, an unstable bridge in the gameworld will always wait for the player character to approach before actually collapsing (Domsch 2013: 42). The existence of an event trigger can be verified by replaying the same section of the game a second time to see if the same seemingly coincidental event repeats itself (Domsch 2013: 42).

The importance of outlining the narrative forms of video games and dividing them into passive and actively nodal forms lies in the fact that although most everything in modern video games is presented to us visually in a cinematic fashion by way of 3D graphics, games are not a collection of connected scenes (a series of shots or a single shot) like films. For instance, describing an extended gameplay sequence where the player has complete control of their character as simply "a scene" or "a single shot with no cuts" would be entirely misleading because such a description disregards the aspects that make video games unique compared to film and other narrative media – interactivity and player agency. Domsch (2013: 3) states that "agency implies choice, and choice implies differing outcomes". Every time a novel is read the changes that happen in the storyworld remain the same but this may not be the case in games because of player agency (Domsch 2013: 29). Even when the focus of the analysis is not on an actual experiencing player with agency, identifying and keeping in mind which elements of a game are actively nodal and may, therefore, lead to changes and differing outcomes in the storyworld in different runs of the same game brings us closer to a more medium-conscious approach that acknowledges the potentially subjective nature of narrative analyses of video games.

1.2.3 Gameplay and Perspective

So far narrative forms that either occur during gameplay or interrupt gameplay have been explored but gameplay sections that, admittedly, often emphasize combat and the connected challenge over narrative content, are important to the overall narrative of a game as well. Even if the majority of narrative content is presented through passive narrative forms like cut scenes and the gameplay sections lack in actively nodal narrative forms, the gameplay still acts as a connecting tissue for the events presented in cut scenes because the gameplay sections "provide information on the progress of the action, contain the same figures and are set in the same environment" (Neitzel 2014: para. 26). A relevant aspect of gameplay in relation to narrative analysis is the presentation of space i.e. spatial perspective.

While every game belongs to one or another fiction genre on the basis of its storyworld, the genre of a video game is usually determined by two factors – the nature of the gameplay i.e. the game mechanics and the graphical perspective during said gameplay. For example, in a first-person shooter the player keeps progressing from one area to the next in the navigable space of the game while coming across various gunplay-filled combat situations against virtual enemies and the gameplay is presented to the player through the eyes of the player character. For the purpose of describing spatial perspective in video games with three-dimensional environments the term camera position has been borrowed from film theory (Thon 2009: 281). Mark J.P. Wolf suggests that games have emulated Hollywood films in terms of the way in which they represent space and Jan-Nöel Thon believes this to be the obvious reason as to why it is common to talk of camera position in video games (Wolf 2001: 66; Thon 2009: 281). Thon (2014: 86) notes that a key difference between films and video games is that in video games the spatial position from which space is represented is more static because "most games use the same spatial perspective

over long stretches of time". This is largely true for gameplay sections and it is common to distinguish between first-person and third-person games.

Neitzel (2002, referenced by Thon 2009: 282) has also proposed a more medium-specific categorization of audiovisual point of view. Firstly, what is identified as a subjective point of view corresponds with the aforementioned first-person perspective. It is common in first-person shooters as they "have the position from which the game space is presented coincide with the position of the player's avatar" (Thon 2009: 282). In the case of a semi-subjective point of view, however, the point of view of the player and that of the player character serving as the player's in-game avatar do not coincide entirely but the player's "point of view is connected to the movements of the avatar" (Neitzel 2002, referenced by Thon 2009: 283). There is some distance between the player character and the camera which follows her (Thon 2009: 283). A semi-subjective point of view is common for action adventure games and newer role-playing games (Thon 2009: 283). Lastly, if the point of view is not connected to a player character then the point of view can be described as being objective (Thon 2009: 284). This can be witnessed in strategy games where the player commands large armies.

Although the analysis presented in the second part of the thesis focuses on a single game that could be described as being third-person or, in other words, employing a semi-subjective perspective, it is possible for a game to use different points of view in different situations. For example, a semi-subjective point of view may be maintained throughout most of the game but if the player uses binoculars or takes aim with a sniper rifle then this might result in a shift to a subjective point of view. Therefore, in a way the point of view in a game can also be more flexible than in film because the camera adapts to the player's actions (Thon 2014: 86). Additionally, games that include visceral scripted sequences in their gameplay sections may let the player know that an important event is happening by

displaying a prompt and if the player chooses to press the prompted button "the game will take control of the perspective (but not the player character's movement), moving the player's sight so that it centers on the event" (Domsch 2013: 42). Some games also employ suggestive camera movements to explain the game's navigable space to the player during gameplay (Domsch 2013: 109). Domsch (2013: 109) compares this to the establishing shot found in films. The aim of this kind of shot is to show the player the obstacles in the area they are about to enter and it also suggests a possible path through the area (Domsch 2013: 110).

Understanding perspective during gameplay sections in video games is necessary before we can turn our attention to exploring the strategies of subjective representation – the representation of a character's consciousness. As these strategies are directly connected to the topic of narrative comprehension then this issue will be explored in the following chapter concerning a cognitive approach to video game narratives.

1.3 Cognitive Approach to Video Game Narratives

Some significant aspects related to narrative comprehension like the mental linking of events and the mental construction of a storyworld by a player have already been briefly touched upon in the chapter concerning the debate between narratologists and ludologists. As the analysis in the second part of the thesis focuses on narrative cues and narrative comprehension then the aforementioned aspects require further explanation. However, before turning to the ways in which we are able to comprehend narratives, it is first necessary to consider the suitability of a cognitive approach to video game narratives and examine how narrative is understood from a cognitive perspective.

The name "cognitive narratology" already suggests that we are dealing with research that is interdisciplinary in nature. Cognitive science, which includes disciplines

like psychology, neuroscience, computer science and philosophy of mind among others, asks questions about "the relations between perception, language, knowledge, memory, and the world" and cognitive narratology is interested in the ways in which stories cross paths with these phenomena (Jahn 2005: 67). Cognitive narratology asks questions that were not addressed in structuralist narratology due to the simple fact that narratology was not really in dialogue with disciplines found in the field of cognitive science until the last decade of the 20th century (Herman 2013a: para. 4; Pol 2013: para. 5).

Ryan (2010: 1) states that one of the main areas of investigation for cognitive narratology is the mental activity of the reader, viewer or player. As the reader, viewer and player are all included we can also infer that cognitive narratology is not only interdisciplinary but also transmedial unlike classical narratology, which emphasizes verbal communication and excludes mimetic forms of narrative. This makes the cognitive approach to narrative also suitable for the study of video game narratives. Indeed, Herman notes that the research-relevant corpora encompass

/fictional and nonfictional print narratives; computer-mediated narratives such as interactive fictions, e-mail novels, and blogs; comics and graphic novels; cinematic narratives; storytelling in face-to-face interaction; and other instantiations of the narrative text type. (Herman 2013a: para. 2)

Narrative-related concepts that apply across different media are the discourse/story distinction and the notions of character, event and fictional world (Ryan 2006: 6). The presence of these elements is what increases the narrativity of a text or the "storiness" of a story (Ryan 2006: 7). In other words, narrativity is a scalar property and not a binary one as the conditions of narrativity are realized to a greater or a lesser extent in different narratives (Ryan 2006: 7; Herman 2009b: 73). Each of these elements will be examined in further detail before moving on to the mental activity of the reader.

Ryan (2006: 7) and Herman (2009b: 73) both choose to describe narrative as a representation, thus agreeing to the discourse/story distinction. Ryan (2006: 7) expands on this concept stating that the discourse level is representation encoded in material signs –

"the textual actualization of story" – and story is a mental image in the mind of a reader, player, or viewer. Additionally, the cognitive construct in the mind of the reader has been evoked by the narrative discourse (Ryan 2006: 7). Herman (2009b: 71, 73) chooses to call this mental construct a mentally configured storyworld which concerns events happening in time and space as well as human or human-like agents with consciousnesses through whom the reader can experience the fictional world.

As can be seen, the notions of character, event and fictional world are all tied to narrative discourse. Ryan (2006: 8) goes into more detail about these elements arguing that for us to be able to speak of narrative, it has to be about a fictional world (storyworld) "populated by individual existents", it needs to be "situated in time" and it needs to go through transformations because of nonhabitual physical events that either involve or are purposefully caused by intelligent agents, who emotionally react to the changes in the storyworld and who have mental lives as well as identifiable goals and plans. What stands out about these basic conditions that determine the narrative status of a text is that they do not include any restrictions medium-wise. We are dealing with a narrative if it evokes a certain kind of mental image – a storyworld – in the mind of an interpreter. This leads us back to Ryan's statement about cognitive narratology investigating the mental activity of the reader (of fictional meaning regardless of the medium).

By now it should be rather apparent that cognitive narratology is not just interested in the narrative text but also in the ways in which people are able to interpret narratives. Indeed, one way we can look at a narrative is as a target of interpretation that requires the interpreter to make use of their cognitive capacities while relying on textual cues that help them make sense of the storyworld (Herman 2013b: x, Herman 2009b: 72). For instance, as has been mentioned in a previous chapter, textual cues that provide us with information about the causal and temporal links between events are what help the viewer to reorganize

the events in the film *Pulp Fiction* into a chronological order despite the achronological narration. Both the cognitive mechanisms and the textual cues that make interpretation possible are, therefore, subjects of inquiry in the field of cognitive narrative studies.

On the other hand, narrative can also be seen as a way we make sense of the world or, in other words, a resource for interpreting the world (Bode 2013: 8, Herman 2013b: xi). Turning our real life experiences into stories enables us to reflect on why something happened or what motivated somebody to do something. If constructing a storyworld could be thought of as "worlding the story" then seeing the world through narrative would be "storying the world" (Herman 2013b: x–xi).

1.3.1 Storyworlds

Juul (2005: ch. 4) has said that "the emphasis on fictional worlds may be the strongest innovation of the video game". When game developers talk about narrative in games then usually they are actually not speaking about elaborate scripted events but rather about "the elements that prompt the player into imagining fictional worlds" (Egenfieldt-Nielsen, Smith and Tosca 2008: 198). The question that we are then faced with is: how exactly do we construct these fictional worlds?

All fictional worlds are incomplete in the sense that all aspects of a fictional world are never and could never be described by the narrative text (Juul 2005: ch. 4; Palmer 2004: 198). The text of Hamlet, for instance, focuses on a castle in Elsinore and while there are hints to some foreign countries, we get very little info about the larger world. Nevertheless, we imagine the world of Hamlet to be just as big and detailed as the real world (Juul 2005: ch. 4). When imagining a storyworld we assume a realist paradigm i.e. that the imagined world is similar to our own physical world (Domsch 2013: 16). In other words, we bring the knowledge we possess about the real physical world to a storyworld in

order to comprehend it (Palmer 2004: 196). However, even though our real world "serves as a model for the mental construction of fictional storyworlds", we are still able to make changes to our assumptions regarding the storyworld's resemblance to our reality (Ryan 2013: para. 6). We assume the storyworld is as close as possible to our own until something in the text contradicts this assumption (Ryan 2013: para. 6). For example, we assume that every human child born in a fictional world has a human father unless the text tells us otherwise (Pavel 1986: 105, referenced by Juul 2005: ch. 4). We also know that in our physical world humans cannot fly on their own but if a character suddenly starts flying in a story then instead of a realist paradigm we assume a fantastic one (Domsch 2013: 16). Ryan (2013: para. 6) calls this the principle of minimal departure.

If we return to video games then the principle of minimal departure is the reason why, for example, a game does not have to first tell the player their character in the game cannot fly. It is already expected by the player and that expectation is modified accordingly when at some point in the game it turns out the player character can fly (Domsch 2013: 17). In this case the game lets us perform an action which is impossible in the physical world. Perhaps surprisingly, the opposite is also possible. We expect that human beings are capable of jumping but in a number of games the player cannot perform this action with their character. It is, however, quite likely that the player will not think that this is a world where human beings cannot jump but would rather recognize that the restriction has to do with the rule system of the game.

If all fictional worlds are incomplete in terms of the information that we are directly provided with then it is up to us to fill in the gaps. The strategies for doing so "are contained in" frames (Palmer 2004: 198). Frames are associated with schema theory, a sub-discipline of cognitive science, which proposes that we understand new experiences by comparing them to a stereotypical model – a schema – we have formed based on similar

past experiences (Gavins 2005: 520–521). The schema can also be modified when new experiences contradict an existing schema. While schemata determine how we interpret a text, the text can also make us modify our existing schemata (Alexander and Emmott 2014: para. 4). Temporally-ordered schemata are called scripts and they concern the sequence of events in everyday situations like, for example, dining at a restaurant (Alexander and Emmott 2014: para. 2). If somebody tells us that they went to a restaurant then we assume that they ordered the food, ate and then paid the bill even if the person actually slipped away without paying. When we watch a film and in one scene a character goes to an airport and in the next scene the character is shown in a different city then we assume that they boarded a plane and went through all the necessary steps at the airport.

Juul (2005: ch. 4) has argued that we fill in gaps not only through the help of real world knowledge but also through our knowledge of the genre conventions. Genre conventions are "the defining aspects of any genre" ranging from archetypical characters to repeating plot points that the audiences expects (Queen 2015: para. 1–2). We may not have real life experience with witches but when we encounter witches in a storyworld we assume that they possess magical powers of some sort (Juul 2005: ch. 4). It has been suggested that we also possess story schemata that have been formed based on our experiences with stories (Alexander and Emmott 2014: para. 6). Therefore, our expectations for the way a story proceeds in any given genre stem from the story schema relating to that particular genre.

Lastly, filling in the gaps in a storyworld involves "postulating connections between events" (Egenfieldt-Nielsen, Smith and Tosca 2008: 198). When one event follows another then not only do we automatically assume that the event that was presented first precedes the following event, we also presume that there is some sort of a causal connection between the first and the second event (Herman 2000: para. 41). Therefore, a

causal connection between two successive events does not need to be explicitly stated by the text (Bode 2013: 5). We cannot help but attribute meaning to events and the way to do this is by linking events and interpreting them in relation to each other (Bode 2013: 5). For example, the meaning of a historical fact like "Christopher Columbus discovered America on October 12, 1492" does not reside in the event itself but in the way it relates to what came before and after (Bode 2013: 6).

1.3.2 Gameworlds

So far storyworlds or fictional worlds have been discussed as they exist in fiction across media but in the case of video games we can also speak of gameworlds. What sets gameworlds apart from storyworlds is the added rule system of the game (Domsch 2013: 18, 29). Because we are dealing with both a narrative and a game then we can distinguish between narrative text, visual presentation and textual as well as visual commentary (Domsch 2013: 25). Narrative text, which encompasses both written and spoken textual elements, acknowledges aspects of the storyworld – the diegesis – but not aspects relating to the game rules (Domsch 2013: 25). The distinction is relevant because it has been common practice in games for non-player characters in the game to instruct the player on how to perform a certain task with the controller (Juul 2005: ch. 1). Narrative text, however, never directly addresses the real world player, only their character (Domsch 2013: 26).

A character in the storyworld instructing the player falls under textual commentary. Textual commentary includes commands directed at the player as well as button prompts like "hold X to climb the wall" that appear on screen in text and various numerical values like accumulating experience points or the amount of damage that is inflicted on an enemy

(Domsch 2013: 25). The values may appear on screen but they exist only for the player and not the characters.

As is the case with narrative text, visual presentation has to do with only the diegesis. Material space in the game is presented "as something that really exists as part of a storyworld" with passive and actively nodal visual narrative forms (Domsch 2013: 26). Visual commentary, on the other hand, includes non-diegetic elements that are not part of the storyworld e.g. abstract maps, game menus or various visual prompts visible to the player but not the character (Domsch 2013: 26). For instance, non-player characters that can be interacted with may have a special symbol floating above them so that the player can quickly identify important non-player characters from characters who just serve as background elements in the game space (Domsch 2013: 26). It should be noted that "narrative text, textual commentary, visual presentation and visual commentary can all be present simultaneously for the player to perceive" (Domsch 2013: 27).

What also separates gameworlds from storyworlds is that in addition to being incomplete they may also be contradictory or incoherent because of game rules. For example, a character in the storyworld speaks about the game controller and the player character dies but comes back to life after the player loads a save file and in strategy games the player can build people in minutes (Juul 2005: ch. 1). In cases like these where we cannot explain events by referring to fiction we have to interpret events in the game by referring to game conventions (Juul 2013: 190). When the player character is resurrected by way of loading a save file then we recognize that it is necessary for creating a gaming experience that is not frustrating (Domsch 2013: 23). Similarly, in role-playing games the player character may have a huge inventory of items they could not possibly carry but the player refers to the conventions of the particular game genre (Thon 2013).

Thon (2013) proposes that dealing with inconsistencies in the storyworld "necessitates the application of medium-specific charity". The player relies on "hypotheses about authorial intentions and their knowledge about game conventions and/or communicative rules" to explain the inconsistencies. For example, we are faced with an inconsistency between gameplay and a cut scene when the player character is shown to be carrying two swords in the cut scene but has only one sword in the gameplay section that follows the cut scene (Thon 2013). In such a case the player would not look for an explanation in the storyworld (the character must have lost one sword between the time the cut scene ended and the gameplay started) but instead applies "charity based on pragmatic inferences connected to hypotheses about authorial intentions" on the cut scene (Thon 2013). In other words, the player recognizes that this may simply be an oversight on the part of the game developers (Thon 2013). Inconsistencies between cut scenes and gameplay sections with regards to visual representation can occur when the player character's visual appearance is customizable but a cut scene is not designed to take all customizable aspects of the character's appearance into account. This is especially true when a game uses pre-rendered cut scenes that cannot adapt to the player's modifications during gameplay. On-the-fly rendered cut scenes i.e. cut scenes that are rendered in real time by the computer and use the same gameplay graphics are much more flexible in this respect, however. Alternatively, we can also theorize that the game developers gave the player character two swords in the cut scene because it makes for a more exciting cinematic sequence.

Juul (2005: ch. 4), on the other hand, believes that imagining the fictional world of a game is optional and, therefore, incoherencies in the storyworld are not of too much concern. While there are games that are playable even when the player refuses to imagine a storyworld and instead focuses solely on the gameplay aspect, there are also many games

where ignoring the storyworld is not possible. In *L.A. Noire,* a third-person action adventure detective game, the player has to search crime scenes for clues and talk to potential suspects and witnesses. The game is presented in a highly cinematic fashion where the facial animations of the characters that are interrogated are the result of real performances that have been filmed with motion capture cameras. The player has to evaluate and compare the stories the suspects are telling along with their facial expressions and tone of voice in order to achieve success. Without imagining the storyworld the game would be unplayable (Domsch 2013: 20–21). To remedy this issue, games have taken steps to align storyworld elements and rules (Domsch 2013: 23). Gameplay rules may be diegetically legitimized and adjusted to create a more coherent storyworld (Domsch 2013: 23). It is common practice for games that involve shooting mechanics to include regenerating health for the player character and not explain how the character could withstand the hail of bullets directed at them nor is it explained how they could recover. In the *Mass Effect* game series, however, the characters are equipped with kinetic barriers that deflect gunfire. Additionally, the concept upon which the kinetic barriers as well as most other technology in the futuristic sci-fi setting of the storyworld are based (mass effect fields) is explained in detail within the fictional world of the games.

Lastly, gameworlds are not only different from storyworlds in other non-interactive media in the sense that they contain rules that may cause storyworld incoherencies. Because ,on the one hand, we have the game system and, on the other hand, the storyworld then the mental world that the player constructs also reflects this double nature of the video game. As has already been established, readers and viewers process a narrative by building a mental model of the narrative world and are then constantly updating it as new information is presented to them by the text (Ryan 2010: 2). When the player is playing a video game then in addition to keeping track of new information and changes in the

storyworld, they also create "a mental image of the game state at any given point during the gameplay" (Domsch 2013: 29). The game state includes information about the game system and accounts for the game score and the player's actions and the game system's reactions (Domsch 2013: 29). The player constructs mental images of the game state and the storyworld simultaneously and continuously (Domsch 2013: 29). For instance, in order to describe the climax of the role-playing video game *Dragon Age: Origins* one could say that "The final boss battle was tough and I was really low on health when I finally killed him" but also describe it in terms of the storyworld i.e. "The Grey Warden defeated the Archdemon".

1.3.3 Characters

As has already been established, one of the narrative-related concepts that apply across media is the notion of character (Ryan 2006: 6). Fotis Jannidis (2013: para. 5) states that "characters are one of the most important aspects of a narrative". They are capable of creating strong feelings in readers (Jannidis 2013: para. 26). For example, a reader feels sympathetic towards a character they perceive to be similar to them, they feel empathy for a character that is in an unfortunate situation and they may be attracted to a character who they admires (Jannidis 2013: para. 27). For a reader to be able to relate to a character in such ways, however, the character's inner life has to be, to an extent, accessible to the reader (Jannidis 2013: para. 5).

In cognitive approaches to narrative characters are viewed as the "representations of imaginary beings in the minds of the audience" (Eder et al 2010: 8). Characters are often imaginary human beings but they may also include, for instance, aliens, monsters and other fantastical creatures (Eder 2010: 17). Jans Eder (2010: 17) argues that we can identify characters in a storyworld by "their intentional (object-related) inner life" i.e. their

"perceptions, thoughts, motives, or emotions" set them apart from the other entities in the storyworld. Through a process of characterization a character's inner life can either be described to us explicitly or suggested implicitly by way of various textual cues (Jannidis 2013: para. 5; Palmer 2004: 174). In other words, a text ascribes various traits (psychological, social, physiological, locative) to a character (Jannidis 2013: para. 22). Once the text presents an entity identifiable as a character it is up to the reader to construct said character, or, more precisely, to construct the mind of the character (Palmer 2004: 175, 176). Alan Palmer (2004: 176) suggests that a reader sets up a "character frame" when first encountering a character and then start collecting information about said character. The reader's hypotheses about the character are then modified by further information gathered in the course of the reading process (Palmer 2004:176). Character traits that are revealed later in the narrative may contradict traits that were established earlier, thus subverting the original idea of the character we had in our minds (Jannidis 2013: 3). Additionally, textually ascribed character traits may prove to be entirely invalid when those traits were ascribed by fellow characters whose views on other characters are very much subjective (Jannidis 2013: para. 22).

Characters are similar to storyworlds in the sense that they are always incomplete. In order for the readers to be able to construct a character with a coherent and continuous consciousness based on what could be a relatively small amount of information scattered within the text, they have to fill in the gaps themselves (Palmer 2004: 176). Palmer (2004: 15) argues that in order to fill in the gaps "readers create a continuing consciousness out of the isolated passages of text that relate to a particular character" by applying a "continuing-consciousness frame." Furthermore, this frame is also applied in the case of real people who are only present to us some of the time (Palmer 2004: 199). When we meet up with an acquaintance after a period of absence we try "to reconstruct what they have been doing

since we last saw them in order to work out roughly how they are feeling now" (Palmer 2004: 200). Therefore, as is the case with constructing storyworlds, readers also draw on their real world knowledge of real minds for the purposes of constructing fictional characters.

A further example of our reliance on cognitive abilities and real world knowledge to comprehend the minds of fictional characters happens when we are making inferences about a character to whose mind we do not have direct access. While it is, of course, true that the narrator can give readers "direct access to inner speech and states of mind", it is not the most common strategy of representing the consciousness of a character (Palmer 2004: 211). Instead, readers are left to observe the behavior and speech of a character and make inferences about the character's state of mind based on these observations (Palmer 2004: 11). In other words, we assume that the actions and behavior of fictional characters are connected to their emotional state, plans, goals etc. As Eder (2010: 17) has put it, we usually assume that characters move externally because of some inner process.

Narratologist Lisa Zunshine (2003: 270–271) explains that what makes literature (but also other storytelling media) possible is that a writer automatically assumes that a reader interprets a character's body language as indicative of the character's emotions. Although it could be simply argued that a reader is expected to be aware "that the default interpretation of behavior reflects the character's state of mind" due to the fact that it is a long-standing and well-established technique for presenting a character's consciousness in fiction, Zunshine stresses that it is the existence of our cognitive capacity that makes it possible to narrow down the default interpretation from a range of various interpretations (Zunshine 2003: 271). In cognitive psychology our ability to interpret others' behavior in terms of their state of mind is called Theory of Mind (ToM) or our "mind-reading ability" (Zunshine 2003: 271–272). An alternative explanation as to why writers automatically

expect readers to link together the behavior and mental states of characters then emerges. Our mind-reading ability is the result of human evolution and was necessary for our ancient ancestors to be able to make sense of other people in their groups (Zunshine 2003: 272). We practice ToM every day and construct "the minds of others from their behavior" (Palmer 2004: 11). Therefore, we carry this same ability over to the interpretation process of fictional characters and because the practice of ToM happens automatically on a subconscious level in everyday interactions in the real world, it is reasonable to assume that we are also well-equipped to deal with fictional characters in the same manner (Palmer 2004: 11; Zunshine 2003: 272).

As was established in a previous chapter, we postulate causal connections between events to fill in the gaps of the storyworld. Palmer (2004: 30–31) draws attention to the fact that mental states cause events. Indeed, the motivations of a character can propel a whole narrative (Palmer 2004: 216). Understanding the causal connection between mental states and behavior enables us to understand why events in the narrative are happening. Although readers can be aided in this by the presentation of explicit reasons for behavior in the text, we still rely on our cognitive abilities, including Theory of Mind, to infer the causal connections between mental states and events.

1.3.4 Video Game Characters

The way in which the player character is set up at the beginning of the narrative can vary significantly across games and provide players with very different narrative experiences depending on the chosen approach. Many role-playing games feature a character-creation screen before the actual gameplay starts (Domsch 2013: 94). A character-creation screen enables the players to choose their player character's gender or class, for instance. Common character classes include fighters, spell casters, thieves and so

on, each with their own abilities and strengths that may then lead "to the creation of a different idea about the player character in the player's mind" (Domsch 2013: 95, 96). For example, depending on the character class the player character could be seen as someone who prefers stealth tactics to fights in the open or, alternatively, someone, who charges head-first into battle without thinking (Domsh 2013: 97).

The player's conception of the character is also largely affected by the amount of narratively relevant information the game itself ascribes to the character (name, backstory etc.), independent of the choices the player makes (Domsch 2013: 98). If the game gives the player a substantial amount of information about the character, the player makes choices based on what they know about the character and, therefore, "fulfills the requirements of the role" rather than inventing the role (Domsch 2013: 98). When a player performs an established role in an interactive digital narrative the player can be compared to an actor performing in a scripted drama and this performance results in readerly pleasure, a pleasure found in participating in the narrative rather than in authoring the narrative (Tanenbaum 2011: 4; Bizzocchi and Tanenbaum 2012: 394). In the case of the latter the player could be compared to an actor in an improvisational scene (Tanenbaum 2011: 4). As Domsch (2013: 98) explains, when the player character is essentially a blank slate it is up to the player to, first, create the role and then also act accordingly.

Like gameworlds, video game characters are set apart from fictional characters found in other media by the game mechanics and the rule system of the game. Firstly, video game characters (in single-player games) are presented through the interplay of two modes of representation – the mode of narration, which focuses on the characters as fictional beings, and the mode of simulation that focuses on their function as game pieces with various ludic properties and abilities like health or accuracy (Schröter and Thon 2014: 48). Players must adopt and alternate between two different "receptive stances" when

playing a game (Schröter and Thon 2014: 48). It is possible to distinguish between a narrative and a ludic experience when discussing the ways in which players can experience character (Schröter and Thon 2014: 40). In the case of the former the player experiences characters as fictional beings (Schröter and Thon, 2014: 49). Here the player creates a character frame and practices Theory of Mind to construct the mind of the character. In the case of the latter the player perceives characters as game pieces with properties like speed and health points i.e. the characters are tools for the players to extend their agency into the gameworld (Schröter and Thon 2014: 49). In this case the mental model of the player character or other characters the player constructs consists of game-related features and abilities and of character-related rules (Schröter and Thon 2014: 49). Schemas applied here are not ones carried over from the real world but "are made available to the players by playing other games and gaining knowledge about rules and game systems" (Schröter and Thon 2014: 49–50).

1.3.4.1 Visual Strategies of Subjective Representation

Subjective representation or, in other words, the representation of characters' consciousnesses is one of the prototypical features of narrative and is a transmedial phenomenon found "across a wide range of media" (Thon 2014: 67). Subjective representation, in essence, provides us with direct access into the mind of a character (Thon 2014: 68). Subjective representation implies that the storyworld is perceived by only one character and the player is given direct access to that character's perception of the storyworld which, for example, includes the character's hallucinations, memories or dreams (Thon 2014: 71).

Thon (2014: 72–76) proposes that the four main visual strategies of subjective representation in video games are the spatial point-of-view sequence, the (quasi-

)perceptual point-of-view sequence, the (quasi-)perceptual overlay and the representation of internal worlds. We can speak of a spatial point-of-view sequence when a game employs a subjective point of view i.e. the space of the game is represented from the spatial position of the character, that is from the perspective of the character. In a (quasi-)perceptual point-of-view sequence a subjective point of view is employed as well, but the visual representation also simulates the character's perception via representational markers like filters or soft focus (Thon 2014: 73, 75). For example, in the first-person shooter *Call of Duty* a red filter is applied when the player character gets hit (Thon 2014: 86). It should be noted that the use of a semi-subjective point of view where the camera follows the movements of the character but does not coincide with the position of the character entirely, falls under the intersubjective mode of representation which, on a scale, could be placed between the subjective and the objective mode (Thon 2014: 70, 87).

Unlike the previous two subjective modes of representation, the spatial position of the character does not necessarily need to be simulated when we consider the (quasi-)perceptual overlay (Thon 2014: 75). In *Batman Arkham Asylum,* a third-person action game, the player can use "detective mode" – a (quasi-)perceptual overlay that represents the world as seen through the eyes of Batman when he activates a gadget inside his cowl that highlights various elements in the navigable space (Thon 2014: 87). The camera, however, still follows Batman from an angle and does not simulate his spatial position through a subjective point of view.

The representation of internal worlds, the fourth strategy of subjective representation, differs from both spatial point-of-view sequences and (quasi-)perceptual overlays because of the added context markers in addition to the aforementioned representational markers (Thon 2014: 75). It is made clear that what appears on screen is not a character's perception of the storyworld but instead their internal world – a dream, a

hallucination, a flashback or a fantasy (Thon 2014: 76). In addition to representational markers like soft focus or slow motion, the internal world sequence may be followed by a scene where we are shown the dreaming character waking up (Thon 2014: 77).

1.4 Cinema and Cinematic Games

Modern video games have turned into major productions as hundreds of people are involved in their making and the budgets of the games are comparable to those of Hollywood movies (Domsch 2013: 170). In fact, comparisons to Hollywood movies are drawn voluntarily by video game publishers. For instance, a promotional trailer for *Mass Effect 3*, which highlights the positive reviews of the game, prominently features quotes like "the first true blockbuster game of the year" from *USA Today* and a quote from *Eurogamer* that reads "…this is arguably the first true modern blockbuster…"(EA UK 2012). As the term "blockbuster" was originally coined to describe big-budget Hollywood spectacles and is still commonly used to, first and foremost, refer to successful big-budget films then it appears that comparisons to movies are seen as a selling point by the publisher of the game. The comparisons aren't unfounded as modern games "employ full-scale cinematic drama, scenes in which characters profess their inner wants, and struggle to accomplish their dreams" (Sattin 2013: para. 10). In terms of their visual presentation games are also closer to achieving cinema's photo-realism than ever before (Domsch 2013: 173). In addition to the realistic visual presentation video games employ the talents of actors, many of whom also do work in film and television, in order to also make the characters *sound* convincing. In light of these examples and trends, which demonstrate the influence popular cinema has had on video games, one would assume that video games have also looked to movies for narrative techniques that would help the players to more easily comprehend the narrative. Although it has been well-established that we use our

cognitive abilities to make sense of narrative texts, the texts themselves can also contain narrative cues that aid our comprehension.

Film theorist Kristin Thompson (2003: 19) states that Hollywood cinema is known for employing storytelling techniques that make films easily comprehensible. In other words, Hollywood cinema strives for unity and clarity (Thompson 2001: 12). This requires that everything in the movie is justified or as Thompson puts it, "motivated" either in advance or in retrospect (Thompson 2001: 12; 2003: 21). For example, when it is set up early on in *Jurassic Park* that the character of Lex is good with computers and later in the film is able to reboot the park's security systems then the film has provided us with motivation in advance (Thompson 2003: 21). In films it is common for the characters to provide most of the motivations, which are, more precisely, based on the traits of the characters (Thompson 2001: 13). Once certain character traits are established we expect them to remain true throughout the film i.e. we expect the characters to act consistently throughout. If a character's actions do not align with the established traits, however, this too needs then to be justified either explicitly or implicitly (Thompson 2001: 13–14).

In order to achieve unity and clarity Hollywood film narratives consist of causal chains meaning that a cause leads to an effect and that effect leads to yet another cause and so on (Thompson 2001: 12). In some cases, like the *Jurassic Park* example, we can also speak of a dangling cause. We are presented with information or action that does not lead to an immediate effect but is to be used and picked up on later (Thompson 2001: 7; 2003: 21). Causal actions almost always result from the actions or traits of the characters and it is the main character that sets the causal chain of events in motion (Fabe 2004: 67; Thompson 2001: 14; 2003: 21–22). Thompson (2001: 14; 2003: 22) calls this character the "goal-oriented protagonist" whose goals provide "the forward impetus for the narrative". Additionally, limiting the amount of such protagonists to just one is another common way

for making narrative comprehension as easy as possible for the audience (Thompson 2001: 45). Domsch (2013: 81) also refers to causal chains in video games in his discussion regarding quests. Quests in the simplest sense are tasks that the player character needs to complete in the gameworld (Domsch 2013: 81). Quests can appear in sequential causal chains and they tend to be unified by a single overarching objective "that is often of major consequence to the player character" (Domsch 2013: 83–84).

Another way to make the comprehension process easier for the audience is to include appointments and deadlines for the purpose of temporal clarity (Thompson 2003: 25). When a character is given a deadline to achieve a goal of some sort or a certain time to meet someone then the viewer has a better sense of how much time has approximately passed for the character in the film (Thompson 2003: 24–25). A more extreme example of this approach to achieve unity is the TV series *24* in which "the ticking clock format" was essentially used to help the audience to better understand how the various complex subplots relate to each other (Neroni 2015: 97). Although in film deadlines also add urgency and suspense to the proceedings, in most games there are no actual time-restrictions for the player, only for the fictional character (Domsch 2013. 86). As the player is aware of this then game designers have attempted to maintain a sense of urgency by including narrative encouragements. For instance, non-player characters may make comments regarding the urgency of the task at hand or the exposition in the intro can already allude to an impending doom (Domsch 2013: 86).

Character traits, events and deadlines can all be made even clearer by conveying information about them redundantly (Thompson 2001: 16; 2003: 26). For instance, an event that is about to happen may be mentioned by a character after which the event is shown happening and is then later commented on and discussed by the characters (Thompson 2001: 17; 2003: 27). In such cases often what is called a dialogue hook is also

used at the end of a scene to connect it to the next one – a character promises to do something and in the next scene we see that character engaged in that activity (Thompson 2001: 20). Important character traits tend to be reiterated multiple times throughout a film as well (Thompson 2003: 27).

Narrative clarity in film can also be achieved through stylistic devices and careful editing. A new locale is introduced with an establishing shot i.e. we are presented with a panoramic view of the characters and the space they are occupying (Thompson 2001: 18; Kuhn and Schmidt 2014: para. 4). The exact location may further be identified with an expository non-diegetic title that appears on screen or with signs in the setting (Thompson 2003: 24). Actions and events are separated into different shots so that, for example, conversations are represented with shot/reverse-shot sequences (Kuhn and Schmidt 2014: para. 23). In a shot/reverse-shot sequence we cut back and forth between shots of two characters talking and to further make it clear that they are talking to and looking at each other their eyelines match in the alternating shots (Bordwell and Thompson 2010: ch. 6).

THE ANALYSIS OF NARRATIVE IN *MASS EFFECT 3*

2.1 Mass Effect 3

Mass Effect 3 (2012) is a sci-fi third-person action role-playing video game developed for the PC as well as for the Playstation 3 and Xbox 360 video game consoles by the Canadian video game developer Bioware (Edmonton Studio). It serves as the climax to the *Mass Effect* trilogy of games. The events of *Mass Effect 3* take place in the year 2186 in the Milky Way galaxy. Humanity made first contact with aliens 19 years prior to the events of the game and has since then become a part of an enormous spacefaring galactic community, which is over two millennia old making humans the newcomers to the galactic stage. The protagonist of all three games is Commander Shepard, a human (male or female depending on the player's choice) serving in the Systems Alliance Military, the representative body of Earth and other human colonies. The story of the series revolves around Commander Shepard's and her companions' attempts to thwart the plans of the sinister Reapers, an ancient sentient machine race that returns from dark space in every fifty thousand years to harvest the galactic civilizations that have sprung up during the course of one of the fifty-thousand year cycles. In the course of the first two games Shepard and her friends become aware of the impending Reaper threat and then fight and defeat the various agents of the Reapers, successfully denying Reapers entrance into the galaxy. One of the threads that runs through the games involves Shepard trying to convince the galaxy of the Reapers' existence. However, as the Reapers were successful in extinguishing all intelligent spacefaring civilizations that existed fifty thousand years ago then the current galactic community has no way of knowing of the Reapers and Shepard's words fall on deaf ears. *Mass Effect 3* begins on Earth with Shepard relieved of her command and under investigation for her morally questionable actions in *Mass Effect 2.*

However, when the Reapers finally reveal themselves to the galaxy by unexpectedly attacking Earth, Shepard is forced to escape the planet. As the Reapers close in on the entire galaxy Shepard has to find a way to unite the races of the galaxy in hopes of somehow stopping the seemingly unstoppable Reapers before it is too late.

2.2 Methodology

What is presented in this empirical section is a single run (playthrough) of the game as the narrative of the game can be realized only through performance i.e. going through all the nodal situations by playing the game and converting the nodes into narrative events. The playthrough was completed in 27 hours and 50 minutes in the course of eight separate game sessions, the longest of which ran up to 5 hours and 46 minutes and the shortest being 1 hour. All sessions were recorded and the recordings served as the basis for the analysis. The recordings were viewed once in their entirety to identify sequences and situations that relate to the set of questions outlined in the paragraphs below. They key sequences were subsequently viewed again for the purpose of the analysis. The structure of the empirical analysis reflects the structure of the theoretical section.

The hypothesis of the thesis is that games have moved towards a more cinematic presentation, a fact that is also reflected in how they are nowadays marketed, and have also borrowed narrative strategies used by filmmakers (as outlined by David Bordwell and Kristin Thompson). Therefore, film serves as a point of reference for the analysis of narrative strategies that aid an implied player in their comprehension of the narrative of the game. The analysis assumes that the imagined player also relies on the cognitive abilities outlined in the theoretical section. Additionally, the empirical analysis focuses on narrative forms specific to the medium of video games and the way in which they contribute to the player's comprehension process.

Questions related to the specifics of video games that the empirical analysis hopes to answer are: What kinds of narrative forms are included in the game? How do video game-specific narrative forms like embedded narratives or loading screens support narrative comprehension? Does the game employ narrative techniques commonly used in cinema?

Another set of questions is related to the double nature of gameworlds: Are there instances of incoherencies in the storyworld that cannot be explained by relying on our cognitive abilities and instead have to be explained by referring to the rule system or game conventions? Are there instances where game rules have been aligned with the storyworld to avoid incoherencies?

2.3 Analysis

2.3.1 Video Game-Specific Narrative Forms

2.3.1.1 Intro

The intro that precedes the gameplay includes a brief cinematic sequence, but more importantly the following paragraph of written text, which appears on the screen:

In 2157, humanity discovered that it was not alone in the universe.

Thirty years later, they found a peaceful place among dozens of galactic species. But this idyllic future is overshadowed by a dark past: Reapers, a sentient race of machines responsible for cleansing the galaxy of all organic life every 50,000 years, are about to return. The leaders of the galaxy are paralyzed by indecision, unable to accept the legend of the Reapers as fact. But one soldier has seen the legend come to life.

And now the fate of the galaxy depends on her

This paragraph provides us with quite a bit of storyworld information – the action takes place over one hundred years in the future, humanity has mastered space travel, there are dozens of different species of aliens in the galaxy and the antagonists as well as the dramatic stakes are established (destruction of all organic life in the galaxy). We realize that this is a science fiction story and we modify our expectations based on our knowledge

of the sci-fi genre conventions. For example, we may expect to meet bizarre aliens, witness space battles and experience a journey through the galaxy. Additionally, we immediately assume a fantastic paradigm when imagining the storyworld. Even though the principle of minimal departure still applies meaning that we still expect the storyworld to be similar to our physical world in certain ways, the future sc-fi setting also prepares us to modify many of our assumptions about the storyworld's resemblance to our current world.

2.3.1.2 Embedded Narratives

In *Mass Effect 3* the player has access to a source of encyclopedic storyworld information called the Codex. The Codex gets automatically updated with new entries whenever various concepts, historical events, planets, species and so on first get mentioned or are encountered in the game. When or if the Codex gets read is entirely up to the player. It should be noted that reading the Codex is not necessary for the successful completion of the game as relevant information is revealed in the course of the narrative. The Codex can, however, help flesh out the storyworld for new players, who are not familiar with the first two games in the series.

For instance, in a cut scene taking place on the moon of Palaven, Garrus sums himself up as a "failed C-Sec officer" and "a vigilante" and jokingly wonders how it happened that he and Shepard are "actually respectable now", referencing the events of *Mass Effect* and *Mass Effect 2*. Although neither Garrus nor Shepard go into any further detail about it, if a new player chooses to read the Codex entry pertaining to Garrus Vakarian they would find out that Garrus was a security officer at the Citadel and left due to conflicts with his superiors. He then later assumed the identity of Archangel to strike at the various gangs of Omega, a known haven for criminal activity. Without the Codex entry we would simply have to our own vague guesses about Garrus's past.

In addition to providing backstory information about characters returning from previous games, the Codex can also, for example, explain various concepts that are mentioned only in passing and are not elaborated on until later in the story. During one of the gameplay sections on the mission to save the turian primarch stationed on the moon of Palaven, James, Garrus and Shepard have a brief exchange about "the genophage" and how it has resulted in the krogan hating both the turians and the salarians. James also mentions something about the krogan having been sterilized. Right after the brief exchange notifications pop up on the screen that read "Codex Updated The Genophage" and "Codex Updated Krogan: Krogan Rebellions". These entries explain the exact nature of the genophage as well as who created it and why. Curing the genophage becomes a major plot point later in the game and while all the relevant info is laid out by the characters as the narrative progresses, reading these Codex entries would undoubtedly make it easier for someone new to the series to follow the story developments later on.

As is the case with the Codex, finding and reading the PDAs that can be found lying around on some missions is not necessary for completing the game or even for understanding the narrative. They can, however, support or confirm some of the hypotheses we have developed along the way, especially during missions with an element of mystery. Bordwell and Thompson (2010: ch. 3) have proposed that "a variation of the goal-oriented plot pattern is the *investigation*" in which the protagonist's goal is information "about mysterious causes". When Shepard goes to the Mars Archives to retrieve the Prothean data that might be the key to defeating the Reapers, she and her crewmates find the research base seemingly abandoned. In truth the base has suffered a surprise attack by Cerberus forces and as Shepard, James and Ashley venture further into the base, they begin to suspect that someone on the inside must have been working for Cerberus. In one of the cut scenes Ashley sees a woman on one of the security monitors

and Liara tells her that it's Dr. Eva Core, who arrived "about a week ago". Given that at this point we are aware of Shepard's suspicions of an inside man (or a woman) working for Cerberus, the introduction of a fresh addition to the research base makes her a believable suspect for us. Indeed, a little bit later Liara accesses another console with security footage showing Eva Core shooting two guards then venting the air from one of the compartments, killing everyone inside. Shepard remarks that now they have the answer to how Cerberus got in and Liara says she feels stupid for not realizing that Dr. Eva Core was a spy. Even though the reveal comes only three minutes (gameplay time) after Ashley first noticed the woman on the security monitor, another clue can be found in-between these two cut scenes. Specifically, the player actually takes Shepard through the vented room and a PDA can be found which contains a message from one of the researchers to another, complaining about the new wannabe "expert" woman messing in their files. After reading the message our suspicions are all but confirmed even before the reveal.

Another written message that can be found at the base pertains to what the scientists have discovered about the Protheans. One document suggests that the ancient space faring race "seemed particularly interested in early humanity's evolution" and that "they seemed to be trying to chart the curve of humanity's intellectual progression". When Shepard then later asks Javik, the last surviving Prothean recovered from a stasis pod during one of the following missions, if the Protheans had observed their ancestors, the document found earlier provides us with additional context to this question that Shepard poses.

The mission to Horizon, where Shepard investigates a seemingly abandoned facility for war refugees is notable for the number of clues that can be accessed along the way. The building appears to be deserted when Shepard, Garrus and Tali land but they quickly notice signs of battle between Cerberus and Reaper forces. Shepard then explores the base and begins to piece together what truly transpired at the facility by accessing

PDAs as well as audio and video logs on different computer terminals. The mission took only 29 minutes to complete but it included 11 audio logs, 5 video logs and 3 PDAs. Only two specific video logs have to be accessed to make progression possible. The two video logs contain the most important pieces of information. The first is security camera footage that shows Cerberus agents converting the refugees into Husks, the foot soldiers of the Reapers. The second one includes a video message recorded by Miranda, who says she has evidence that her father is working for the Illusive Man, the head of Cerberus. Footage of Miranda's father talking to the Illusive Man follows and their conversation reveals that the true purpose of the facility is to figure out how to control Reaper forces. Shepard concludes that the Reapers must have become aware of the Illusive Man's plan and attacked the facility.

Even though the two pieces of video footage provide the player and Shepard with the most vital bits of information, the rest of the logs slowly build up to the two major reveals and our cognitive skills are challenged in the process. With more bits of information available to us we form more hypotheses and modify them more frequently. In other words, we have to reconsider previously learned information more often than we would by simply viewing the two pieces of aforementioned video footage. We are able to do so because our "cognitive activity is not restricted to the particular moment being viewed" (Branigan 1992: 37). In fact, film theorist Edward Branigan (1992: 38) insists that moving forward and backward through the information presented to us is what enables us to form "a variety of /.../ hypotheses". For example, when Shepard first enters the facility she finds a PDA containing a Front Desk Log that has notes about processing "suitable candidates". At first we may hypothesize that the staff were trying to figure out which people should be provided with aid and accommodations first, but when we later learn that the refugees were used as test subjects in horrifying experiments, the terms "processing"

and "suitable candidates" acquire a much more sinister meaning in retrospect. By watching the various video recordings, we also become aware of Miranda's presence at the facility much sooner than we would otherwise and we may hypothesize that something may have happened to her or that she could be in need of rescue. Finding new consoles with Miranda's video recordings enables us to follow her steps and construct a narrative out of the events we see on the monitors. Therefore, in this case the scattered embedded narratives can be seen as parts of a single bigger narrative.

2.3.1.3 Loading Screens

Loading screens, which are presented in the form of short looping animations, appear in the game before and after most, but not all, of the missions and are often then also followed up by cut scenes before the actual gameplay resumes. Additionally, loading screens appear when the player moves from one larger area of the navigable game space to another. For instance, Shepard's ship has an elevator that the player can use to get to different decks of the Normandy, each of which features various computer terminals and crew members that Shepard can interact with. A brief loading screen appears every time the player takes the elevator to a different deck of the ship. While the game includes a number of different loading animations, only one appears during the elevator rides aboard the Normandy – a close-up shot of Shepard's desk in the captain's cabin. Similarly, when Shepard is on the Citadel and travelling between the different areas via elevators, the loading screens only include establishing shots of the space station or shots of its interiors.

The loading screen animations that appear before embarking on missions are always the same. After the player has used the galaxy map, located on the Normandy's main deck, to choose the next mission, a loading screen appears that again shows the room with the galaxy map. After the loading screen the player needs to select two squad

members out of a total of seven to accompany Shepard on the mission. Another loading screen appears, this time showing Normandy's shuttle bay after which the player must select the weapons they want to equip the characters with for the mission. A third loading screen then appears with a short animation of Shepard's drop shuttle flying through space. Finally, a full cut scene follows after which the gameplay section begins. When Shepard talks to Lieutenant Cortez the very first time, he explains that one of the new changes to the Normandy is that the armory has been moved down to the shuttle bay from deck two so that "Now you get off the elevator, pick your gear and head right into the shuttle". It could be argued that the loading screens along with the weapon selection screen are presented in such a way that aids the player in constructing the sequence of events verbalized by Cortez despite the lack of an explicit cinematic cut scene. Although we do not actually see Shepard and the two squad members taking the elevator down to the shuttle bay, arming themselves and then boarding the shuttle, the loading screens let us know that this is what happens. Firstly, if the player has explored the ship then they already know that the armory and the drop shuttle are both located in the shuttle bay. The shuttle bay loading screen effectively serves as a kind of an establishing shot and the weapon selection screen that follows further confirms that the characters must indeed be in the shuttle bay because that is where the armory is. Furthermore, when we then see the loading screen with the drop shuttle flying, we can easily fill in the missing gap of the characters boarding the drop shuttle in the shuttle bay and taking off despite it not being shown. It should be noted that the very first time Shepard leaves the Normandy aboard the drop shuttle it is presented in the form of a full cut scene where we actually see Shepard, Ashley and James checking their weapons in the armory, bringing down the shuttle and then flying it out of the shuttle bay. After seeing the cut scene we then also have a script for this temporally ordered

sequence of events, which also helps us to fill in the gaps in the same kind of situation later on in the game.

Most loading screens, with a few exceptions, serve to establish the location where we see the characters in the following cut scene and gameplay section. For certain mission-specific locations like, for example, the salarian homeworld of Sur'Kesh or the Jon Grissom Academy, instead of the standard flying shuttle animation the player is shown establishing shots of the planet and the space station, respectively. Loading screens featuring establishing shots of the Normandy or simply a shot of Shepard's desk that appear after the completion of a mission could also be seen as establishing shots serving as indication that Shepard is once again aboard the Normandy. Their necessity, however, is arguable due to the fact that as the player progresses through the game they come to expect the return to Normandy after each mission and have also grown familiar with the interiors of the Normandy, therefore, quickly grasping the location upon Shepard's return there.

In terms of exceptions, there are a few instances where the loading screens do not appear to serve a narrative purpose. After Shepard's mission on Mars the loading screen that follows does not feature the Normandy but instead an establishing shot of Mars. This could be explained by the fact that the particular mission ends with an extended cut scene that clearly shows Shepard and her squad members getting on the Normandy and the ship leaving the planet, thus making a loading screen featuring the Normandy redundant. In two other cases, however, it is harder to explain the choice of loading screens. During the missions on Sur'Kesh and the geth dreadnought the loading screens that appear are not location-specific and instead feature Shepard's desk and an establishing shot of the Normandy. In situations like these it is likely that a player would rely on their knowledge of game conventions and apply medium-specific charity, hypothesizing that perhaps not enough unique loading screens were simply created.

2.3.1.4. Scripted Events, Event Triggers and Quick Time Events

Scripted events that appear only during gameplay sections in *Mass Effect 3* could be divided into two distinct categories. While all of these scripted events are triggered when the player reaches a certain location in the navigable space of the game, they differ in terms of whether the player has to focus on them or not.

Firstly, there are scripted events where something unexpected and sudden happens, which heightens the tension in the situation. A number of these include the platforms Shepard is on suddenly collapsing. For instance, during the very first mission when Shepard and Anderson reach a certain spot in the game space an Alliance spaceship is shot down by the Reapers above the city and a massive shockwave causes the platform the characters are on to collapse, sending Shepard and Anderson tumbling down to a lower level. Presumably, the game takes control of the camera and focuses on the ship just as it is about to explode because otherwise there is no guarantee that we would be pointing the camera at that specific spot, which could leave us questioning what made the platform collapse. A similar situation takes place on Tuchanka when Shepard reaches a bridge. The camera pans right to show us a Reaper blasting the bridge Shepard is on and she comes crashing down on the ground. Yet another example of this type of scripted event can be observed when Shepard is trying to escape the exploding geth dreadnought and falls down to a lower level after failing to make a jump over a hole in the upper level. In addition to everything else Shepard has to now also get back to the upper level in the short amount of time she has left to escape from the ship.

The second category includes scripted events that might be happening either in the distance or in relatively close proximity to Shepard, but do not affect her directly. Usually one of Shepard's squad members mentions something visible in the nearby area and a visual prompt appears on the screen that highlights the (V) button and has an image of an

eye next to it. When the (V) button is pressed, Shepard turns to face the phenomenon her squad member is referring to. For example, during the mission to extract Primarch Victus, Garrus says "Damn it. Look at Palaven. That blaze of orange – the big one – that's where I was born". When the (V) button is pressed Shepard turns to look at Garrus's home planet, which is clearly visible in the sky. When Shepard is helping Mordin and Wrex to save Eve on Sur'Kesh then at a certain point Wrex can be heard over the radio telling Shepard "I'll draw some of their fire" and when the (V) button is pressed Shepard looks up and sees Wrex, who is being chased by a Cerberus gunship, flying the drop shuttle in the sky above her. A slightly different variation of this type of scripted event happens when Shepard herself tells Tali over the radio that Tali is "going to like the view". When the player presses the (V) button Shepard turns to look at the planet Rannoch. Even though pressing the prompted button is entirely optional, in each of these cases we might be left confused as to what the characters are referring to as we are not guaranteed to be looking at these specific things at these exact moments the characters are speaking.

The quick time events in *Mass Effect 3* often feature Shepard taking physical action during tense situations and they relate to her sense of morality. The player has a limited time of a few seconds to either take the paragon action, which involves Shepard acting heroically or compassionately; the renegade action i.e. an act of aggression or instead simply let the situation play out. The player is also not privy to what Shepard will actually do before making the choice. For instance, when Khalisah-al-Jilani ambushes Shepard near the Citadel Embassies and verbally attacks Shepard for fleeing Earth, the renegade action involves Shepard taking a swing at the journalist and saying "I've had enough of your tabloid journalism". Paragon choices, on the other hand, often involve Shepard showing compassion or trying to solve hostile situations without violence. For example, when Shepard gets into a standoff with Ashley on the Citadel, the paragon action results in

Shepard lowering her gun and signaling Garrus and Liara to do the same. The way Shepard handles herself in these situations likely affects our conception of the character.

2.3.2 Gameworld

Information about game rules and mechanics are relayed to the player in several ways throughout *Mass Effect 3*. While narrative text and visual presentation make it possible for us to construct a mental image of the storyworld, textual commentary and visual commentary provide us with non-diegetic game-related information that enable us to simultaneously construct a mental image of the game state. In some cases narrative text and textual commentary accompany one another harmoniously while at other times textual and visual commentary can draw our attention away from the narrative and instead make us focus solely on ludic aspects. The double nature of the gameworld is also highlighted by instances where we have no other choice but to apply medium-specific charity in order to deal with what could otherwise be considered an incoherent storyworld.

During gameplay sequences *Mass Effect 3* prominently features both textual as well as visual commentary to provide the player with non-diegetic information. In combat situations the heads-up display (HUD) features small numbered icons signifying the combat powers available to Shepard in the upper left corner, the bottom left corner features the image of the weapon Shepard is wielding along with numbers signifying how much ammunition Shepard has got left for that specific weapon and in the bottom centre of the screen the status of Shepard's health and shields are represented in the form of two colored bars (red and blue, respectively). Additionally, tiny portraits of Shepard's two squad members are displayed under the bars as well as icons signifying combat powers available to each of them. A targeting reticule is present at all times to indicate where exactly the player is currently aiming and when enemies get within a certain range they become

outlined in red and when aimed at the specific type of enemy (e.g. "Assault Trooper") is featured in written text in the top centre of the screen along with their respective health and shield bars. Similarly, when approached, the names of Shepard's crew members, allies and other important characters appear in the top centre of the screen along with the word "Talk" under the name, informing the player that the character can be engaged in conversation. Other elements like computer consoles are also visually highlighted, this time with the word "Use" being displayed. In short, the game utilizes both visual (e.g. health bars, power icons, character portraits) and textual commentary (e.g. "Talk" and "Use") to provide non-diegetic game-related information to the player. With the help of this information we are able to construct a mental image of the game state and get acquainted with game rules. For instance, the HUD helps us keep track of things like Shepard's health, ammo and powers and tells us what we can and cannot interact with in the gameworld. As the HUD is never referenced or recognized by any of the characters it is clearly not part of the narrative text or the visual presentation.

Game-related information is also provided to the player during loading screens that appear when Shepard uses the elevator aboard the Normandy to travel between decks. The image during the loading screens is that of Shepard's desk located in her cabin. Among other things on the desk there is Shepard's private terminal and during loading screens random gameplay tips like "Use hard-hitting weapons against armored opponents" or "Use the First Aid Power to resuscitate a fallen squadmate from a distance" are displayed on the screen of the computer terminal. However, as these tips appear on the computer screen only during loading screens and not when Shepard actually checks the terminal in her room then we are not dealing with a storyworld incoherency. Unlike some other loading screens, which may serve as establishing shots of sorts, this particular loading screen image simply appears to exist so that the player has something to look at while the game is loading.

Although a number of different instructions and button prompts appear on screen throughout the game, characters in the storyworld do not directly address the player. In the very first gameplay sequence of the game in which Shepard has to follow Anderson and escape Earth, players are presented with various instructions that help them get acquainted with the gameplay mechanics. This is done via textual commentary with commands like "hold (SPACEBAR) to run", "press (F) to melee" or "pick up heat sinks to replenish ammo" appearing on the screen. However, these instructions are also every time accompanied by suggestions from Anderson that bear the same meaning, but do not recognize the non-diegetic game mechanics. The suggestions made by Anderson that correspond with the aforementioned three prompts are "take a running jump, it's farther than it looks", "have to take these things out the old-fashioned way" (Shepard has to engage in melee combat with Husks, zombie-like humanoid foot soldiers of the Reapers) and "grab some ammo". In other words, the player is addressed with textual commentary and at the same time Shepard is addressed with narrative text.

There are also a few noteworthy instances where game-related information is provided to the player through diegetic dialogue between non-player characters and Shepard i.e. via spoken narrative text. At the beginning of the first act after Shepard has talked to the Citadel Council and is in command of the Normandy again Specialist Traynor gives Shepard a rundown of some of the areas of the ship in a cut scene. Although Specialist Traynor explains that the Normandy was retrofitted during Shepard's absence, thus providing a legitimate reason as to why Shepard needs to get reintroduced to her own ship, Traynor focuses solely on the areas of the ship that are important to gameplay (i.e. areas that contain computer consoles for various purposes). For instance, Traynor tells Shepard that "the shuttle bay contains an armory, where you can modify your equipment between missions" and that Shepard "can set the Normandy's destination" by using the

galaxy map found in the CIC. Even though the player is not directly addressed, these explanations seem to be a little too basic and unnecessary for Shepard. Similarly, when Shepard enters Liara's office for the first time she is greeted by Glyph, an info drone, who informs her that the office contains a terminal that allows Shepard to choose between various upgrades. As the upgrades do not serve any narrative purpose and only boost Shepard's ludic abilities then what appears to be narrative text at first is actually used to introduce game mechanics to the player.

Textual commentary and visual commentary are combined in notifications that appear throughout the game in the bottom right corner of the screen. The two most prominent ones are the "Codex Updated" and the "Level Up!" notifications, which also feature the images of a PDA and three arrows pointed upwards, respectively. The first one lets the player know that a new entry has been added to the Codex, which acts as a major source of storyworld information that the player can read or listen to whenever they choose to. The second notification informs the player that they have gained enough experience points to be able to level up Shepard and her squad members. Even though it is entirely up to us, the players, whether we wish to read new entries in the Codex or start the leveling up process when the notifications appear, we are encouraged and inclined to do so when it comes to leveling up Shepard and her squad members.

In the analyzed playthrough the "Level up!" notification appears for the first time during a gameplay section just as Shepard, Ashley and James have landed on Mars. It is also accompanied by a non-diegetic instruction that reads "Press (ESCAPE) and select Squad to level up". Even though we have already come to perceive Shepard as both a character and a game piece during the previous gameplay sequence on Earth (i.e. she has ludic properties like health), the process of leveling up the characters requires us to strictly focus on them as game pieces. The squad upgrading process revolves around allocating

points to develop various special powers inherent to each character to make them more effective in combat. Due to the fact that the allocation of points affects the characters only as game pieces that have game-specific features then we switch from the mode of narration over to the mode of simulation until we have finished leveling up the characters. Of course, we constantly alternate between the two receptive stances during gameplay, but the process of upgrading the characters interrupts the narrative entirely as picking and choosing which powers and skills to spend the experience points on can take some time. What is more, we are unlikely to ignore the "Level up!" notifications even when we are currently in the middle of an exciting mission because leveling up the characters increases our chance of success against enemies, who might be waiting just behind the next door.

Although reading the Codex, which is written from an in-universe perspective, provides us with storyworld information as opposed to gameplay information, it too is disruptive to the narrative and it is arguable whether it is a part of the diegesis. The Codex is essentially an encyclopedic collection of information, compiled by the Systems Alliance Intelligence, about the galaxy, the different races, technologies and individuals (e.g. there are entries for Shepard's allies as well as enemies). Theoretically, these texts actually exist in the storyworld of the game, but reading the Codex effectively pauses time in the storyworld meaning that the player can read the Codex for an extended period of time and then resume gameplay as if no time has passed. None of Shepard's squad members ever comment on Shepard simply taking a break and there are no narrative consequences for such delays. Therefore, it would seem that it is only the player who does the reading and not Shepard.

Mass Effect 3 includes an interesting example of a storyworld inconsistency caused by game rules. In what could perhaps be seen as an attempt to make a simple non-diegetic game rule a part of the diegesis, the player cannot simply bring up a weapon selection

screen whenever or wherever. In order to make the weapon selection screen appear Shepard needs to use the weapon bench in the armory located in the shuttle bay of the Normandy in-between missions. Therefore, a narrative is created where the character of Shepard actually goes to the armory and then equips herself in the storyworld as opposed to the player simply bringing up a non-diegetic weapon selection menu with a press of a button. Additionally, the weapon selection screen displays a weight limit which determines how many weapons Shepard is able to carry. Weight from weapons also decreases the speed with which Shepard's various powers recharge in combat. In other words, the game points to weight as a realistic reason as to why Shepard does not and cannot have an infinite number of weapons on her and the negative effect that equipping an unrealistic number weapons has on the use of powers discourages players from doing so. It then appears that in *Mass Effect 3* we do not have to apply medium-specific charity to explain Shepard carrying an impossible number of weapons because she is unable to do so.

However, Shepard can pick up certain weapons found on various missions and the player can then choose whether to "equip" the new weapon, "continue" without doing so or to "change loadout". When the third option is chosen the weapon selection screen appears and we can surprisingly choose between all the weapons found in the armory. In the storyworld this is impossible as the weapons would have to literally appear out of thin air and, therefore, we have to apply medium-specific charity to deal with this inconsistency, hypothesizing that perhaps the game developers wanted to give players more frequent opportunities to change their weapons so as to provide a more fun gaming experience.

Lastly, while repeating throughout the game, only a single type of inconsistency in visual representation between cut scenes and gameplay sections was identified in the analyzed playthrough. In a total of 19 cut scenes Shepard is holding either a different

assault rifle or a different pistol from the one equipped in the gameplay sections preceding the cut scene. As there are no apparent gaps in time between the gameplay sections and the particular cut scenes that follow then it is impossible to imagine that Shepard picked up a different gun before the beginning of the cut scenes. In every case Shepard's equipped weapons were replaced with the two weapons she originally started out with during the escape from Earth. It should be noted that without additional playthroughs it is uncertain whether this is a glitch that appears at random or if it is specific to those particular cut scenes. In any case, we might simply conclude that we are dealing with an oversight on behalf of the game developers and not look for explanations in the storyworld.

2.3.3 Character

Before delving into the gameplay proper, the various options available to the player in terms of character creation and backstory should be discussed. Firstly, the playthrough analyzed in the thesis utilizes the save file transfer feature of the game, which enables the player to carry over Shepard's decisions from the previous two games because it opens up additional narrative content that would not appear in *Mass Effect 3* otherwise. In fact, a fan website was created from where players new to the series can download save files from previous games to use in their own playthroughs of *Mass Effect 3* to gain access to the content. The downside to using said feature, however, is that a new player does not get access to the section of the character creation screen that lets them determine Shepard's origin (Earthborn, spacer or colonist) and reputation (sole survivor, war hero, ruthless). Upon choosing two of the six options, both are accompanied by a short introductory paragraph of text (not visible in case of a save file transfer) that could potentially impact the player's perception of the character before the game begins and the way the player chooses to roleplay the character. As the Shepard in the analyzed playthrough is identified

as Earthborn and a war hero then the corresponding introductory paragraphs still bear a mention.

The game informs us that an Earthborn Shepard was "raised on the streets" but then "escaped the life of petty crime and underworld gangs by enlisting with the Alliance military" at the age of 18. Additionally, Shepard's reputation as a war hero stems from the fact that early in her career she demonstrated "bravery" and "heroism" by risking her life to save fellow soldiers in the line of duty when facing "an overwhelming enemy force". Although the descriptions are rather vague, we could infer that Shepard is someone who is both independent and selfless. Furthermore, while arguably *cliché*, the orphan backstory does present Shepard as an underdog type of character who players cannot help but to root for. If we follow Bizzocchi and Tanenbaum (2012: 394), who argue that players find pleasure in participating and "submitting to the story" (i.e. fulfilling an established role) and Thompson (2001: 13), who states that we expect characters to act consistently, then not only can we infer certain character traits (e.g. independent, selfless, courageous) from the backstory provided, but we are likely to roleplay the character in such a way that Shepard's attitude and actions reflect the already established character traits.

However, as the specific run of the game analyzed here does not include this section of character creation and the thesis does not focus on player agency or aspects of roleplaying then it will be assumed that the only thing we know about Shepard before the start of the game is her visual appearance as Shepard's looks can still be modified even if a save file with a pre-existing version of Commander Shepard is transferred over to *Mass Effect 3*.

The game begins with an intro that features a short cinematic sequence, which is then followed by a paragraph of expository text that appears on screen. In the cinematic sequence we can hear Admiral Anderson and Admiral Hackett share their concerns over

the appearance of "something massive on long-range scanners" and the loss of contact with "two deep space outposts". The two men conclude that this must be what Shepard warned them about. Shepard is also referred to in the expository text, which states that "one soldier" is aware of the Reaper threat and that "the fate of the galaxy depends on her". Therefore, even if we if we were not already aware of the general tendency of the player character also being the main protagonist in video game narratives then Shepard's importance with regards to the narrative is implied by the fact that in the opening minutes of the game she is the only character referred to – first by her proper name and, almost immediately after, via a personal pronoun. It is also made explicitly clear that the fate of the entire galaxy depends on her specifically.

In *Mass Effect 3* character traits are most often ascribed to the characters during conversations between Shepard and other non-player characters. As the player controls only Shepard and the game includes only a handful of cut scenes that do not feature Shepard then, with the exception of one cut scene, we do not witness other characters talking about her without Shepard also being present. Shepard's allies do, however, freely share their opinions on each other and Shepard can also witness her crew members bantering with each other aboard the Normandy and during missions.

Thompson (2001: 42) states that in film it is common to have newly introduced characters enter into dialogue so as to provide the viewer with information about each of them in the course of the conversation. In *Mass Effect 3* the very first thing we learn about most of the characters in addition to their physical appearance, of course, is their name. In the opening cut scene Shepard is first addressed as "commander" by a soldier, who Shepard identifies for us as "James" and shortly after she shakes hands with "Anderson" who then tells her "You look good, Shepard". What is more, the way Shepard greets and addresses newly introduced characters almost immediately gives us a sense of whether

Shepard knows them or is meeting them for the first time. For instance, Ashley, Liara, Garrus, Jack, Mordin, Grunt, Samara, Jacob, Miranda, Tali and Legion, all of whom are major returning characters, address the player character as "Shepard" when they first appear and she, in turn, greets them by their first name. In many cases the greeting is also followed by remarks like "It has been some time, Shepard" or "good to see you again". In contrast, new characters like General Corinthus or Kahlee Sanders address Shepard by her rank. Additionally, when Shepard is interacting with fellow officers in the Alliance then the level of formality or lack of provides us with information on the nature of the relationships. For instance, the long-standing friendship between Shepard and Anderson is reinforced during a cut scene where Shepard addresses Anderson as "sir" and says it's good to see him again. Anderson, however, mocks Shepard saying "I may have reinstated you, but that doesn't give you permission to go all formal on me".

If Shepard goes and sees Garrus aboard the Normandy after she has solved the conflict between the geth and the quarians he expresses his disbelief at the situation: "Peace between the geth and the quarians? /.../ Next you'll be telling me the krogan and the turians are cooperating. Oh right, you managed that one too. You're a peacemaker, Shepard". In other words, a character trait is explicitly ascribed to Shepard, one which consistently informs her actions throughout the story. When first meeting the Citadel Council, Shepard tells them that the various species must now stand together more than ever before. Later Shepard needs to extract a turian military leader form a battle zone so that he can attend a summit that could help unite the different races. During the gameplay section Shepard tells Garrus that the summit is their only chance, adding that "None of us are beating the Reapers alone." When further tensions arise between the turians and the krogan after it is revealed that centuries ago the turians had planted a bomb on Tuchanka, the krogan homeworld, Shepard tries to talk reason to both Victus and Wrex, urging them

not to let the past rip them apart and when the krogan clan leaders threaten Mordin, an eccentric salarian scientist, Shepard tells them that if they want to defeat the Reapers, the grudge they have against the salarians "ends right now". Lastly, after saving the lives of the Citadel Council from Cerberus assassins she again stresses the need for everyone to stand together.

Interestingly enough, at the beginning of the game we may not have guessed that Shepard would be successful at calming the fires between the aforementioned races. Shepard is reluctant to leave Earth, later telling Liara that she's a soldier first and should not be wasting her time with diplomacy. She again reiterates this sentiment when the turian councilor asks her to retrieve the turian primarch for the summit and she expresses frustration at having to "play politician" while there is a war going on. However, another character trait is explicitly ascribed to Shepard early in the game during the mission to the Mars Archives when Liara admires Shepard's ability to always stay "focused, even in the worst situations". Indeed, Shepard tells Liara that "stopping the Reapers should be the only thing we should be focused on". When convincing Primarch Victus to come with her she tells him "I *need* an alliance. I *need* the turian fleet" and when the salarian dalatrass warns Shepard against curing the genophage in exchange for help form the krogan and the turians, Shepard retorts that "If it takes a cure to cement this alliance, then that's what I'm doing". We build a character and a continuing-consciousness frame for Shepard as our hypotheses about her are modified as new character traits are ascribed to her in the course of the narrative. Even though diplomacy does not appear to fully suit her, Shepard's focus and determination explain her perseverance and success in achieving peace between the different factions.

During a conversation aboard the Normandy after Shepard has helped cure the genophage, Garrus tells Shepard that he admires her for not secretly sabotaging the

genophage cure, an idea the salarian dalatrass suggested to Shepard earlier in exchange for providing salarian help with building the Crucible and taking back Earth. Shepard responds with "I could never bring myself to do that, no matter what I was offered" and Garrus agrees that it is nice when they can „save the galaxy without destroying another race along the way". Shepard's unwillingness to compromise her morals is a character trait that is also ascribed to her through her actions in two notable situations. In said situations we practice Theory of Mind to get access to Shepard's state of mind based on her behavior. In a cut scene an armed standoff between Shepard and Ashley takes place on the Citadel because Ashley is assigned to protect the Council members and Shepard is convinced one of the members is, in fact, a traitor working for Cerberus. In the end Shepard manages to talk Ashley down. Later aboard the Normandy Garrus asks Shepard if she could "have pulled the trigger" to which Shepard replies "I don't see how", arguing that once they start killing their friends, war becomes murder. At the end of the mission to retake Omega from Cerberus Shepard also lets General Oleg Petrovksy live and arrests him even though Aria would like nothing more than to see him die. Aria does, however, begrudgingly admit that Shepard "has good control" and that she knows "it's hard to resist that impulse". It should be noted that both situations feature a quick time event during which the player can alternatively make Shepard shoot the two characters. In such a way this specific character trait of Shepard's is dependent on the player. On the other hand, it could be argued that in the analyzed playthrough the choice to not shoot the characters stemmed from performing the already established role. As we know Shepard and Ashley are friends and that Shepard prefers peace to conflict, it would be out of character for her to violently gun down these people. On a later mission she also reprimands a quarian general for attacking the geth, calling his actions "shortsighted" and "bloodthirsty".

Some other minor character traits are also ascribed to Shepard, mostly through dialogue. For example, when Shepard proposes that she and Jack blow off some steam by dancing in the Purgatory nightclub, Jack laughs and says "Shepard, everybody knows you can't dance". This character trait is conveyed again during a friendly shooting contest when Garrus quips that people who are impressed by Shepard have never seen her dance. From this comment we can infer that Garrus too thinks Shepard is a bad dancer. Throughout the game many of Shepard's responses carry a hint of sarcams and at one point Ashley calls Shepard out on it saying that nobody likes sarcasm to which Shepard proudly responds "I do".

We are also provided with direct access into Shepard's mind by way of a few dream sequences, which involve her chasing after a young boy she previously saw die in the initial attack on Earth and she appears disturbed each time she wakes up. As Shepard also looked visibly upset in the cut scene, where the boy was killed we may infer that Shepard is still emotionally reeling from the experience and that the nightmares are a reflection of Shepard's mental state. Our hypothesis is later proven to be accurate by Shepard herself, when she tells Garrus, who also doubts if he did the right thing leaving his own homeworld, about the noy.

Through brief bits of dialogue the text ascribes Shepard the same backstory presented during the character creation section, which was skipped in the analyzed playthrough. Upon landing on the beautiful garden world of Eden Prime Shepard reflects on how the city where she grew up was "hard and dirty". Additionally, when Shepard asks Admiral Hackett why he thinks she is the best one for the job, Hackett brings up Shepard stopping "the Batarian slavers on Elysium all those years ago" and points out that Shepard has a knack for succeeding against all odds because of her ability to inspire loyalty in her troops.

Lastly, based on the conversation with Hackett we could infer that despite her past heroics Shepard is humble or at the very least she does not have an inflated sense of self. In a different cut scene Liara asks Shepard how she would like to be presented in historical records meant for future generations. Shepard tells Liara to just include the facts without any embellishment even though Liara, who obviously admires Shepard, has supposedly already prepared "breathless passages" on her heroics. At one point Anderson also tells Shepard that she has "quite a fan club" back on Earth and that any news they hear of the Normandy gives the troops, who are left behind on Earth some hope. During the climax of the game when Shepard has returned to Earth, Major Coats also feels that seeing Shepard is good for the troops and that her presence will "bolster their resolve". Shepard argues she is just a soldier like any other, but Coats points out that even though she might see herself like that, she is a hero for the the men and women fighting on Earth. Therefore, it appears that Shepard's attitude towards her own accomplishments and abilities remains unchanged throughout the story.

As is the case with Shepard, most character traits are either explicitly or implicitly ascribed to non-player characters through dialogue. We create a character frame for each of them and practice Theory of Mind to get insight into their state of mind based on their outward behavior. Additionally, we apply a continuing-consciousness frame to them as information about them is revealed bit by bit and they may disappear from the narrative for extended periods of time. Even some of Shepard's squad members, arguably the non-player characters with the most screen time, may sit out a number of extended missions because the game allows Shepard to be accompanied by only two squad members at a time.

Based on his interactions with Shepard and other characters we may describe Javik as being straightforward to the point of coming off as rude. When Liara asks him questions

about Prothean technology, Javik states that in his time he was a soldier and that he is skilled only in the art of killing. When Liara enthusiastically tells him how she has spent her life researching his race, Javik's answer is "Amusing, asari have finally mastered writing", which appears to somewhat offend Liara. Later on she also tells Shepard that "Javik is his usual forthcoming self", referring to his seeming lack of cooperation and that he was "cold" when she tried to talk to him. Initially Javik appears to have the same sort of dismissive attitude towards other races as well when, for example, he points out how not that long ago humans used to live in caves and refers to the salarians as "lizard people" who used to eat flies. His attitude changes somewhat in the course of the story, however, as do his social skills. When some citizens on the Citadel ask him if they have any chance of defeating the Reapers, Javik starts out by saying that the odds are they will all die, but quickly realizes this may not be the right approach to take and changes course, giving the people an inspiring speech instead. Additionally, we may hypothesize that he starts seeing more value in the "primitive races" when he begins referring to them as "the young". From some of his comments we may also infer that above all Javik respects warriors, which would be consistent with him being established as a soldier. For example, he seems to approve of Garrus because "his knowledge of war is formidable".

In the case of characters like James and Jack we might make certain assumptions about them as soon as we first see them. James, for example, is big and muscle-bound, more so than any other human character in the game. His physicality is also emphasized when Shepard visits James in the shuttle bay and James is doing pull-ups and continues to do so during the conversation after which he also asks Shepard to spar with him. The little corner James has set up for himself in the shuttle bay is also filled with weights. Cortez also jokingly tells Shepard that even though James is responsible for maintaining the armory, "the only weapon he really cares to maintain is himself". In other words, we could

describe James as being "physical" just by his appearance and this character trait is later reinforced by James's behavior, living quarters as well as by Cortez's joke. James wanting to spar with Shepard could also lead us to speculate that he is perhaps a little competitive and this character trait is seemingly reiterated later when James asks Wrex if they could later "go toe to toe, just for fun". We may infer that James's interests also include "drinking", "gambling" and "smoking" as he asks if Javik likes to do any of these things in an attempt to make small talk. Indeed, whenever Shepard visits the Citadel, James can often be found playing cards at a table and when Shepard finds Ashley hung over in her quarters aboard the Normandy, Ashley tells her that she just wanted to let off some steam and James "had just the thing" and that it came in a bottle.

Similarly to James, when first encountering Jack in Grissom Academy we might immediately have certain expectations about her character based solely on her appearance. Her haircut features shaven sides, she wears a studded leather jacket over a white top that leaves quite a bit of her heavily tattooed skin exposed and the outfit is completed by military pants and boots. As Shepard and Jack recognize each other instantly, both seemingly surprised to see the other, we realize that we are dealing with yet another acquaintance of Shepard's. Based on her punkish look we might expect Jack to be a character, who, for example, does not take kindly to authority. Jack's behavior appears to give weight to our hypothesis about her being a rebellious figure as she greets Shepard by punching her in the face and calling her stupid for trusting Cerberus. Furthermore, other characters confirm our hypothesis as Shepard does not appear to be even remotely surprised by the punch and EDI notes that "Jack's personality appears largely unchanged". Shepard then asks "how in the hell did you end up teaching people?" and Jack provides us with expository dialogue about what she has been up to since Shepard last saw her. Based on Shepard's question we may conclude that Shepard too has trouble seeing Jack acting as

a leader and an authority figure. Jack admits that Shepard may have rubbed off on her a little and that she did pick up a thing or two from all of Shepard's "damned speeches". As the conversation goes on it turns out that Jack has actually become a good teacher and seems to be liked by her students. Not only has our initial impression of Jack been at least partially subverted, we can also infer that Shepard has been a role model of sorts to Jack with her "damned speeches". Therefore, Shepard's capabilities as a leader are once again brought to our attention.

In the case of some other characters like Liara, for example, our initial assumptions about them based on just their looks may prove to be somewhat off base as well. We meet Liara in the prologue when Shepard goes to the research base on Mars. Once Shepard has entered the base she hears gunshots coming from the direction of an air shaft. The camera zooms in on the air shaft and we cut to a shot of Liara crawling through it. At this point we do not yet know her name, but Hackett informed Shepard beforehand that she has to locate Dr. T'Soni, who may have discovered a way to defeat the Reapers. As the blue-skinned alien woman in the vent is introduced in a cut scene, a potential sign of importance, we may hypothesize that this could be the Dr. T'Soni Hackett mentioned earlier. In the cut scene Liara appears to be unarmed and keeps looking backwards with a distressed look on her face while continuing to crawl through the air shaft and we might assume that she is fleeing away from the gunshots we heard moments earlier. We get confirmation as bullets hit the shaft above her head and two Cerberus soldiers appear from behind a corner in pursuit. Although our first impression of her might be that of a damsel in distress, both due to her gentle appearance and her occupation as a scientist as opposed to a soldier, this initial idea of the character is quickly subverted when after jumping out of the vent she elegantly suspends the two soldiers in the air with a special biotic power and proceeds to shoot them both without any hesitation. She then calmly walks up to the injured soldiers

laying on the ground and shoots them again, ensuring their death. This is one of the more action-oriented introductions to a character and shows us that despite her gentle appearance and soft-spoken nature, she is skilled in combat and can be ruthless when necessary. This character trait is further established later when she tells Shepard how during their time apart she was attacked by Cerberus but managed to outwit them and escape by sending her own ship exploding into one of the Cerberus cruisers in "a spectacular fashion".

In addition to being Shepard's romantic partner, Liara is also one of the more important non-player characters in the main plot line due to her background as an archeologist and her extensive knowledge of the Protheans. She is the one to discover the plans for the Crucible, a Prothean device, that plays a major part in the climax of the story and her knowledge of the Protheans enables her to help Hackett figure out and build the Crucible.

Upon discovering Javik in the stasis pod on Eden Prime Shepard notes "It's a good thing we brought our Prothean expert", referring to Liara, who appears to already be excited by all the new things she could now learn about the Protheans. She also provides most of the expository dialogue during the mission and is the one to figure out how to safely open the pod. Liara's profession as well as her passion for her work is emphasized a number of times throughout the game. Liara explicitly states that "I've spent my life studying Protheans" and enthusiastically tells Javik how she has written "over a dozen studies" and published in "several journals". Liara appears to be very invested in her work as she describes the study of Protheans as a "lifelong passion" and considers them to be "an enigma, a mystery to be solved". Liara's enthusiasm is also not lost on other members of the Normandy's crew. James figures that Liara "must be over the moon" after finding Javik and when Liara starts bombarding Javik with questions, Shepard appears to have

known it was only a matter of time until Liara could no longer contain her excitement, saying "here it comes".

Liara's profession and passion for her work is also touched upon in the romantic plotline during intimate scenes between Shepard and Liara. On the Citadel Liara tells Shepard how the scenery reminds her of the park near her childhood home, where she used to get into trouble for digging for ruins in the grass. Shepard finds this cute and Liara recollects how her mother bought her her first history book because of her exploits in the park. It then appears that archeology and by extension the Prothean culture are indeed lifelong passions of Liara's that extend back to childhood. In another scene between the two, Liara visits Shepard in her cabin to share her plan to bury computers containing records of the history of the galaxy including information on the Reapers on various planets so that even if they fail to defeat the Reapers, the evolved species of the next fifty-thousand year cycle may have a chance. Shepard wonders if the records will survive for that long, but Liara assures her she knows what she is doing, having been an archeologist for so long. On a more personal note, Liara wants to know how Shepard would like to be presented in the records. Shepard tells Liara to just put down the facts. Liara agrees to do so but also jokes in a half-serious manner that first she has to delete "all these breathless passages" on Shepard's heroics she has already prepared. We might gather that Liara thinks highly of Shepard.

As can be seen from the above examples, in *Mass Effect 3* character traits may be ascribed explicitly or implicitly to the characters via dialogue, their environments, their behavior and their physical appearance. Additionally, some implied character traits may later be subverted or, alternatively, repeated (i.e. presented redundantly). It should be noted, however, that due to the limited scope of the thesis and the considerable length of the game only a handful of major non-player characters have been explored in this chapter

and only their most prominent character traits are highlighted. The four non-player characters were chosen for the analysis because each of them provided different examples of how character traits can be ascribed by the text and interpreted by the player. They also provided examples of character traits being presented redundantly.

2.3.4 Strategies of Subjective Representation

Although *Mass Effect 3* employs a semi-subjective point of view during gameplay sections, there are a few notable gameplay instances that provide us with direct access to Shepard's perception of the storyworld via the use of (quasi-)perceptual overlay. Additionally, an example of a (quasi-)perceptual point-of-view sequence can be observed in one of the cut scenes.

In a cut scene during the climax of the game Shepard is knocked out by a Reaper's laser blast and the screen flashes white. The cut scene then resumes and we are treated to a (quasi-)perceptual point-of-view sequence as Shepard slowly wakes and we see the surrounding chaos directly from her perspective before we cut to a shot of Shepard as she gets up. Different representational markers are used to simulate Shepard's immediate perception of her surroundings during the (quasi-)perceptual point-of-view sequence. Most sounds are somewhat muted while Shepard's breathing and grunts are clearly audible. Light sources appear to be unnaturally bright and the visible surroundings are blurry. The representational markers are, however, still present in the next shot of Shepard getting up meaning that a (quasi-)perceptual overlay is used. As the semi-subjective point of view gameplay resumes Shepard's impaired hearing as well as the (quasi-)perceptual overlay remain. Her state of mental and physical distress is further emphasized by the gameplay mechanics as Shepard can no longer run or even walk, instead slowly limping forward and at one point falling down from exhaustion. What is more, when Shepard is confronted by

an enemy character the gunplay happens in slow motion. Earlier in the game during the mission on Mars there is also a similar gameplay sequence where time slows down as Eva Core, a Cerberus agent, is running towards Shepard and the player has to aim carefully before she is able to reach Shepard. The application of slow motion to the game mechanics can be viewed as a strategy of subjective representation that gives us access to Shepard's own perception of this tense life or death situation without actually simulating her exact spatial position.

In a cut scene during the prologue of the game Shepard also gets knocked out by a blast wave and we are treated to a close-up of Shepard's face as she slowly regains consciousness. A quasi-perceptual overlay is applied – the camera is slightly out of focus to simulate a sense of disorientation and Shepard's perception of the storyworld in that moment is simulated with sound effects that imitate a ringing in the ears. What separates this sequence from the one mentioned before, however, is the fact that Shepard's spatial position is not simulated in the case of the latter.

The game also involves several instances of the representation of internal worlds in the form of flashbacks, visions and dreams, which involve various representational as well as context markers so as to aid the player in comprehending what is happening. The first dream sequence begins at the end of the prologue when Shepard returns to the Normandy after talking to the Council on the Citadel. Once we return to the Citadel dock bay and choose to enter the ship, a loading screen appears showing the Normandy but in the cut scene that follows Shepard is instead in a foggy park filled with lifeless trees, some empty benches and what appear to be leaves falling from the grey sky. Shepard is also wearing her armor even though she was not wearing it just before boarding the Normandy. In the short gameplay section that follows Shepard runs in dream-like slow motion and has to chase a bright ghostly figure appearing in the distance. As the player and Shepard catch up

with the figure it is revealed it is the same boy that Shepard saw die in the Reaper attack on Earth earlier in the game. If we were not sure about the nature of this sequence before, even despite the odd location and the slowed movements, this reveal further increases our hypothesis that we are dealing with a dream or at the very least, no matter how unlikely, a flashback because we witnessed the boy die earlier. The dream ends with a cut scene in which the boy bursts into flames as Shepard watches on in horror. The camera then cuts to a close-up shot of Shepard's face as she gasps and wakes up in her bed aboard the Normandy. Later in the same cut scene Shepard tells Liara that she didn't get "a good night's rest", again confirming for the player the previous sequence to have been a dream. The two remaining dream sequences again feature the grim park and the boy and end with context markers in the form of cut scenes showing Shepard waking up in her bed aboard the Normandy.

Visions and flashbacks are featured on two missions of the game. On the first one Shepard is tasked with retrieving a newly found Prothean artifact from the planet Eden Prime. In the course of the mission it turns out, however, that what was found is a stasis chamber containing an actual living Prothean, who may very well be the last survivor of the previous Reaper war from fifty thousand years ago. In order to open the chamber, Shepard has to first access two computer terminals that are nearby. When either one is accessed a cut scene begins and we see Shepard looking at the computer terminal screen as images start to appear, her eyes glow green and the images start coming in faster and faster. A vision then follows of aliens fighting off Reapers and hastily making preparations to enter stasis pods to "sleep…until the Reapers return to dark space". The mention of the stasis pods fuels our hypothesis that these aliens are the long-dead Protheans. The fact that we are dealing with a representation of an internal world is emphasized by a representational marker in the form of a noticeably different color grading used during the

sequence. The vision ends with a context marker as we again cut to a close-up shot of Shepard's face as her eyes return to normal. When the first vision ends Shepard is also surprised to learn that her squad members saw absolutely nothing and Liara suggests that the Prothean Cipher that Shepard acquired (callback to the events of the first *Mass Effect*) must be what enables only her to make sense of the Prothean data. The mission ends with Shepard releasing the Prothean (named Javik) from the stasis chamber. When Shepard touches Javik she witnesses one last vision and it is revealed that what we have been seeing are Javik's memories. This time the flashback sequence is contextually marked by close-ups of Javik.

A slightly different example of the representation of an internal world occurs during the Leviathan mission when Shepard finally finds the enormous aquatic creature after having descended into the bottom of the ocean of a mystery planet to where clues have lead her to. When the creature reveals itself, the cut scene shows both Shepard, who is in her Triton mech, and the towering Leviathan in the same shot in the cavernous deep sea lair. As the creature starts to speak, however, we zoom in on Shepard's face and after a flash of light we cut to a shot of Shepard kneeling on what appears to be a floor made of water or some reflective surface. The screen flashes white again and Shepard is back in her mech in the bottom of the ocean, looking a bit disoriented. The conversation continues and we got another close-up of Shepard's face as a strange noise grows louder and she closes her eyes and grits her teeth in pain. After another flash Shepard wakes on the reflective surface as the Leviathan, who appears to Shepard in human form, declares "Your mind belongs to me". Although the close-ups of Shepard's face and the flashes of light clearly serve as context markers, there are no representational markers used other than the strange environment Shepard suddenly finds herself in. However, it has been already established during the course of the mission that the Leviathan has the power to control minds and

with the addition of the context markers we quickly come to the realization that the Leviathan has entered Shepard's mind and that she has not been physically transported somewhere else. The sequence ends with the Leviathan releasing Shepard from its control at which point we cut to a close-up of Shepard in the mech again.

2.3.5 Narrative Techniques

As has been established, Hollywood films aim for unity and clarity in their narratives and employ various storytelling techniques to achieve this goal. Drawing direct comparisons between video game narratives and film narratives in terms of narrative clarity and unity can prove to be somewhat of a difficult task, however. Firstly, video games may take tens of hours to finish and they are not necessarily meant to be played through in one sitting. Secondly, even though the gameplay sections ultimately connect cinematic sequences, they can also break up the narrative flow. Therefore, the purpose of this chapter is not to necessarily draw any direct comparison between film and video game narratives, but simply to outline the various cinematic narrative techniques that can be observed in *Mass Effect 3* and to suggest how they aid the player in comprehending the narrative.

Firstly, editing techniques common in film can be witnessed in many of the cut scenes. For instance, we are presented with establishing shots of many of the planets and locations Shepard visits. Often we are presented with a shot of the Normandy flying towards or past the camera, which then pans around revealing a wide shot of the planet the Normandy is approaching. For some locations like the Prothean Archives on Mars, the salarian base on Sur'Kesh, Grissom Academy and the Illusive Man's Headquarters we are also treated to additional establishing shots of the specific location where Shepard's drop shuttle lands. Interestingly, on the whole there appeared to be more missions where we do

not get a shot of the Normandy nor the drop shuttle approaching a new location from a distance. In many cases we are treated to a scene of the characters talking inside the shuttle during the descent, we then get a close-up shot of the shuttle landing and our first real look at the new environment comes when the shuttle doors open, Shepard jumps out and we are given control of her. The initial assumption was that the main story missions (*Mass Effect 3* employs a quest-based narrative structure distinguishing between main missions that advance the main storyline and optional side missions) feature establishing shots of planet exteriors while the side quests do not. However, the main story mission to cure the genophage on Tuchanka does not feature such establishing shots of the planet either. The decision to include them for some locations and not for others remains unclear. Of course, in most cases the player has to access the galaxy map aboard the Normandy to choose their next destination and the image of the planet is displayed there, thus diminishing the need for an establishing shot later.

The game involves a lot of dialogue between Shepard and other characters during cut scenes and these conversations are to a large extent represented with shot/reverse-shot sequences. For instance, when Aria briefs Shepard on her plan to take back Omega in the backseat of her aircar, a relatively confined space, we alternate between close-up shots of their faces depending on who is speaking and their eyelines clearly match in the alternating shots. We also switch between profile shots of the two characters so that both are visible in the same shot. When Aria is talking, she is placed in the foreground and Shepard is visible in the background, looking at Aria and in the direction of the camera. Additionally, in some shots both characters are in the frame while looking at each other i.e. we see the back of Shepard's head in the frame and Aria looking into the camera. Lastly, the shot/reverse-shot sequence is occasionally broken up by shots of both women in the frame sitting side-by-side in the backseat (i.e. it is as if we are looking at them from the front seat).

It should be noted that in the aforementioned scene we clearly see Shepard getting into Aria's car before the conversation begins. Some cut scenes, however, begin with a close-up of a character talking. For example, in the cut scene that comes right after Shepard's adventure on Eden Prime we open with a close-up of Admiral Hackett's hologram asking "A living Prothean?" and it is followed by a shot of Shepard who says "That's correct, admiral". While Shepard and Hackett are never in the frame together we can conclude that based on the content of the conversation and the use of matching eyelines they are indeed talking to each other. Furthermore, when Shepard is done talking to Hackett, his hologram disappears and the camera pans around in the room to establish that they were indeed together in the comm room of the Normandy (or at least Hackett's hologram was). Alternatively, the cut scene where Shepard contacts the asari councilor via the holographic display to ask her to take part in the summit, the cut scene opens with a shot of the asari councilor but this time from a bit of distance so we can also see Shepard in the frame standing opposite the councilor. When we switch to a shot of Shepard we can again see the hologram of the asari from the back in the frame. During the note-taking process no dialogue cut scenes were identified that did not use any of the aforementioned narrative techniques.

In addition to shot/reverse-shot sequences, cross-cutting was also observed in a number of cut scenes. According to Bordwell and Thompson (2010: ch. 6) cross-cutting enables the presentation of "narrative actions that are occurring in several locales at roughly the same time". When Shepard is first confronted by the Illusive Man in the form of a hologram that appears in the research base on Mars, cross-cutting is employed to show us both the hologram and the real man somewhere else in what appears to be a glass dome looking at a massive star, thus confirming that we are indeed dealing with a holographic projection of a human character and not, for example, with an artificial intelligence.

Additionally, the technique provides us with spatial and causal information (Bordwell and Thompson 2010: ch. 6). We learn that the Illusive Man is in a different location entirely and the hologram that appears to Shepard represents the Illusive Man's actual movements performed in his faraway hideout.

On the mission to recapture Omega Shepard's squad members Aria and Nyreen are walled off by a force field and are assaulted by waves of enemies. Shepard must access the power controls of the nearby power reactor and has to decide whether to turn off the reactor immediately, which would also shut down the life support of thousands living on the station or to spend extra time to reroute the power so that only the force field would be affected, thus potentially risking the lives of Aria and Nyreen. During this cut scene the camera cross-cuts between Shepard and Aria and Nyreen, who are pinned down and are urging Shepard to just shut down the reactor. Every time we cut back to Aria and Nyreen their situation grows more critical. Bordwell and Thompson (2010: ch. 6) also note that cross-cutting can be used to build up suspense. As the choice to turn off the reactor prematurely is up to the player, the cross-cutting between Shepard and her two squad members, who are in dire straits adds tension to the situation and tempts the player to sacrifice the lives of thousands aboard the station. It also helps to create "a sense of cause and effect" (Bordwell and Thompson 2010: ch. 6). If Shepard does not manage to shut down the force field fast enough, Aria and Nyreen could die.

Another example of cross-cutting can be observed during the climax of the game when Admiral Hackett is aboard the Normandy and is giving a speech to all the races that have gathered to attack the Reapers on Earth. During the speech we cut back and forth between Hackett and the commanders of the other fleets resolutely preparing for the battle aboard their own ships. Here cross-cutting adds to our comprehension of the narrative by widening "our frame of knowledge" (Bordwell and Thompson 2010: ch. 11). In other

words, through the use of cross-cutting we get visual confirmation that the aliens are also preparing for battle and appear to be just as determined as Hackett.

Occasionally *Mass Effect 3* also uses dialogue hooks to connect different scenes in a longer cinematic sequence together, mostly aboard the Normandy. For instance, when Shepard returns to the Normandy after talking to the Citadel Council, Traynor visits her cabin and informs Shepard that Admiral Hackett would like to speak to her "at the vid comm". We then cut to a shot of Hackett's hologram appearing in the comm room and Shepard already being there to greet him. Later on in a different cut scene Shepard tells Traynor to have the salarian and krogan representatives brought to the Normandy's conference room. The next scene shows the representatives already in the conference room arguing with each other. Before landing on Tuchanka, Shepard orders Joker to "get everybody assembled in the war room" and we hen cut to a shot of Shepard entering the war room with Wrex, Mordin and Victus already present. In both cases the dialogue hooks prepare us for the next scene, making it easier to follow the events that are about to unfold on screen. Furthermore, it is made very clear that the scenes that follow the dialogue hooks happen *because* of Shepard's orders. While the content of the dialogue is similar to the previously listed examples, it is somewhat questionable whether we are dealing with a dialogue hook in the cut scene that takes place right before landing on Thessia. Liara insists that she be one of the crew members to go down on the planet and Shepard allows it telling Liara "Then get to the shuttle and let's do this". Although the next cut scene shows Liara and others already in the drop shuttle, the two cut scenes are separated by three loading screens as well as the squad selection and the weapon selection screen.

Narrative encouragements appear frequently in the game and take the form of comments made by non-player characters or by Shepard herself. For instance, after dispatching some Cerberus soldiers on Eden Prime, Shepard suggests that her, Liara and

James "get moving before more of them come back". Upon landing on the moon of Palaven, Shepard also insists that they "get in" and "get out". At Grissom Academy Shepard receives a transmission from one of the staff, who reports that Cerberus has students trapped in Orion Hall and that they are "closing fast". On Tuchanka Shepard is contacted by the turian platoon leader, who Shepard has been sent to rescue. Shepard asks about the status of the platoon over the radio and the turian tells her that they are "in deep". Shepard orders him to "hang tight" and reassures him that she is on her way. Although there are no ramifications for stalling in any of these situations, the narrative encouragements may prove to be useful in keeping the narrative moving and dissuading the player from spending too much time taking in the exotic environments. There are exceptions, however. The mission on Sur'Kesh differs from the aforementioned examples due to the fact that although there is no ticking clock, Shepard has to help Mordin transport Eve's pod from the ground floor up to the fourth before Cerberus soldiers manage to destroy it. In the upper right corner of the screen there is a "Pod Integrity" bar that indicates how much damage the pod has taken. Therefore, the player has to actually follow Mordin's orders when he periodically tells Shepard over the radio to "hurry" to the next level and that he needs assistance with defending the pod. A similar technique is used on the mission to deactivate the turian bomb on Tuchanka. Shepard has to defend Lieutenant Victus from waves of Cerberus troops while he works on defusing the bomb. A health bar for Victus is displayed in the right upper corner of the screen and during this gameplay sequence Victus is heard yelling "I need more time, Commander" and "Almost there".

Bordwell (2007: 178) states that in mainstream cinema appointments and deadlines are the primary means for creating cohesion. However, only a few instances of concrete deadlines were identified during the note-taking process. Once Shepard, James and Ashley have landed the drop shuttle near the Prothean Archives on Mars, James tells Shepard that

scanners indicate a massive storm is approaching the research base and that they have "half an hour, tops" until the storm cuts off their communication with the Normandy. As Shepard and her two squad members are heading towards the entrance of the base across the windy terrain, James again remarks on how the storm looks even bigger in person. When Shepard then loses radio contact with James and the Normandy later during the mission we know that approximately half an hour has passed for the characters in the storyworld. In other words, the deadline provided us with temporal clarity. In a cut scene preceding the mission on the deth dreadnought a deadline is also presented by Joker, who informs Shepard that the "ETA to Rannoch" is five minutes meaning that Shepard has five minutes to get ready for boarding the dreadnought. When we then see the Normandy arriving at Rannoch, presumably five minutes have passed for the characters.

Even though the game features many appointments, usually in the form of non-player characters contacting Shepard by mail asking to meet, no specific dates or times are ever mentioned. For example, after the previously mentioned talk with Aria in her flycar, Shepard is simply told to meet Aria on her command ship. As it is up to the player whether to immediately follow up on this request or to pursue other activities instead, a more specific appointment in this situation could result in an incoherent storyworld. Yet another example of an appointment without a specific date or time appears relatively early in the game when Hackett sends Shepard a mail asking her to meet with Dr. Bryson on the Citadel "right away". In the analyzed playthrough this was among one of the last missions to be initiated and the events unfolded just as they would if Shepard had gone to see Dr. Bryson immediately. Due to such vague appointments and the lack of specific deadlines the player is not provided with temporal narrative clarity in the game. As there is no obvious day and night cycle aboard the Normandy and we do not know how long it actually takes the Normandy to travel between the various planets then it is hard to say

whether weeks or months pass. We do, however know that the Alliance starts building the massive Crucible at the beginning of the story and finishes it by the end. Hackett also gives Shepard some progress reports along the way. If we apply the principle of minimal departure then we can infer that we are not dealing with mere days as even in the future building something that massive must take at the very least take a few weeks.

Some forms of redundancy like dialogue hooks and the reiteration of certain character traits have already been mentioned. However, redundancy is most obvious when it comes to the way in which the game presents the player with information about each particular mission. For example, the turian councilor informs Shepard that if she wants the peace summit to happen, she has to extract the turian primarch from a war zone as the summit cannot proceed without him. In the following mission Shepard goes to rescue the turian primarch and informs General Corinthus and Garrus of her assignment. Garrus then takes her to Primarch Victus, who Shepard must convince to leave the war zone in order to "chair a summit" and represent his people so that an alliance can be created between the disparate races. Primarch Victus agrees, but only if the krogan attend the summit as well. After every mission Shepard also briefs Admiral Hackett or some other authority figure (e.g. the asari councilor) on what happened on her mission and the two then discuss the larger ramifications of the events that unfolded. After the aforementioned mission Shepard is first contacted by the asari councilor, who refuses to take part in the summit if the krogan attend. Immediately after this conversation Shepard also talks to Hackett, informing him that even though she retrieved the turian primarch, the asari are "staying on the sidelines". A similar pattern of redundancy can be observed throughout the game for most of the missions.

In some cases there is also an additional cut scene aboard the drop shuttle, where the characters go over the mission objectives and parameters right before landing. For

instance, Garrus asks "Any updates, Shepard?" and Shepard goes over the mission details again (a krogan scout team has gone missing and the rachni may somehow be involved). This same information was also given to Shepard by Wrex in an earlier cut scene. On the mission Shepard aids the Krogan search party and also frees the rachni queen, who had been imprisoned by the Reapers. After the mission Shepard again reports to Hackett, who is glad that Shepard managed to "cut the Reaper supply of new rachni troops and picked up some additional krogan support". Lastly, after every mission Shepard can talk to her crew members, who may comment and share their opinions on the events that transpired during the mission. Although such a high degree of redundancy could potentially become bothersome in a two hour film, it may prove to be rather useful for the player of a rather lengthy video game as they may need to be reminded of certain details, especially as the game is most likely not played all the way through in just one sitting.

We are also aided in our comprehension of the narrative due to the fact that the game features a single protagonist – Commander Shepard, who is also the player character. Even though a single protagonist is common in many games, there are exceptions like *Resident Evil 6*, for example, where the story is told from the perspective of four different player-controlled protagonists. Shepard's status as the protagonist is already hinted at in the intro text. During the first cut scene that follows the intro Anderson and Shepard provide us with some expository dialogue about the Reapers and Shepard's importance to the narrative is further emphasized when Anderson tells her "You've faced down a Reaper. Hell, you spoke to one and then blew the damn thing up. You know more about this enemy than anyone". We might, therefore, expect that Shepard is the right woman for the job.

However, until the end of the very first mission we could also speculate that perhaps Admiral Anderson is the protagonist and Shepard the sidekick. It is Anderson, who formulates the goal to "get to the Normandy" at the space port as soon as the Reapers

descend on Earth. In the gameplay section that follows he is also the one to lead the way. While carefully passing through a destroyed building, Anderson also verbalizes another goal – they need to get to the Citadel and ask the Citadel Council for help. When Anderson and Shepard fail to reach the space port, Anderson sets a new goal for them, which is to get to a nearby downed gunship and contact the Normandy with its radio. However, when it comes time to leave Earth, Anderson decides to stay behind to help the resistance and asks Shepard to follow through with the aforementioned plan. Shepard reluctantly adopts Anderson's goal, promising to come back for him and to bring all the help she can get, thus taking on the role of the goal-oriented protagonist. It also bears mentioning that even though Anderson is the one to formulate goals during this initial sequence, between the two it is Shepard, who is ascribed more defined character traits and a more detailed backstory. From this point on it is also Shepard whose actions and goals push the story forward and throughout the rest of the narrative we follow only Shepard, who is present in every gameplay section and in almost every cut scene with only a few brief exceptions (e.g. we see Hackett in a different location overseeing the construction of the Cruciclbe or the space battle taking place above Earth during the climax of the game). Bizzocchi and Tanenbaum (2012: 401) found this to be the case in *Mass Effect 2* as well, noting that "Shepard is always in the shot in some way–except for the menus–emphasizing his character's narrative weight and point of view".

Shepard is ascribed new goals throughout the game and when one is achieved, a new one is soon introduced. After escaping Earth she is contacted by Hackett, who wants her to retrieve vital data from the Prothean Archives on Mars. After doing so Shepard returns to her original goal of going to the Citadel to get help. There she learns that the council races will convene a summit where their course of action will be decided. In order for the summit to proceed, however, the turian primarch is needed. Shepard's goal then

becomes to extract the turian primarch for the summit. Even though she achieves this goal the turian primarch says that the turian fleet can only help Earth if Shepard convinces the krogan to help the turians defend their homeworld Palaven first. During the summit the krogan clan leader Wrex demands that the genophage be cured or he will not help the turians. Shepard's new goal then becomes to go to the salarian homeworld of Sur'Kesh and help retrieve a cured krogan female from a salarian base so a cure for all krogan could be synthesized. Shepard's goals are also made explicit for the player as she often express them verbally. For instance, she clearly and neatly sums up the plan to extract the turian primarch from the moon of Palaven when she says "Let's get him on the shuttle and let's get out of here".

In addition to being goal-oriented, Shepard's involvement in the events is in some way always justified. Before taking on the mission to save the primarch, the turian councilor points out that "The Normandy is one of the few ships that can extract Primarch Fedorian undetected". We may infer that the Normandy has some special properties. Shepard's ship also provides motivation for her being the one to go and deactivate the Reaper signal coming from aboard a geth dreadnought when Shepard explains that "the Normandy's stealth drive" will allow her to get close enough to the ship to be able to board it and then disable the signal once on board. Shepard's status as a Spectre, which is effectively the *Mass Effect* universe equivalent of the 00 agent, is also used to motivate Shepard's importance to the narrative. Although releasing the krogan female would normally take time due to political red tape, Primarch Victus states that because Shepard is a Council Spectre she has the authority to "oversee the exchange" and speed up the process.

Events in the narrative are also motivated by the character traits of some of Shepard's allies and friends. For instance, the possibility of curing the genophage is

motivated by Mordin's character traits. Before landing on Tuchanka Shepard can talk to Mordin in the med bay and Mordin's decision and ability to cure the genophage are here motivated. Shepard points out that Mordin always defended his original work on the genophage and that she does not fully understand the reasons behind Mordin changing his mind. Mordin explains that the genophage "was a proper decision at time", but if the Krogan are not cured now, the turians will be doomed. Mordin also states that he is the "best candidate for project" because there are no other salarian scientists with Mordin's expertise. We can also infer that Mordin has personal reasons for deciding to cure the genophage when he says the following: "My work. My job to put it right. To prove I can." We may conclude that Mordin does, in fact, regret his original work on the genophage to some extent. In other words, Mordin's character traits (i.e. a scientist with first-hand expertise, a sense of guilt) motivate the curing of the genophage. Similarly, Tali is established as being "an expert on the geth" and will "be handling hacking" aboard the geth dreadnought. Due to her abilities the plan to disable the signal aboard the dreadnought becomes feasible and their ultimate success is justified.

Although many of the major narrative events are causally connected, an obvious example being Shepard starting out asking the Citadel Council for help and ending up curing the genophage, a single causal chain of events is not maintained from beginning to end. There are many missions, especially side quests that are not directly linked to any of the previous ones and are introduced rather randomly at different points in the narrative. Even the two biggest conflicts, which include creating an alliance between the turians and the krogan and resolving the conflict between the quarians and the geth are not directly causally linked. At a certain point in the narrative Shepard is simply contacted by Admiral Hackett, who wants her to go talk to the quarians and ask them for some support ships for the war effort and Shepard promises to "look into it". The apparent lack of urgency on

display could be explained by the game's non-unilinear narrative and the inclusion of side missions, both of which are characteristic features of the role-playing genre. If all main quests were to immediately lead into one another, then the player would be deprived of being able to explore the gameworld to its full extent. For instance, in the analyzed playthrough the longest lull in the narrative came before going to see the quarians and close to four and a half hours (real time) was spent simply on interacting with non-player characters and completing minor missions on the Citadel. The narrative of the game is clearly not as unified as that of a standard Hollywood film.

CONCLUSION

In the thesis the narrative of the third-person action role-playing video game *Mass Effect 3* was analyzed from the point of view of cognitive narratology in order to learn what kinds of narrative techniques the game employs to aid the player in comprehending the narrative. The decision to take a cognitive approach to narrative was made because cognitive narratology is transmedial in scope and therefore suitable for the study of video game narratives. As cognitive narratology aims to understand how readers, viewers and players comprehend narratives, the cognitive mechanisms we rely on for doing so were outlined in the theoretical section. In cognitive narratology we are dealing with a narrative if a text evokes a mental image – a storyworld – in the mind of the interpreter. A storyworld is an imagined world in which all the characters, events and situations that appear in the narrative text exist in. However, no narrative text can ever describe every aspect of a storyworld. In order to deal with incomplete storyworlds we have to fill in the gaps by relying on our knowledge of the real world and on our past experiences with other fictional stories. In other words, we expect a storyworld to share certain similarities with the real world and with other fictional storyworlds we have encountered before.

When interpreting a narrative we also fill in gaps by automatically assuming that there are causal connections between events i.e. a preceding event causes the next one to happen. In order for us to be able to understand the reasons behind the events in any given storyworld we must also possess an understanding of the characters in that same storyworld because events always involve or are caused by characters. We presume that a fictional character resembles a real world person in the sense that they have a functioning mind (i.e. a consciousness). The actions of a character result from their inner goals, emotions and needs. If their actions and behavior are reflective of their mental state then

we can create hypotheses about what they might be feeling or thinking by observing their behavior just like we do with other people in real life.

Although our cognitive abilities make the interpretation of narratives possible, our comprehension is also aided by the inclusion of narrative techniques, which create narrative clarity. Due to the fact that video games and films are comparable in that they are both audiovisual media, narrative techniques that are used in film to create narrative clarity and, thus, aid the viewer were outlined in the theoretical section. The hypothesis is that big-budget modern video games have become more movie-like in their visual presentation and also adopted narrative techniques characteristic to Hollywood films.

On the other hand, the thesis is mindful of the fact that video games differ from films in significant ways. Video games include unique narrative forms, extensive gameplay sections that involve player agency and feature rules that can potentially interfere with the narrative. Therefore, the analysis also focused on narrative forms specific to video games as well as on the rule system of the game and its relationship with the narrative.

Firstly, the analysis showed that Mass Effect 3 features a variety of video game-specific narrative forms that can potentially aid the player's comprehension of the narrative. The game begins with an intro, which introduces elements of the storyworld to the player in the form of written expository text. It establishes the futuristic setting, the dramatic stakes, the protagonist and the antagonists in just seven sentences. This information enables us to modify our expectations about the story before we fully engage with it (e.g. we are prepared to rely on our knowledge of other science fiction stories) and we have been provided with enough detail to begin mentally constructing the storyworld.

The game also includes embedded narratives in the form of written messages or audio and video recordings, some of which the player must first find in the navigable game spaces to access. Although neither the Codex, an in-universe electronic encyclopedia that

acts as a major source of storyworld information, nor the scattered messages and recordings proved to be necessary in terms of successfully following the narrative, the examples presented in the analysis demonstrated that the Codex entries have the potential to clarify the characters' backstories and expand upon major storyworld concepts that are otherwise breezed over during conversations, perhaps because having some familiarity with the series is expected on the part of the player as this is the third game in a trilogy. Additionally, the scattered embedded narratives provided additional suspense to the proceedings as they acted as clues leading up to bigger reveals in the story. They also make the player rely on their cognitive abilities as each new additional clue will make the player modify their hypotheses about the nature of the upcoming reveal.

In the course of the analysis it also became clear that loading screens, which usually appear when the game needs to load new data, serve a narrative purpose. In some cases the loading screens acted as establishing shots and provided spatial clarity, presenting the player with the image of the new location they will find themselves in after the game has finished loading. Loading screens that appeared in close succession before each new mission also served to suggest a specific sequence of events with only a few images. The establishing shot of the armory followed by a shot of the drop shuttle flying is enough for the player to understand that Shepard goes to the armory and boards the drop shuttle. Additionally, as this sequence of events was depicted fully in a one-time cinematic sequence earlier in the game then we also have a temporally ordered schema to rely on during all future cases. There were some exceptions where the loading screens did not reflect Shepard's location and some loading screens also provided the player with non-diegetic gameplay-related tips.

Scripted events that occur during gameplay sections and are triggered when the player reaches a certain point in the navigable space of the game were also noted to aid the

player in comprehending the narrative. In the course of the analysis two distinct types of scripted events were identified. There were scripted events that presented the player with sudden and thrilling action-packed moments but also ones, which functioned to help the player to better follow the narrative. When one of the characters (either Commander Shepard or one of her two squad member) verbally refers to some element in the game space, a button prompt appears that allows the player to have Shepard immediately turn and focus on whatever the characters are talking about. As there is no guarantee that the player is looking at the right thing at the right moment then this technique allows for clear storytelling without the need to take the control away from the player completely. The examples provided in the analysis indicated that the lack of such button prompts could indeed leave the player confused. In terms of actively nodal narrative forms, quick time events were also identified in the playthrough, but their main narrative aim appeared to be providing Commander Shepard with additional characterization through her actions based on which we can make inferences about her state of mind and personality.

The relationship between the narrative and the rule system of the game was another topic of inquiry that was explored in the empirical analysis. Narrative text and visual presentation that make up the diegesis were accompanied by textual and visual commentary throughout the game. Purely gameplay-related instructions and prompts appear regularly on screen for the player to see, but they were never recognized by any of the characters. Although it is common for some games to have their characters referring to non-diegetic game mechanics and giving the player instructions, which results in an incoherent storyworld, there were no such instances found in *Mass Effect 3*. Some instances of storyworld inconsistencies caused by the rules of the game did emerge, however. On closer analysis accepting either the Codex or the weapon selection interface as parts of the diegetic storyworld turned out to be impossible and the application of

medium-specific charity became necessary to reconcile the fact that the Codex and the weapon selection interface appear to be diegetic and non-diegetic at the same time. Lastly, the game's progression system that requires the player to regularly level up the characters interfered with the narrative during missions, bringing the action to a halt and drawing the player's attention solely on the ludic functions of the characters.

The chapter of the empirical section concerning characterization highlighted both the ways in which players draw inferences about the mental states of characters and how the game ascribes traits to characters implicitly and explicitly. A player has to rely on their cognitive abilities which include practicing Theory of Mind and applying a character frame as well as a continuing-consciousness frame to each new character that is encountered. Character traits were for the most part ascribed in the course of conversations between Shepard and non-player characters. Some examples also demonstrated that we may infer certain character traits based on the characters' appearances and the activities and work they engage in. What is more, we were able to draw inferences about Shepard's emotional state by the content of her dreams. Character traits also appeared to be conveyed redundantly, a technique that brings about narrative clarity.

Information about Shepard's consciousness and her subjective perception of the storyworld, in particular, was also communicated to the player through various strategies of subjective representation that were applied during both gameplay sections and cut scenes. Representational markers like slow motion and the manipulation of visuals and sounds were prominent. Shepard's visions and dreams were also bookended by context markers, which made it easier to distinguish between the representation of the storyworld and the representation of the character's internal world.

Mass Effect 3 also included examples of most of the narrative techniques common in film to create narrative clarity. In addition to the aforementioned loading screens,

establishing shots were also present in cut scenes. However, there were also instances where they were noticeably missing. The reasoning behind where establishing shots were used and where they were omitted could also not be determined. Actions and events in cut scenes were separated into shots and due to the plentitude of scenes involving two characters engaged in conversation many cut scenes were presented with shot/reverse-shot sequences. Additionally, the eyelines of the digital characters were made to match in these scenes to make it clear that they are looking at and talking to each other. Often both characters can also be seen in the same frame or at some point during the conversation the camera might pan across the room, providing spatial clarity. Another editing technique borrowed from film that was identified in the analysis is cross-cutting which, depending on the scene, was used to create causal and spatial clarity as well as to build up suspense and show us events happening outside of Shepard's point of view.

Mission-related information in the game is presented highly redundantly with relatively extensive scenes of expository dialogue preceding and following each mission. Although such a high level of redundancy could quickly become bothersome in the medium of film, video games can last tens of hours and are not usually completed in the course of a single session. Therefore, players may need to be reminded of salient story details. Redundancy was also provided by a few dialogue hooks e.g. Shepard says that there is going to be a meeting in the conference room and the next scene revolves around the meeting in the conference room. They enable the player to easily see the causal connection between the scenes and also prepare them for what is about to happen.

Deadlines and appointments, which are commonly used to create temporal clarity in movies, were almost entirely absent, however. Times and dates were rarely specified and it was wholly unclear how much time certain events took or how long of a time period the whole story supposedly covered. Player agency and the non-unilinear narrative of the

game could potentially be the reasons behind this obvious exclusion. Because *Mass Effect 3* allows the player to often choose where to go and what to do next then precise appointments and deadlines would be counterproductive and result in storyworld incoherencies. Analysis of deadlines and appointments in games with unilinear narratives could potentially shed light on whether this exclusion stems from the non-unilinearity of the narrative.

The narrative of the game also bore similarities to Hollywood cinema due to the inclusion of a single goal-oriented protagonist. Shepard forms new goals throughout the narrative and is the character that pushes the narrative forward with her actions. Her involvement in the events and her status as the protagonist were also repeatedly motivated by her character traits. Her ability to achieve her goals was in a number of cases also motivated by the character traits of her companions.

Although film narratives are characterized by causal chains (i.e. events are causally linked), in *Mass Effect 3* a more episodic approach to narrative was observed as even some major story-furthering events were not directly connected. Furthermore, the game allowed the player to explore the gameworld and engage in relatively insignificant activities that did not push the narrative forward for a considerable amount of time.

Based on the empirical analysis of the narrative of *Mass Effect 3* the hypothesis that filmic narrative techniques are now also used in video game narratives appears to be accurate. That is not to say that all or even most games that are currently on the market utilize such techniques or place as much emphasis on their narratives, but *Mass Effect 3* exemplifies how narrative techniques developed in film can also be made us of in video games. *Mass Effect 3* also demonstrated the combination of a variety of different narrative forms, many of which were medium-specific, to present its narrative. However, the lack of temporal clarity and the fact that many of the missions were not causally connected could

merit further research into unilinear and non-unlinear game narratives to establish the extent to which the degree of linearity affects these aforementioned aspects.

REFERENCES

Primary sources:

Bioware. 2012. *Mass Effect 3.* EA Games (PC).

Secondary sources:

Aarseth, Espen. 2004. Quest Games as Post-Narrative Discourse. In Ryan, Marie-Laure (ed). *Narrative across Media: The Languages of Storytelling*, 361-376. Lincoln: University of Nebraska Press

Abbott, H. Porter. 2002. *The Cambridge Introduction to Narrative*. Cambridge: Cambridge University Press.

Alexander, Marc and Catherine Emmott. 2014 (last modified). *Schemata.* Available at http://www.lhn.uni-hamburg.de/article/schemata, accessed March 18, 2015.

Bizzocchi, Jim and Joshua Tanenbaum. 2012. Mass Effect 2: A Case Study in the Design of Game Narrative. *Bulletin of Science, Technology & Society*, 5: 32, 393–404.

Bode, Christoph. 2013. *Future Narratives: Theory, Poetics, and Media-Historical Moment*. Berlin: Walter de Gruyter.

Bordwell, David. 2007. *Poetics of Cinema*. London and New York: Routledge.

Bordwell, David, Kristin Thompson. 2010. *Film Art: An Introduction* (9th Edition). New York: McGraw-Hill, epub file.

Branigan, Edward. 1992. *Narrative Comprehension and Film*. London and New York: Routledge. Available at http://gel.msu.edu/classes/tc848/papers/Branigan.Narrative_Comprehension_and_Film_Chp_1_2.pdf, accessed January 12, 2016.

Chatman, Seymour. 1978. *Story and Discourse; narrative Structure in Fiction and Film.* Available at https://archive.org/stream/StoryAndDiscourseNarrativeStructureInFictionAndFilm/chatman.seymour_story.and.discourse_narrative.structure.in.fiction.and.film1#page/n1/mode/1up, accessed March 12, 2015.

Domsch, Sebastian. 2013. *Storyplaying: Agency and Narrative in Video Games.* Berlin and Boston: Walter de Gruyter.

EA UK. 2012. *Mass Effect 3: The War Begins.* Available at https://www.youtube.com/watch?v=42lohypUNfM, accessed January 3, 2016.

Eder, Jens. 2010. Understanding Characters. *Projections. The Journal for Movies and Mind*, 4: 1, 16–40.

Eder, Jens et al. 2010. Introduction. In Eder, Jens, Fotis Jannidis, Ralf Schneider (eds). *Revisionen: Characters in Fictional Worlds : Understanding Imaginary Beings in Literature, Film, and Other Media,* 3–67. Berlin: Walter de Gruyter.

Egenfieldt-Nielsen, Simon, Jonas H. Smith, and Susanna P. Tosca. 2008 *Understanding Video Games: The Essential Introduction.* New York: Routledge.

Entertainment Software Association. 2014. *Essential Facts About the Computer and Video Game Industry.* Available at http://www.theesa.com/wp-content/uploads/2014/10/ESA_EF_2014.pdf, accessed March 22, 2015.

Eskelinen, Markku. 2001. *The Gaming Situation.* Available at http://www.gamestudies.org/0101/eskelinen/, accessed May 19, 2016.

Fabe, Marylin. 2004. *Closely Watched Films. An Introduction to the Art of Narrative Film Technique.* Berkely: University of California Press.

Fludernik, Monika. 2009. *An Introduction to Narratology.* London and New York. Routledge.

Franich, Darren, 2012. *In defense of the 'Mass Effect 3' Ending.* Available at http://www.ew.com/article/2012/03/22/mass-effect-3-ending-bioware, accessed March 21, 2015.

Frasca, Gonzalo. 2003. *Simulation versus Narrative: Introduction to Ludology.* Available at http://www.ludology.org/articles/VGT_final.pdf, accessed May 19, 2016.

Gavins, Joanna. 2005. Scripts and Schemata. In Herman, David, Manfred Jahn, Marie-Laure Ryan (eds). *Routledge Encyclopedia of Narrative Theory*, 520–521. London and New York: Routledge.

Herman, David. 2000. *Narratology as a cognitive science.* Available at http://www.imageandnarrative.be/inarchive/narratology/davidherman.htm, accessed March 19, 2015.

Herman, David. 2009a. *Basic Elements of Narrative.* United Kingdom: Wiley-Blackwell.

Herman, David. 2009b. Narrative Ways of Worldmaking. In Heinen, Sandra,Roy Sommer (eds). *Narratology in the Age of Cross-Disciplinary Narrative Research*, 71–87. Berlin: Walter de Gruyter.

Herman, David. 2013a (last modified). *Cognitive Narratology.* Available at http://www.lhn.uni-hamburg.de/article/cognitive-narratology-revised-version-uploaded-22-september-2013, accessed March 16, 2015.

Herman, David. 2013b. *Storytelling and the Sciences of Mind.* Massachusetts: The MIT Press.

Ip, Barry. 2011. Narrative Structure in Computer and Video Games: Part 1: Context, Definitions, and Initial Findings. *Games and Culture*, 6: 2, 103–134.

Jahn, Manfred. 2005. Cognitive Narratology. In Herman, David, Manfred Jahn, Marie-Laure Ryan (eds). *Routledge Encyclopedia of Narrative Theory*, 67–71. London and New York: Routledge.

Jannidis, Fotis. 2013. Character. In Hühn, Peter et al (eds). T*he Living Handbook of Narratology*. Available at http://www.lhn.uni-hamburg.de/article/character, accessed December 14, 2015.

Jørgensen, Kristine. 2010. Game Characters as Narrative Devices. A Comparative Analysis of Dragon Age: Origins and Mass Effect 2. *Eludamus: Journal for Computer Game Culture*, 4: 2, 315–331.

Juul, Jesper. 2001. *Games Telling Stories?* Available at http://www.gamestudies.org/ 0101/juul-gts/, accessed January 12, 2015

Juul, Jesper. 2005. *Half-Real. Video Games between Real Rules and Fictional Worlds*. Cambridge, Mass.: MIT Press, FictionBook file.

Juul, Jesper. 2013. On Absent Carrot Sticks. The Level of Abstraction in Video Games. In Ryan, Marie-Laure and Jan-Nöel Thon (eds). *Storyworlds across Media*, 173–192. Lincoln and London: University of Nebraska Press.

Kain, Erik. 2012. *Six Reasons Why Changing The Mass Effect 3 Ending Won't Threaten Its 'Artistic Integrity'*. Available at http://www.forbes.com/sites/erikkain/2012/03/30/six-reasons-why-changing-the-mass-effect-3-ending-wont-threaten-its-artistic-integrity/, accessed March 21, 2015.

Kuhn, Markus, Johann N. Schmidt. 2014. *Narration in Film (revised version)*. Available at http://www.lhn.uni-hamburg.de/article/narration-film-revised-version-uploaded-22-april-2014, accessed January 6, 2016.

McLellan, Heather. 2012. *Bioware Announces Post-Ending DLC for Mass Effect 3*. Available at http://www.escapistmagazine.com/news/view/116661-BioWare-Announces-Post-Ending-DLC-for-Mass-Effect-3-Updated, accessed March 2012, 2015.

Murray, Janet H. 2013. *The Last Word on Ludology v Narratology (2005)*. Available at https://inventingthemedium.com/2013/06/28/the-last-word-on-ludology-v-narratology-2005/, accessed March 21, 2015.

Neitzel, Britta. 2014. *Narrativity of Computer Games*. Available at http://www.lhn.uni-hamburg.de/article/narrativity-computer-games, accessed January 6, 2015.

Neroni, Hilary. 2015. *The Subject of Torture: Psychoanalysis and Biopolitics in Television and Film*. New York: Columbia University Press.

Palmer, Alan. 2004. *Fictional Minds.* Lincoln: University of Nebraska Press.

Queen, Jacob. 2015 (last modified). *What Are Genre Conventions?* Available at http://www.wisegeek.com/what-are-genre-conventions.htm, accessed March 19, 2015.

Ryan, Marie-Laure 2006. *Avatars of Story*. Minneapolis: University of Minnesota Press.

Ryan, Marie-Laure 2010. Narratology and Cognitive Science: A Problematic Relation. *Style*, 44: 4, 469–495. Available at http://users.frii.com/mlryan/cognarr.pdf, accessed March 16, 2015.

Ryan, Marie-Laure 2013 (last modified). *Possible Worlds.* Available at http://www.lhn.uni-hamburg.de/article/possible-worlds, accessed March 18, 2015.

Sattin, Samuel. 2013. *Video games are the new movies*. Available at http://www.salon.com/2013/08/30/video_games_are_the_new_movies_partner/, accessed January 6, 2016.

Schröter, Felix, Jan-Nöel Thon. 2014. Video Game Characters. Theory and Analysis. *Diegesis* 3: 1, 40–74. Available at https://www.diegesis.uni-wuppertal.de/index.php/diegesis/article/view/151/200, accessed January 1, 2016.

Simons, Jan. 2007. *Narrative, Games, and Theory*. Available at http://gamestudies.org/0701/

articles/simons, accessed January 6, 2015.

Tanenbaum, Joshua. 2011. *Being in the Story: Readerly Pleasure, Acting Theory, and Performing a Role*. Available at

https://www.academia.edu/1152051/Being_in_the_Story_Readerly_Pleasure_Acting_Theory_and_Performing_a_Role, accessed December 18, 2015.

Thompson, Kristin, 2001. *Storytelling in the New Hollywood*. Cambridge: Harvard University Press.

Thompson, Kristin. 2003. *Storytelling in Film and Television*. Cambridge: Harvard University Press.

Thon, Jan-Nöel. 2009. *Perspective in Contemporary Computer Games*. Available at http://www.janthon.de/texte/Thon_Perspective_2009.pdf, accessed March 3, 2015.

Thon, Jan-Nöel. 2013. *Narrative Comprehension and Video Games. Simulated Gameplay, Narrative Representation, and the Intersubjective Construction of 'Interactive' Storyworlds. Available at* https://lecture2go.uni-hamburg.de/veranstaltungen/-/v/15227, accessed March 19, 2015.

Thon, Jan-Nöel. 2014. Subjectivity across Media: On Transmedial Strategies of Subjective Representation in Contemporary Feature Films, Graphic Novels, and Computer Games. In Ryan, Marie-Laure and Jan-Nöel Thon (eds). *Storyworlds across Media*, 67–102. Lincoln and London: University of Nebraska Press.

Wolf, Mark J.P. (2001). Space in the Video Game. In Wolf, Mark J.P (ed). *The Medium of the Video Game*, 51–76. Austin: University of Texas Press.

Zakowski, Samuel. 2014 Time and Temporality in the Mass Effect Series: A Narratological Approach. *Games and Culture*, 9: 1, 58–79.

Zunshine, Lisa. 2003. Theory of Mind Experimental Representations of Fictional

    Consciousnesses. *Narrative* 11: 3, 270–291. Available at http://lisazunshine.net/,

    accessed December 15, 2015.

RESÜMEE

TARTU ÜLIKOOL
ANGLISTIKA OSAKOND

Karl Jaagola
Narrative in *Mass Effect 3*
(Narratiiv videomängus „*Mass Effect 3*")
Magistritöö
2016
Lehekülgede arv: 107

Annotatsioon:
Videomängud on muutunud üheks kõige populaarsemaks meelelahutusviisiks. Mängud on märgatavalt arenenud nii graafiliselt kui ka narratiivselt. Sellest hoolimata on mängude narratiivide akadeemilise uurimisega siiani küllaltki vähe tegeletud.

Magistritöö üks eesmärk on seega täiendada juba olemasolevaid uurimusi videomängu „*Mass Effect 3*" (2012) narratiivi analüüsimise kaudu. Analüüsis lähtutakse kognitiivse narratoloogia põhimõtetest, sest kognitiivne narratoloogia on oma olemuselt transmediaalne uurimisvaldkond. Kognitiivne narratoloogia keskendub kognitiivsetele mehhanismidele, millele me narratiivide tõlgendamisel toetume, ning ka tehnikatele, mida tekstid kasutavad, et meid narratiivi tõlgendamisel abistada. Töö peamiseks eesmärgiks on nende tehnikate tuvastamine videomängude kontekstis ning nende tehnikate funktsioonide määratlemine videomängu „*Mass Effect 3*" narratiivi analüüsimise teel.

Sissejuhatuses põhjendatakse videomängu „*Mass Effect 3*" sobilikkust uurimisobjektiks. Töö teoreetiline osa keskendub videomängude narratiivide omapäradele, kognitiivse narratoloogia põhitõdedele ja narratiivsetele tehnikatele, mis esinevad eelkõige filmides.

Töö empiiriline osa tutvustab lühidalt analüüsitavat mängu ja kasutatavat metoodikat. Sellele järgneb analüüs, milles vaadeldakse lähemalt kindlaid situatsioone ja stseene, mis toovad esile tehnikad, mis mängijaid narratiivi tõlgendamisel abistavad. Analüüsi tulemused näitasid, et mängus „*Mass Effect 3*" on selgelt arusaadava narratiivi loomiseks läbivalt kasutatud filmidest laenatud tehnikaid. Ilmnesid ka teatud tehnikad, mida mängus ei leidunud, eeldatavasti narratiivi mittelineaarsuse tõttu.