Gaming the Narrative

A Ludo-narratological Examination of Video Game Narrative

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Abstract

The paper elucidates how video games approach narrative as well as the methodologies for conveying story available to the medium. By illuminating this topic, the paper seeks to create an understanding of narrative within the video game medium and to discuss the benefits and issues of narrative games. To do this, the paper first explored narrative as per Genette, Cobley, and Propp, and found especially Genette to be valuable to the discussion. Genette provided insight into the 'tense', 'order' and 'voice' of narratives, which refer to the temporality of events, the sequence of these, and the narrating instance. Ultimately, this was later used to frame the discussion surrounding the place and role of narrative within video games. Seeking to define games, the paper turned to Salen & Zimmerman, Juul, Crawford and Egenfeldt-Nielsen et al. The paper found that rules, artificial conflict, and quantifiable goals were essential traits in games. Beyond this, interaction was deemed to be a critical component as it allowed for player agency, which refers to the player being able to manipulate the game state, and in turn, the narrative. Further, Klimmt et al., expressed that identification with characters within video games to be stronger and more effective than traditional media due to the interactive element, as it allowed players to 'become' media characters. The knowledge gained from exploring narratives and video games separately was then combined to discuss the application of narrative in video games. In doing so, the paper drew on examples from *Brothers: A Tale of Two Sons, What Remains of Edith Finch* and *Nier: Automata,* among others, which were chosen due to them being narrative games, as well as influential and expressive of storytelling methodologies unique to video games. Exploring narrative within video games, Aarseth expressed that story within video games can be expressed through the 'world', 'objects', 'events', and 'characters', and that games exist on a spectrum ranging from 'pure story' to 'pure game'. According to Aarseth,

games which allow the player to manipulate any or all the four expressions of story above push the game towards ‘pure game’. This means that the affordances given to the player by the narrative allows them to shape said narrative, otherwise it remains completely authored. Later, the paper outlined the debate between ludologists and narratologists regarding whether video games should be considered narratives or something new and other. Agreeing with Juul, the paper found it important to acknowledge that video games exist within a narrative paradigm and that drawing on narratological concepts can prove useful in analyzing them, while still acknowledging that they are somewhat disparate from traditional media and that not all video games are narratives. Furthermore, the paper found that time, as it exists within typical traditional narratives, is often discarded in favor of allowing the player to manipulate diegetic time. This was found to dilute or eliminate narrative tension in a traditional sense. Instead, games rely on conflict between the player and the game’s systems. Further, it was found that video games exist in the narrative ‘now’, which denotes that the events of the game are usually not depictions of events prior or future but can be influenced in the moment. This aspect is crucial for player agency. The paper then discussed the issues regarding focalization, i.e. from what perspective the events are seen, and found that video games, much akin to film, rely on a virtual narrator in the form of a camera, to show, rather than tell, events. In combination with the interactive nature of video games, this would, in some games, allow players to focalize the events themselves, thus further giving them sway over the narrative. Narrative control is, however, often seized by the game during authored sequences, known as cutscenes. Delving into the storytelling methodologies of video games, the paper examined Hjaltason et al. and found that players can introduce narrative into games without any authored narrative by relying on ludic systems as storytelling devices. Furthermore, the paper found that ludic systems could be

employed by game designers to convey story content. By allowing players to interact in a certain way with mechanical systems, the game could express thematic substance, thus allowing interaction to become metaphors for the story content. The paper thus concluded that the video game as a narrative medium is like traditional media in many aspects, but differs mainly due to interaction, which allows not only for the manipulation of events, but also the expression of story which are unavailable to any other medium.

Keywords: Narrative, Video Games, Mechanical Storytelling, Interaction

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When venting our frustrations about missing the bus to work or regaling the triumph of winning a game of *Playerunknown's Battlegrounds* (PUBG Corporation, 2017) we are constructing narratives. We narrate stories to those around us and continuously spin the narrative web of our lives through the stories we tell. Narratives can be found in everything from commercials to statues, telling stories about something and through something is the way we, as humans, understand the world. As Monika Fludernik writes: "Narrative provides us with a fundamental epistemological structure that helps us to make sense of the confusing diversity and multiplicity of events and to produce explanatory patterns for them" (Fludernik, 2012, p. 2). It is then natural that game designers would aim to tell stories through the video game medium. Video game development is a multibillion-dollar industry (Dreunen, 2016), and continues to expand with seemingly no signs of stopping. As such, this paper deems it important to examine if and how the medium approaches narrative and the methodologies involved with this. Since its inception with *Spacewar!* (Steve Russel, 1962), the video game medium has transformed from consisting of simple simulations such as *Pong* (Atari, 1972), to works such as *The Last of Us* (Naughty Dog, 2013), which attempt to transfer the cinematic experience to the video game format. As stated above, this paper aims to illuminate the subject of narrative as it relates to the video game medium, how the medium approaches narrative, conveys story, and what methodologies of expression the medium has that are distinct from other media. To investigate this, the paper will first seek and understanding of narrative to clearly illustrate the distinct elements it involves and to, in a later chapter, contrast these with the role of narrative in video games. Later, the paper will

seek to define video games as well as illuminate the elements which the paper finds is most important to the discussion. Then, the paper will discuss the role of narrative within video games, the problems associated with traditional narrative construction and then explicate the methodology of mechanical storytelling as an expression of story content. The paper will concede that the scope of the paper cannot include the breadth of methodologies which the video game medium has for expression and rather chooses to focus on interaction with ludic systems. This because the paper deems it to be the most significant and unique. Finally, the paper will conclude by outlining its findings and discuss further studies of the subject.

Understanding Narrative

What is narrative and how is it distinguished from story? What are the fundamental elements of a narrative? In this section, the paper will seek to answer these questions by delving into the writings of prominent narratologists. However, before beginning to explore the various ideas of what narrative signifies, one should perhaps consider whether the term narrative is apt for the current discussion of video game narratives. Gérard Genette's influential work *Narrative Discourse: An Essay in Method* (1980), distinguishes three meanings of the French word 'récit' (narrative) to establish a clarification of the term. He writes:

> A first meaning […] has *narrative* refer to the narrative statement, the oral or written discourse that undertakes to tell of an event or a series of events: Thus, we would term *narrative of Ulysses* the speech given by the hero to the Phaeacians in Books IX-XII of the Odyssey, and also these four books themselves. […] A second meaning, less widespread but current today among analysts and theoreticians of narrative content, has *narrative* refer to the succession of events, real or fictitious, that are the subjects of this discourse, and to their several relations of linking, opposition, repetition, etc. "analysis of

> narrative" in this sense means the study of a totality of actions and situations taken in themselves, without regard to the medium, linguistic or other, through which knowledge of that totality comes to us. […] A third meaning, apparently the oldest, has *narrative* refer once more to an event: not, however, the event that is recounted, but the event that consists of someone recounting something: the act of narrating taken in itself. (Genette, p. 26, italics in original).

In this quote, Genette recognizes the difficulty in discussing the topic of narrative due to the universality of the term. Acknowledging this, he attempts to reclassify his three observations:

> I propose […] to use the word *story* for the signified or narrative content, […] to use the word *narrative* for the signifier, statement, discourse or narrative text itself, and to use the word *narrating* for the producing narrative action, and by extension, the whole of the real or fictional situation in which that action takes place (p. 27).

'Narrative' is then the entirety of the text, the ordering of the content within it, and the way it is presented. As such, it is a representation of a particular manifestation of the content within, i.e. the 'story', while 'narrating' refers to the act of recounting the narrative. The present paper draws its understanding of narrative and story from these observations. While this definition is clear and concise, it is perhaps not useful in the modern-day media landscape. Marie-Laure Ryan, in her book *Storyworlds Across Media* (2014) seeks to replace the term 'narrative' with 'storyworld', as it, in her opinion:

> […] acknowledges the emergences of the concept of 'world' not only in narratology but also on the broader cultural scene. Nowadays we have not only multimodal representations of storyworlds that combine various types of signs and virtual online worlds that wait to be filled with stories by their player citizens but also serial

> storyworlds that span multiple installments and transmedial storyworlds that are deployed simultaneously across multiple media platforms, resulting in a media landscape in which creators and fans alike constantly expand, revise, and even parody them. (Ryan, 2014, pp. 1-2).

The term storyworld, Ryan argues, is thus an appropriate replacement for narrative in a multimodal and transmedial world, in which a specific story can exist in countless forms. As an example, one might consider the so-called 'Marvel Cinematic Universe' where filmmakers expand and collect a vast web of characters and events. Each of these contains recognizable characters, settings and story threads that interweave. Put simply, one can think of a storyworld as being the 'rules' that govern a particular story. The fluidity of transmedial stories demands some sort of resemblance to the core traits of the story, a 'blueprint', as Ryan explains, for the creation of a cohesive story (p. 3). For example, a blueprint is Spider-Man's struggles in balancing his love life with his heroic obligations. Thus, a blueprint is a collective understanding of either the setting, which the characters inhabit, the story, or the characters themselves. If these traits cease to be similar, the reader likewise ceases to see them as being part of a storyworld and instead become their own separate entity.

Using the term storyworld carries with it the connotations of a text existing in the context of other narratives and that it should be viewed as being communal and freely interpreted and expanded upon. One might wonder, then, can video games, as the main topic of the present paper, be storyworlds rather than narratives? As shall be explored in the section titled 'Ludology versus Narratology' there already exists a discussion of whether video games should be considered narratives or something different. As such, 'storyworld' might encompass the medium more adequately than the term 'narrative' could. However, as Ryan expresses, a storyworld

implies transmediality, and the present paper must express doubts as to whether all video games can be classified as existing in a transmedial space. Transmediality implies that a story, for example, the story of a video game, can exist in any medium. This the present paper disagrees with. This topic shall be studied later but in short, the significance of interaction in relation to their story elements necessitates that they be within an interactive medium, lest they lose all or much of their appeal. The reason for playing games is, this paper would argue, to experience the ability to influence the events in a way which is meaningful, which is unlike film. Ryan expresses that 'storyworlds' can encompass "virtual online worlds that wait to be filled with stories by their player citizens" (pp. 1-2). The present paper will agree that such a case, where community is a main feature or purpose of the video game, such as in *World of Warcraft* (Blizzard, 2004), can be considered a 'storyworld' wherein the contents of the game expand beyond the boundaries of it. For the time being, however, the present paper will refer to video games as being narratives, as the term best reflects the medium with few exceptions. The discussion has, however, illuminated the presence of distinct ideas within the field of narratology as to the classification of narratives. The paper will now aim to illuminate narratology, the study of narratives, to recognize the terms and concepts associated with, to do this the paper will outline the ideas of Aristotle, Vladimir Propp, Gérard Genette and Paul Cobley to create a historical understanding of the topic.

Aristotle

In his work *Poetics* from the 4th century, Aristotle sought to study the workings of narrative, he writes:

> Epic and tragic poetry, comedy too, dithyrambic poetry, and most music composed for the flute and the lyre, can all be described in general terms as forms of imitation or

> representation. However, they differ from one another in three respects: either in using different media for the representation, or in representing different things, or in representing them in entirely different ways (Poetics I).

Here one can observe a theme, which will reemerge throughout this chapter: art (and therefore also narratives) can be thought of as representations of something other. The concept of art as imitation is relevant for the present paper in that it offers insight into the functions of narratives; As humans, we learn through imitation. Landa (2004) offers perspective: "*The instinct of imitation* is basic to all processes of learning. Imitation and recognition of imitation provide an intellectual pleasure" (p. 6), Landa then quotes Aristotle:

> We have evidence of this in the facts of experience. Objects which in themselves we view with pain, we delight to contemplate when reproduced with minute fidelity: such as the forms of the most ignoble animals and of dead bodies. The cause of this again is, that to learn gives the liveliest pleasure, not only to philosophers but to men in general, whose capacity of learning, however, is more limited. (Poetics IV, quoted in Landa, 2004).

Through interacting with art, then, the audience can be subjected to scenarios, which, were they to occur in reality, would be haunting, but as representations in art can be learned from by reflection.

Beyond his writings on mimesis and the imitations of art, Aristotle also sought to define and specify the most common forms of art and the elements within. The present paper will, however, focus on his explication of character and plot. To Aristotle, the 'structure of incidents' or *mythos*, what today is referred to as 'plot', is the most important aspect of a tragedy:

> Most important of all is the structure of incidents. For tragedy is an imitation, not of men, but of an action and of life, and life consists in action, and its end is a mode of action, not

> a quality. Now character determines men's qualities, but it is by their actions that they are happy or the reverse. Dramatic action, therefore, is not with a view to the representation of character; character comes subsidiary to the actions. Hence the incidents and the plot are the end of a tragedy; and the end is the chief thing of all […] besides which, the most powerful elements of emotional interest in tragedy- peripeteia or reversal of the situation, and recognition scenes – are part of the plot (Poetics VI, quoted in Landa, 2004, p. 16).

Interestingly, Aristotle here seems to suggest that character is shaped by the structure of incidents or the plot, and not the inverse. One could be prone to thinking that the characters of a narrative shape that same narrative and direct the course of events, but Aristotle seems to think that character is secondary to plot in importance. Character, to Aristotle, refers to men's qualities (Poetics VII). Landa writes:

> Character, then, is not to be taken in the sense of 'human being' but rather in the sense of 'personality', 'disposition'. Character is bound to action, since it determines the possibility of acting in one way or other: choice and intention are its main defining traits […] Character is made evident only in conscious and deliberate moral choice (Landa, p. 26)

This would indicate that, to Aristotle, characters are merely representations of morality, and thus their fates within the narratives serve as clear lessons in morality. For the present paper, the perspectives of character and plot are, as stated above, the most relevant, as they serve to provide perspective on the concepts which will benefit the present paper's examinations of character and plot in relation to video games. Now, the present paper will shift its focus to Vladimir Propp to gain a further historical perspective on the study of narrative.

Vladimir Propp

In his work *Morphology of the Folktale* (1968), Russian Formalist Vladimir Propp sought to examine the construction of folktales and concluded that they were each constructed by combining elements from a basic repertoire of thirty-one 'functions', which were different events in a story. For example, Propp describes the eleventh function as being: "The hero leaves home" (Propp, 1968, p. 39) and the twenty-fifth function as "a difficult task is proposed to the hero" (p. 60). These functions could, according to Propp, be combined in a series of complicated configurations to create unique stories. Propp thus outlines the idea that folktales have a similar basic construction and follow similar patterns to reach their conclusion. Peter Barry, in his work *Beginning Theory* (2013), criticizes that this is a more superficial way of viewing stories than Aristotle (p. 220). He further notes that many of the functions described by Propp are exceedingly similar and can be described as the same event but from different points of view, as an example, he mentions "in [the tenth function] the hero decides to do something, and in [the eleventh] he does it." (p. 221).

Whereas Aristotle saw characters and actions as being essential to a narrative, Propp instead sees them as "mainly just the mechanism for distributing the functions around the story" (Barry, p. 221). This illustrates a very pragmatic understanding narrative. According to Propp, narratives are comprised of individual parts that work in tandem to create a satisfying narrative. Functions, Propp writes: "logically join together into certain *spheres*. These in toto correspond to their respective performers. They are spheres of action. The following spheres of action are present in the tale:

1. The villain
2. The donor (provider)

3. The helper
4. The princess (a sought-for-person) and her father
5. The dispatcher
6. The hero (seeker or victim)
7. The false hero" (Propp, 1968, pp. 79-80).

According to Propp, one can combine these spheres of action with functions and thereby generate the plots of any Russian folktale in his corpus. Propp's focus on the spheres of functions thus illustrates the concept of describing narratives as being comprised of building blocks and a systematic approach to creating narratives. This mirrors Joseph Campbells seminal work *The Hero with a Thousand Faces* (1949), which likewise sought to illustrate the construction of stories and presented the ideas of the 'Hero's journey' and the 'monomyth' which encompass the distinct elements and phases which many narratives include.

Gérard Genette

Gérard Genette (1980) sought to explore the intricacies of narrative discourse, i.e. the way narrative communicates. In his work, Genette draws on Tzvetan Todorov's *Les Catégories du récit littéraire* from 1966, where Todorov divided the problems of narrative into three categories: *Tense*, "in which the relationship between the time of the story and the time of the discourse is expressed" (Genette, p. 29); *Aspect*, "the way in which the story is perceived by the narrator" (p. 29), and *Mood*, "the type of discourse used by the narrator. […] Mood gathered together the problems of 'distance' that [critics] generally treat in terms of opposition between *showing* ('representation')[…] and *telling* ('narration')" (pp. 29-30). Genette draws on Todorov but makes alterations to his divisions discarding 'aspect' while creating the categorization of *Voice*, which "will refer to a relation with the subject (and more generally the instance) of the

enunciating, […] voice designates the connections between both *narrating* and *narrative* and *narrating* and *story*" (pp. 31-32), as such voice is concerned with who is speaking and the relation between narrator and narrative.

Tense. Exploring Todorov's 'tense', the function of narrative time, Genette researches the *Order, Duration,* and *Frequency* of narratives. He begins by quoting Christian Metz:

> Narrative is a […] doubly temporal sequence […]: There is the time of the thing told and the time of the narrative (the time of the signified and the time of the signifier). This duality not only renders possible all the temporal distortions that are commonplace in narratives (three years of the hero's life summed up in two sentences of a novel or in a few shots of a 'frequentative' montage in film, etc.). More basically, it invites us to consider that one of the functions of narrative is to invent one time scheme in terms of another time scheme (Christian Metz, Quoted from Genette, p. 33).

This notion, with which Genette prefaces his chapter on narrative sequence, expresses a profound aspect of narratives: They exist in a space that can expand and contract the time of events. For example, the dripping of a coffee machine can be stretched in time over several pages, describing each drip in excruciating detail, or can contract whole existences into a single sentence. Genette then explains that there exists an opposition between what he mentions German theoreticians call *erzälthe Zeit,* (story time) and *Erzälhzeit* (narrative time). This means that there can exist a schism between the time in which the events of the story unfold and the time it takes for the narrator to express them. He further notes that written or pictorial narratives can be consumed successively or diachronically, whereas oral narration can only be consumed in the time in which it is narrated (p. 33):

> The temporality of written narrative is to some extent conditional or instrumental; produced in time, like everything else, written narratives exist in space and the time needed for 'consuming' it is the time needed for *crossing* or *traversing* it, like a road or a field. The narrative text, like every other text, has no other temporality than what it borrows, metonymically, from its own reading" (p.34, italics in original).

As shall be explored in a later section, Genette and Metz' observations about time in narrative are especially interesting to the field of game studies due to their ability to manipulate this. When studying temporality in narrative, Genette notes that one must take the displacement of metonymic time for granted, "since it forms part of the narrative game, and therefore accept literally the quasi-fiction of *Erzählzeit* [narrative time], this false time standing in for a true time and to be treated […] as a *pseudo-time"* (p. 34). Meaning that all narratives, in other words, enter a space where time is anachronistic and unrelated to the time of reality, the narrated cannot be synchronized with reality.

Expanding on the above notion, Genette explains that time in fiction contains *Anachronies*, which he describes as being "discordance between the two orderings of story and narrative" (p. 36), which, for example, can be observed whenever a novel states that an event occurred three months earlier. The reader then, "must take into account both that this scene comes *after* in the narrative, and that it is supposed to come *before* in the story (p.35). Genette then goes on to describe how anachronies have been a narrative tradition since its beginning, exemplified by Homer's *Illiad* which exhibits temporal distortion in the first paragraph. It begins with the consequences of Achilles' actions and moves backward in time towards what incited the events (p. 37). Furthermore, he mentions how this is an example of *in media res*, wherein a

narrative begins with the events occurring, as the actions of the work occur in the narrative ‘now' and later moves backward in story time.

Narrative time, to Genette, weaves backwards and forwards, sometimes looking forward in narrative time, which he designates as *prolepsis*, meaning “any narrative maneuver that consists of narrating or evoking in advance an event that will take place later” (p. 40); And at other times focusing on what came before, which he calls *analepsis,* which describes “any evocation after the fact of an event that took place earlier than the point in the story where we are at any giving moment” (p. 40). An example of a prolepsis might then be what is known as *foreshadowing* or a flash-forward, in which an event presented earlier in the story hints at or explicitly shows an event which will occur later, as in the film *The Empire Strikes Back* (Kurtz, 1980), wherein Luke encounters a mirage of his fear, confronting Darth Vader, which points forward in both the narrative and the story time to their actual confrontation. Analepsis, on the other hand, is, for example when Han Solo recounts how he was able to the ‘Kessel run’ in less than twelve parsecs in *A New Hope* (Kurtz, 1977), as it calls back to an event which occurred before the narrative in which it is situated. For Genette, ‘order’ then refers to the common narrative element of weaving back and forth in temporality, thus creating points which look forward in time along with some being retrospective and the structuring of these events. Interestingly, Genette’s views on order are substantially different from Aristotle and Propp as Genette is focused on the internal temporal order of events rather than the structure of incidents as they appear to the reader.

Delving deeper into the topic of time within narratives, Genette explores *Duration,* which, put simply, accounts for ‘discourse time’ and ‘narrative time’, which, as mentioned above in the example of the coffee machine, means that events in fiction can be expanded or contracted

as they fit the narrative. Genette specifies four types of temporal contraction or expansion: Ellipsis, pause, scene, and summary. To Genette, *ellipsis* either refers to *definite* ellipses, which are narrative temporal lapses in which the amount of time which is narratively elided is specified. Conversely, *indefinite* ellipses are not temporally specified (Genette, 1980, p. 106). Pause refers to when story-time comes to a standstill while the discourse time continues unimpeded. Usually, pauses are narrative moments wherein the narrator describes something in detail while the actions of the narrative are impeded. For example: “She stood at the window overlooking the playing children, the faded yellow coffee cup in her hand clenched tightly, she was nervous.” In this short scene, the woman looks out a window as the narrator comments on her appearance and demeanor, effectively pausing the events. Pauses are undoubtedly very common in narratives, as they are often used to show insight into the characters’ thoughts or used to describe important objects (Genette pp. 101-106). The term ‘scene’ refers to when narrative time and discourse time are equal, as is usually the case with dialogue, as the diegesis moves as we observe it without contraction or expansion. Summary, to Genette, occurs whenever events in a narrative are condensed in narrative-time. It is “the narration in a few paragraphs or a few pages of several days, months, or years of existence, without details of action or speech” (pp. 95-96), an example would be: “The years passed without incident, life was good.” Together, these elements make up what Genette thinks of as ‘duration’ in narratives.

In his chapter on *frequency,* Genette seeks to explain how narratives can manipulate how often an event occurs. Genette writes of three possibilities for how many references are made to a given event: *singulative*, *repetitive* and *iterative*. Singulative refers to an event which takes place only once and is referred to once. Repetitive refers to an event which takes place once but is referred to continually. For example, if a character is obsessed with an event and speaks of or

relives it repeatedly. An event, which takes place many times but is referred to only once, Genette classifies as iterative. For example: “For months Thomas had thought about taking the bus instead of walking, today was the day, he decided.” The frequency of an event being mentioned or taking place thus signifies its importance. For example, the rapping at the chamber door in Edgar Allan Poe’s *The Raven* (1906) is not merely glossed over as it is narratively significant.

Voice. Having delved into the workings of time in narratives, Genette moves to explain the role of the narrator and the functions of perspective and ‘person’ in his chapter on Voice. Voice is, to Genette, concerned with who speaks, i.e. is it the intradiegetic character or the extradiegetic narrator and can they overlap? When are they speaking and on what ‘narrative level’? First, however, the paper will define the terms ‘character’ and ‘narrator’. In this context, ‘character’, refers to “a text- or media-based figure in a storyworld, usually human or human-like […] The term ‘character’ is used to refer to participants in storyworlds created by various media in contrast to ‘persons’ as individuals in the real world” (Jannidis, 2013). Interestingly, this definition uses Ryan’s term storyworld, which points to a movement within narratology towards a general acceptance of the term. Despite the usage of ‘narrative’ as opposed to ‘storyworld’ the present paper finds the definition appropriate.

Genette makes an important distinction between *homodiegesis* and *heterodiegesis*, or first-person and third-person narrative. Fludernik comments: “The major advantage of this terminology is that there is no confusion about the use of the first-person pronoun. Homo/heterodiegetic defines the relationship between the narrator and the fictional world – the narrator is (or is not) part of that world” (Fludernik, p. 98). She then compares this to the standard term ‘first-person narrative’, which, she notes:

> ostensibly indicates that the first-person pronoun refers to the central protagonist on the story level just as third-person narrative uses a third-person pronoun, *he, she,* or *they*, in referring to the main protagonist(s), or second-person narrative refers to the central protagonist by means of *you* (p. 98, italics in original).

An example of a homodiegetic narrator would be: "I trashed the second envelope and opened the last one, turning it upside down over my desk" (Butcher, 2000, p. 35), from Jim Butcher's *Storm Front*, in which the narrator is also the main protagonist. A heterodiegetic narrator, on the other hand, can be observed in *Harry Potter and the Philosopher's Stone*, "Even Harry, who knew nothing about the different brooms, thought it looked wonderful" (Rowling, 1997, s. 178), wherein the narrator refers to the characters in the third person and is not part of the diegesis. Later, Genette writes on the 'time of narrating':

> A narrating situation is, like any other, a complex whole within which analysis, or simply description, cannot differentiate except by ripping apart a tight web of connections among the narrating act, its protagonists, its spatio-temporal determinations, its relationship to the other narrating situations involved in the same narrative, etc. The demands of exposition constrain us to this unavoidable violence simply by the fact that critical discourse, like any other discourse, cannot say everything at once (p. 215).

Genette begins investigating time of the narrating by musing on the implications of tense in the narrating act and concludes that one can tell a story without specifying the place where it happens, however, one must specify a tense, present, past, or future of when it happens (p. 215). "This is perhaps why the temporal determinations of the narrating instance are manifestly more important than its spatial determinations" (p. 215), he contemplates. Moreover, he specifies that

the “narrating place is rarely specified, and is almost never relevant” (p. 216). He then differentiates four types of narrating:

> *Subsequent* (the classical position of the past-tense narrative, undoubtedly far and away the most frequent); *prior* (predictive narrative, generally in the future tense, but not prohibited from being conjugated in the present […]); *Simultaneous* (narrative in the present contemporaneous with the action); and *interpolated* (between the moments of the action) (p. 217).

Later, Genette investigates *narrative levels*, which refers to the idea of narratives being ‘nested’ within other narratives in the diegesis. He refers to the topmost layer as the ‘primary narrative’ and those narratively below as ‘secondary’, ‘tertiary’ and so on (pp. 227-236), he refers to secondary and tertiary levels as being metadiegetic, but this term can easily be misunderstood as being related to the outside circumstances of the narrative. Mieke Bal in her work, *Narratology,* draws on Genette, but instead calls this nesting of levels ‘hypodiegetic’, which means below or beneath the diegesis, and is less likely to be misinterpreted. For example, the primary narrative of *Fight Club* is observed when the unnamed narrator is strapped to a chair at the beginning of the film and muses “and suddenly, I realize that all of this, the gun, the bombs, the revolution, has got something to do with a girl called Marla Singer” (Fincher, 1999), thus framing the majority of the events of the film as a secondary narrative, nested within the primary narrative. This leads into Genette’s ideas of the functions of the narrator.

> It can seem strange, at first sight, to attribute to any narrator a role other than the actual narrating, the act of telling the story, but in fact, we know well that the narrator’s discourse, novelistic or not, can take on other functions (p. 255).

Here he presents that the narrator's function is connected to three aspects: first, "the story, and the functions connected to it is the properly *narrative function*, which no narrator can turn away from without at the same time losing his status as narrator" (p. 255). Here Genette speaks of the perhaps banal observations that a narrator who simply does not narrate is not a narrator. He mentions that some novels have attempted to lessen the role of the narrator, one can imagine this being by having no extradiegetic descriptions or simply letting the characters' dialog embody the entirety of the narrative. Second, he mentions the aspect of the narrative text, "which the narrator can refer to in a discourse that is to some extent metalinguistic (metanarrative in this case) to mark its articulations, connections, interrelationships, in short, its internal organization. These "belong to a second function that we can call *directing function*" (p. 255, italics in original). This is observed when the narrator interrupts the narrative and becomes involved in the text, for example: "Thomas strode towards the woman in the red hat, no, it was yellow, yes definitely yellow." Third, the 'function of communication', refers to the situation in the aspect of the narrating situation itself, "whose two protagonists are the narratee -present, absent, or implied – and the narrator" (p. 255). The term 'narratee' to Genette, refers to the reader, in other words, the one being spoken to. This function speaks to the reader directly to establish contact with them. His fourth function concerns the validity of what the narrator is saying, as such he calls it "testimonial function", he mentions that this occurs when a narrator addresses a narratee and reassures them of either the truth or the fiction of their words. Fifth, and lastly, he mentions the *ideological function* which refers to when a narrator interrupts the narrative to comment on the actions of the text or provide wisdom, for example: "Thomas strode towards the woman in the red and yellow hat, what a fool to be so confident." Thus, to Genette, the narrator carries many functions and can interact, or appear interacting, within the narrative in many forms. These views

on narrator shall become relevant when the paper will later explore this in the context of video games.

Genette's third category explores mood, and, most notably, examines *focalization* and *distance*. Fludernik concisely summarizes:

> Under the heading of *distance* [Genette] draws a distinction between different types of mimesis. In the narrative discourse of the novel, language can represent verbal utterances much better than actions, colors or feelings, for example. The point at issue here is how far the *symbolic* medium of language can be used to *iconic* or quasi-iconic effects. This is the point at which Genette discusses speech and thought representation" (2010, p. 102, italics in original).

The terms 'Symbolic' and 'iconic', Fludernik notes, refers to semiotics, within which:

> we distinguish between three kinds of signs: deictic, iconic and symbolic. Deictic signs point from one spot to an object or in a specific direction. […] Iconic signs are characterized by the fact that the sign (*signifier)* resembles the *signified* in some way. […] Symbolic signs, on the other hand, are arbitrary – they show no referential link to the signified nor are they in any way similar to it. (p. 102, italics in original)

Genette is thus concerned with where the reader is situated to the actions and events in the narrative, for example, "Thomas walked over to her and told her that her car had been towed" is very distant from the events, whereas: "He walked over to her and said: 'your car has been towed'", is much closer to the events, as we read the words as they are spoken, and not the signified words in the first example i.e. the symbolic idea of the words spoken.

According to Genette, there exist three distinct kinds of focalization: Zero focalization, internal focalization and external focalization (pp. 189-190). These terms are usually referred to

as ‘point-of-view’, as they correlate to the position of the view of the action, or ‘who sees’ the events. *Zero focalization* refers to the authorial novel, in which the focalization is unrestricted and can move to any point of view. *Internal focalization* refers to a perspective, or point of view, which focuses mainly or solely on one character. Conversely, he describes *external focalization* as being a neutral narrative situation where characters are described only externally without an inner view. Bal explains succinctly: “Focalization is the relationship between the ‘vision,’ the agent that sees, and that which is seen. This relationship is a component of the story part, of the content of the narrative text: A says that B sees what C is doing. […] Consequently, focalization belongs in the story, the layer between the linguistic text and the fabula.” (Bal, 1985, p. 145). The term ’fabula’, which Bal introduces, is closely linked to ’story’ and comes from the Russian Formalist group and, according to Paul Cobley in his work *Narrative* (2014), “refers to the chronological sequence of events which make up the raw materials of a story” (p. 13). Furthermore, Bal extends Genette’s terminology to also include a *focalizor*, which ”is the point from which the events are viewed” (p. 146), this point can, she explicates, lie either within a character meaning an element of the fabula or outside it. In sum, focalization and focalizor refer to the narrative perspective, the point of view adopted by the narrator. it should not, however, be confused with the one who speaks, the narrator can, to Genette, be separate from the focalization. Genette has, as shown above, many pertinent ideas of the workings of narratives. These will be explored in the context of video games later, particularly his ideas relating to ’tense’ and ’voice’ relate to the goals of the present paper, insofar as they can be used to examine some of the unique qualities of video games as it relates to narrative. Moving on, the paper will now explicate Paul Cobley’s perspectives on narrative.

Paul Cobley

In the succinctly titled *Narrative* (2014), Paul Cobley makes the argument that narrative is essentially a collection of signs which includes three fundamentals: ‘sequence’, ‘space’ and ‘time’. He begins, much like Genette, by noting that there often exists a confusion of terms between ‘narrative’ and ‘story’. He writes: “To be sure, story and narrative are closely related; but even the most preliminary of investigations reveals that there are three fundamental items which, while they sometimes blend in a most pleasing way, are really separate. These are ‘story’, ‘plot’, and ‘narrative’” (2014, pp. 3-4). To illustrate this, he offers the example of a television series based on *Oliver Twist*, by Charles Dickens (1839). He writes: “The *story* concerns a young orphan boy, Oliver. […] The story of the character Oliver Twist, his adventures, what happens to him and the events connected with these, is therefore central to the novel” (2014, p. 4 italics in original). To further expand on this point, Seymour Chatman, author of *Narrative Structure in Fiction and Film*, quotes French semiologist Claude Bermond:

> [Story] is independent of the techniques that bear it along. It may be transposed from one to another medium without losing its essential properties: the subject of a story may serve as argument for a ballet that of a novel can be transposed to stage or screen, one can recount in words a film to someone who has not seen it. These are words we read, images we see, gestures we decipher, but through them, it is a story that we follow; and it could be the same story. (Chatman, 1980, p. 20)

The story should thus be similar regardless of the medium to which it is translated, it is transmedial. If this is not the case it ceases to be the same story. Marie-Laure Ryan, in the introduction to *Narratology Beyond Literary Criticism: Mediality, disciplinarity*, reflects on this and concludes:

> The fact that a story can migrate to some extent from one medium to another does not mean that all media offer the same narrative resources and that the transposition has no effect on the story. A core of meaning may travel across media, but its narrative potential will be filled out, actualized differently when it reaches a new medium (2005, p. 1).

This notion predates Ryan's ideas of the storyworld, but similar concepts are present, i.e. the story can be translated between media. For example, the story of Spider-Man can be translated from comic books to movies and games. However, interestingly, she notes here that this transposition has an altering effect on the 'narrative potential' meaning that, for example, the story of *the Illiad* can potentially gain from being expressed in the form of a video game. However, much can, this paper would argue, also be lost in this translation. Nevertheless, in this sense, narrative is subordinate to story, insofar as if the narrative is altered the story should remain reasonably the same.

Cobley continues, stating that "the *plot* of *Oliver Twist*, the circumstances which involve Oliver in a specific series of events is not quite the same as the story" Plot is, to Cobley, the events of the story and the order in which they are presented, as well as the causality behind them. He notes that, in the case of *Oliver Twist*, the character Monks, causes the events to be set in motion (p. 4). Cobley goes on to explain that some events can precede the temporal sequence of the story of Oliver Twist as it is presented in the book, such as his birth, and the resulting death of his mother. These the narrative chooses not to disclose; "in short, the *narrative* of Oliver's story and the plot which drives it only reveal the relevant wider circumstances [at a later point]" (pp. 4-5 italics in original). The narrative can thus reorder the events of the story and choose which to reveal to the reader and how to reveal them.

> Put very simply, 'story consists of all the events which are to be depicted. 'Plot' is the chain of causation which dictates that these events are somehow linked and that they are therefore in relation to each other. 'Narrative' is the showing or the telling of these events and the mode selected for that to take place (2014, p.5).

To expand on this, the present paper will once again look to Gerard Prince who defines narrative thus: "Narrative is the representation of at least two real or fictive events or situations in a time sequence, neither of which presupposes or entails the other" (Prince, 1982, p. 3). Prince's definition interestingly includes time as a prerequisite, meaning that for something to be considered a narrative, two events must be connected by time, for example: "Rose opens the door, Jack enters through the door." Furthermore, Prince's definition mentions that narrative is the representation of events. While this might be obvious, as narratives can never be the events narrated, it is, however, noteworthy as Cobley shall later explore narrative as collections of signs.

Having defined plot, story, and narrative, Cobley later delves into what he thinks of as the three fundamental elementals of any narrative, *Sequence*, *Time* and *Space*. He begins by explaining that: […] at the lowest level of simplification, narrative is a sequence that is narrated" (p. 6), illustrating the importance of sequence, what Genette might refer to as the order. He ponders the implications of sequence by offering the example of nature documentaries narrated by Sir David Attenborough:

> The narrative seems to come from the authoritative voice-over. But one might ask whether the actual pictures on the screen, the way they are organized into a sequence also constitute a narrative. This nonverbal 'showing', in addition to the voice-over 'telling', might equally possess a narrative orientation […] it is not necessarily implied that verbal and visual narratives are the same (p. 7).

Picture(s) followed by narration thus, according to Cobley, creates the narrative of, for example, a penguin marching across an icy field, looking for its mate. The narration functions as a clarification of the narrative, if it didn't exist then viewers would have a hard time discerning what the penguin was doing, but, due to the narration following the images, the viewer understands.

Later, Covley muses on the notion that we, as humans, are intrinsically storytellers. He then poses that as one thinks deeply on the issue "we might easily reach the conclusion that the whole storytelling impulse is illusory […] none of these come to fruition as stories as we 'choose' to impose some kind of narrative on them" (p. 7). The question of events being narratives versus possessing narrativity is likewise posed by Ryan who writes:

> The property of 'being a narrative' can be predicated of any semiotic object produced with the intent to evoke a story to the mind of the audience. […] It is the receiver's recognition of this intent that leads to the judgment: this text is a narrative, though we can never be sure that the sender and receiver have the same story in mind. 'Having narrativity', on the other hand, means being able to evoke such a script, whether or not the author of the text intended to do so, and whether or not there is an author (2005, p. 5)

From this Ryan concludes that "the fullest realization of narrative occurs when we have a text that is both intended as narrative and possesses sufficient narrativity to be construed as such" (p. 5). Imagine, for example, walking through town and seeing a balloon floating past. This event by itself holds no narrativity. However, if we then see a small boy running and looking up, many will surely connect the two; the boy's balloon flew away from him. The events have now been connected by sequence, the 'narrative' of the boy who lost his balloon has been given plot, and yet, Ryan would suggest, it is still without narrative due to the lack of authorial intent. This

means for the present paper that when analyzing events in video games, or texts in their entirety, their narrativity, as well as their intentionality, must be considered, to conclude whether they can be categorized as narratives or narrative events. This will become pertinent when later discussing emergent game events. Cobley then considers the implication of imposing narrative versus authored narratives stating:

> The contradictory coupling of these insights leads to the most fundamental observation that can be made of narrative: that it consists of signs. A sequence of any kind might exist in the world, but if that sequence is to consist of meaningful relations it requires human input; it needs to be understood as being made up of signs (2004, pp. 7-8).

Here he seems to suggest that sequences in the world can be narrative without authorial intent, they should only require human input and to be made up of signs. To illustrate this point, he offers the example of seeing a broken pot on the ground. Because he was not there to witness the clumsy cat who nudged it from its perch, he is "unable to interpret it as a sign" (p. 8). If he was instead told or witnessed the cat breaking the pot, he would then be able to interpret the "sign of the cat's clumsy wall-scaling activities" (p. 8). The sequence is thus important for the creation of meaning as seeing the cat break the pot, followed by the broken pot allows for interpretation. To Cobley, when seeing relations between things "we are operating in the domain of signs" (p.8). Furthermore, he states that these are human signs, and that plants and animals have different signs and that these must "make up the bulk of communication on this planet" (p. 8). What this somewhat esoteric point illustrates is that we as humans have no way of knowing "whether [a second cat] would make the interpretation that we do on the basis on the breakage alone" (p. 8). He then concludes: "Human signs, or what humans interpret as signs, therefore stand in for something else in the world. Put another way, they *re*-present it" (p. 8, italics in original). Cobley

relies on literary theorist Wolfgang Iser to explain: “no rendering can *be* that which it renders” (Iser, 1989 p. 251). To Cobley, this implies that:

> Not only is the ‘real’ world different from the world as it is represented, as even ‘reflective’ and ‘intentional’ approaches would acknowledge, but representational systems as narrative *work* to facilitate the recognition of such phenomena as sequence and causality. They facilitate the meaningful relations which will transpire with human input (p. 8, italics in original).

Everything within narratives is, according to Genette, metaphorical for something other. This harkens back to Genette, the idea that what is narrated is a representation of the events, not the events themselves. Cobley then goes on to state that these forms of representation can be found in what he considers to usually be associated with non-narrativity, such as statues, music, and photographs. Reflecting on this he ponders what is specific to narrative representation: “At their simplest, all narratives are the movement from a beginning point to a finishing point. Narrative is just a sequence which starts and moves inexorably to its end. To understand this is to understand the most important principle behind narrative” (pp. 8-9). This observation provides valuable insight into Cobley’s views on narrative. Narrative is, to Cobley, a sequence of events with a beginning and an end. However, as he notes: “Any straightforward movement from start to finish runs the risk of being tedious” (p. 9). He argues that narratives must include something in between the beginning and end to be engaging. This is because “even tedious narratives cannot consist of an untrammeled journey from A to B; it is impossible” (p. 9). He illustrates this by pointing to Stephen King’s novel *Gerald’s Game* from 1992, in which King chronicles the advancement of a starving dog in harrowing detail over the course of an entire page. Something, Cobley notes, which could have been said in a single sentence. King does this to heighten

anticipation. By dragging out the action, King builds tension and thus, when the release of the scene comes, it is much more effective than had it only been a single sentence. Cobley states: "The progress of fictional narrative must, necessarily, be impeded. […] Narrative must entail some kind of delay […] the space between beginning and end in narrative is where the reader will be involved in doing work" (p. 11). He continues: "a narrative might be said to possess 'space' in the movement from beginning to end, […] narratives enact in this movement a relation to 'time'" (p. 11).

Space. While 'sequence' describes the order in which the events of the text appear, to Cobley, 'space' describes a narrative space which the narrative occupies while progressing. He explains that the notion of having a narrative move from point A to point B implies movement in this narrative space, a narrative, he says: "must advance to its end whilst simultaneously delaying it" (p. 11). He notes that narratives must be pushed forwards towards their conclusion and disclosure and halted in this "by way of 'equivocation', 'snares' and 'false replies'" (p. 12). Put another way, an important factor in establishing a (good) narrative, is delaying the events making the reader ponder the possible outcomes. This, Cobley notes, is the foundation of suspense. He quotes Peter Brooks, who classify these narrative deviations as 'detours', and explains that these are "woven so imperceptibly into narratives that they may not be instantly apparent as pure delays, but rather as snatches of dialogue or sequential description" (p. 12). Questions the viewer or reader might ask, e.g. 'Are they going to fall in love?' or 'Is he going to die?' indicate stoppages in the story. These create displeasure with the story events but result in pleasure or relief upon resolution (p. 12). To Cobley detours "are a crucial site of potential enjoyment in a narrative" (p. 12). What can be gathered from this is, ultimately, that pacing, or indeed the space between events, is central in establishing narrative. The events must be structured in a manner

which gives way for the story to be expressed, but also in a manner which delays the conclusion to heighten the possibility for enjoyment in the discomfort of unanswered questions. To further illustrate this point, Cobley quotes an interview with author Mickey Spillane: “Nobody reads a book to get to the middle, you read a book to get to the end and you hope the end is good enough to justify all the time you have spent reading it” (Miller, 1989, p. 36).

“There is more to delay as well, than simply pulling back from the climax” (p. 13), notes Cobley, and once again draws on Peter Brooks to explain that the narrative movement towards conclusion in narratives, what he specifies as their ‘linear dynamic’ is “equivalent to the poetic effect of metonymy, the sequential linking of items according to their common association in part or whole” (p. 13). For example, a shot of Golden Gate Bridge followed by a shot of a skyscraper creates associations between the two and the viewer understands that the building is in San Francisco. In other words, one thing represents another, and “calls upon another by linear association, thus linking narrative progression to sequence” (Cobley, p. 13). Brooks also notes that items in narratives might be used metaphorically. He offers the example of a red rose which represents love. Thus, Cobley states, “movement towards conclusion is affected by a *re*-presentation which is culturally coded in a relatively general way” (p. 13, italics in original). These representations are then signs, as Cobley specifies above, which must be interpreted by human input. In short, as readers, we understand things as related to what came before, as well as the cultural implications of these.

Continuing his exploration of ‘space’, Cobley delves into two concepts which were illustrated by the Russian Formalists: *fabula*, and *sjuzet*. Narratologist Seymour Chatman succinctly writes: “[fabula is] what has in effect happened’; plot is ‘how the reader becomes aware of what happened’, that is, basically, the ‘order of the appearance (of the events) in the

work itself'" (1978, p. 20). Cobley notes that the terms "are usually translated as 'story' and 'discourse' respectively, conflating 'plot' and 'narrative' in the process" (p. 13). Sjuzet then denotes the entire progress of events and how it is being presented or 'narrated'. He then goes on to explain that these terms have been crucial in the analysis of narrative, because

> [fabula] designates the prior events that are to be narrated; at the same time, however, such events are always *organized* in a way that presents itself as 'the same' as those events but, of course, is quite 'different'. […] it is always *re*organized to highlight some events and downplay others, an activity designated by the term *sjuzet* (pp. 13-14 italics in original).

To illustrate this point, one might think of a film in which the characters never go to the bathroom. This is, of course, a normal bodily function, but in most cases is not essential to the story and is therefore omitted from the narrative. Cobley explains, by way of Brooks, that "narrative is, therefore, a transformation: like metaphor, narrative is 'the same-but-different', and the level of unfamiliarity entailed by this formula also results in a temporary halt to the movement towards disclosure" (p. 14). He then follows this up by saying: "some of the representation in a narrative, then, is based on principles which are fairly familiar and expected: metonymy, sequence; other aspects forge new associations: metaphor" (p. 14). To him, this brings into light problems with his previous identification of 'story', 'plot' and 'narrative' as separable entities. He notes, however, that the double formulation of fabula and sjuzet is "instructive when considered in relation to our earlier observations about narrative as an ensemble of signs" (p. 14), Here he refers to the example above of the Golden Gate Bridge as a reference for something real in the world.

> Signs then act to *re*-present, in different ways, that to which they refer. Equally, though, signs refer to things that are not easily available […] even so, they still *re*-present that to which is the refer. This is the case with *fabula* and *sjuzet* (p. 14).

Assuming that narrative is a collection of signs, then it can now be concluded that, according to Cobley, these signs stand in place of real-world phenomena, such as places or intangible concepts like love, they do this in differing ways, meaning that multiple things in a narrative can represent the same idea or phenomenon.

Cobley later explains that the detours and delaying factors of a narrative's progress towards the end are "'bound' to an end point'" (p. 14), 'binding', he explains, is then "the process by which a detour is created and a 'binding effect' therefore, is something that also produces all those retardations of the narrative's progress to denouement" (p. 14), these, he reiterates, are the snares, equivocations, and false replies. He adds that these are story events which will be "caught up in this complex [of snares, equivocations, and false replies], and often be bound 'in space' by a plot […] the specific ways in which that binding will be related are due to narrative" (p. 14). What he specifies here is that narrative space is tied to the events which halt the narrative's progression, and that these are situated in the narrative's figurative space because they are tied to the necessary events of the narrative, i.e. the fabula or story, and its ultimate end. In other words, narrative events that halt the narrative progression expand the narrative space but are locked, or 'bound', to the ending due to the narrative's content i.e. the story. This will later provide insight into the construction of narrative space in video games.

Time. Cobley notes: "while the movement of narrative implies 'space', it must always also involve 'time'" (p. 15). He then notes that time is notoriously hard for humans to understand as we "tend to apprehend time through its discrete measurements: days, weeks, years, as well as

the way it is imposed on us – by the regularity of work schedules […] and so forth" (p. 15). Cobley draws on French philosopher Paul Ricoeur who, he explains, "understands time and narrative as being on intimate terms precisely because narrative *is* the human relation to time" (p. 15, emphasis in original). Cobley clarifies stating that there exists

> two types of temporality: 'objective' time and 'subjective' time. 'Objective' time co-exists with the universe […] it always has been and there is nothing we can do about it. […] 'Subjective' time is temporal passage as it is experienced by humans going about their lives (p. 15).

He notes that a problem quickly arises as "'objective' time cannot be measured or even conceptualized unless the 'measurement' is carried out by a 'subjective' human; similarly, 'subjective' time cannot exist without some reference to the possibility of 'objective' time" (p. 15), he concludes that humans can then only understand time through narrative. Cobley quotes B. Stevens in *On Ricoeur's analysis of time and narration'* by L. E. Hahn, who offers the invention of the calendar as an example of narrative's facilitating role between subjective and objective time. Cobley comments: "The calendar corresponds to the movements of the heavens but is also a linear narrative sequence" (pp. 15-16). However, he further states that this has "repeatedly been subverted in narrative", referring to narratives which alter or play with linearity, which echoes Genette's idea of anachronies.

For Ricoeur, Cobley writes, time is also hermeneutic, it is thus "based on understanding the imperatives involved in the interpretation of phenomena" (Cobley, p. 16.). To explain this Cobley draws on Freeman, who says:

> We seek to revisit the morning before we arrived at work, or the previous day or month or year; we land back in the present, now informed by the visits just made; we concentrate

> on what's next, both in the immediate and distant future … in coming to terms with the past, I can only do so from the present, through the act of interpretation.
>
> (Freeman 1998, p. 41).

What this means, is, put simply, we can only observe the past and consider the future based on the present, meaning that everything is interpreted in the present. Cobley then explains that this understanding is vital to Ricoeur, especially when concerning what Cobley calls "the interrogation of the relation of time and narrative" (p. 16). Ricoeur explored narrative and time by using St Augustine's *Confessions* (354-430) wherein St Augustine ponders the recitation of a psalm. He explains how reciting a psalm moves the future, the expectation of what is to come, towards the past, and thereby into memory, by using the present in the form of the recitation. Thus, the future uses the medium of the text to become the past, through "the interpretative triad of 'expectation – memory – attention'" (Cobley, p.17). However, Cobley notes that Ricoeur insists that "the kind of temporality encountered in narrative has more to do with the interpretative mode prefigured in Augustine's comments than it has to do with the commonplace version of time as a series of instants arranged along a line" (p. 17). He continues:

> Like Brooks, [Ricoeur] stresses the importance of the endpoint of a narrative, arguing that the understanding of successive actions, thoughts, and feelings in a narrative is dictated by anticipation of the conclusion, and also, that reaching the conclusion enables a backward glance at the actions that led up to it. […] Narrative is therefore not just a matter of paying attention to individual incidents on the time-line; it is most importantly about 'expectation' and 'memory': reading the end in the beginning and reading the beginning in the end" (p. 17).

For the present paper, this observation is especially significant when the paper later discusses games with no concrete end, what will later be defined as process-oriented games, and their relation to end and time. This also relates to the study of video game narratives insofar as they hold an entirely different relationship to time, as shall be explored in a later section. For the moment, however, the paper will return to Cobley as he explains further: "It follows from this recognition, then, that the cornerstone of narrative structure is the plot […] or 'emplotment' […] Emplotment is the intelligible whole which governs the succession of events in a story and thus 'places us at the crossing point of temporality and narrative'" (p. 17). What this means is that we, as readers, are placed within the narrative in the 'now' while we are simultaneously also allowed to experience the 'past' as well as the 'future' of the narrative through gazes towards the past and future.

From Cobley's fundamentals surrounding the structure and construction of narrative, we can gather the following: Sequence is the way in which the story is ordered, the series of events that occur within the narrative whole. Sequence is furthermore important insofar as the sequential representation of events imposes narrative. Space refers to the narrative space which the narrative embodies. It is the space in between the events of the story and is closely linked with delays and narrative barriers. Further, narrative stoppages function to impede narrative progression and heighten enjoyment by imposing displeasure with the narrative. This expands the narrative space. Space is then closely linked to time, which denotes the framework of time within which these events occur. Moreover, it denotes the interpretation of time which occurs when engaging with a text, the triad of 'expectation-interpretation-memory, wherein the reader simultaneously looks towards what might come, engages with what is temporarily occurring, and reflects on what has happened within the narrative. To Cobley, the endpoint of the narrative is

particularly significant as it offers a backward glance towards the events of the narrative, as well as offering a point of reflection for the reader as they engage with the narrative, it should thus reflect the beginning, as the beginning should reflect the end.

In this section, the present paper has explored various viewpoints on the meaning of the term ‘narrative’, as well as hopefully illuminating the difficulty in reaching a definition which is universal. Furthermore, this section has sought to clarify terms and concepts which will be used in later sections. Because narrative is such a mercurial term, it will be used by some authors to refer to the story, while others use it to refer to the entire narrative text. However, there seems, as will be shown below, to be a consensus among game theoreticians to refer to narrative as being synonymous with story. The term narrative will, however, for the remainder be used by the present paper to refer to the narrative text in its entirety, in line with Genette’s views. The term ‘story’ will thus be used to refer to content within a narrative. As such the problem formulation of the present paper should be understood as wishing to explore both the construction of the narrative text itself, as well as examining the methods which video games have for conveying content within the narrative text unique to video games. With this in mind, the paper will now shift its attention towards defining games by virtue of Jesper Juul, Salen & Zimmerman and Chris Crawford among others.

Understanding Games

What makes a game a game? In this section, the present paper will seek a definition of games and video games, so that it may inform the discussion of the main topic of narratives in video games later. To do this, the present paper will also outline the current discussions on the subject, as well as past points of contention. This section will use the influential book *Rules of Play: Game Design Fundamentals* (2004) by Salen & Zimmerman, as a setting off point in the

exploration of the terminology. This because the paper finds their work to be exhaustive of past definitions and discussions. Later, Game Scholar Jesper Juul's definition will be discussed in contrast with the findings of Salen & Zimmerman, this discussion will then form the definition for the present paper. Furthermore, *Understanding Video Games* (2013) provides an excellent groundwork for understanding the medium's culture, history and how the medium approaches narrative, as well as also delving into the definitions of genres, game design elements, and the importance of narrative in video games.

Salen & Zimmerman state: "Any attempt to define the word 'game' is a foolish endeavor" (2004, p. 83). They borrow this reasoning from game historian David Parlett, whom they quote:

> The word [game] is used for so many different activities that it is not worth insisting on any proposed definition. All in all, it is a slippery lexicological customer, with many friends and relations in a wide variety of fields" (Quoted from Salen & Zimmerman, p. 83).

Before defining games, one must first separate it from 'play', as the two are inherently linked. Salen & Zimmerman ponder: "is there a difference between the words 'play' and 'game?" (p. 84), and note that "in English, there is a clear distinction between the two words" (p. 84), however, they also state that 'to play a game' "in both German and French […] uses different versions of the same word for both 'play' and 'game'" (p. 84). This is also seen in Danish, as Jesper Juul (2005) notes: "Scandinavian languages have a stronger distinction with 'leg' = play and 'spil' = game with verbs for both – you can play play ('lege en leg') and game game ('spille et spil'), so to speak" (p. 30). What Juul outlines here is what Salen & Zimmerman refer to as the issue of defining games as a subset of play, versus play as a subset of games, they write:

> It turns out that play and games have a surprisingly complex relationship. Play is both a larger and a smaller term than 'game,' depending on the way it is framed. In one sense, 'play' is a larger term that includes 'game' as a subset. In another, the reverse is true: 'game' is the bigger term, and includes 'play' within it (p. 84).

Some activities, they explain, such as playing Dodge Ball, has the players follow a formalized set of rules and compete to win. Playing on a seesaw or climbing a jungle gym, however, are "forms of play which do not constitute a game. Most forms of play are looser and less organized than games" (p. 84). This they then counter, stating that some forms of play are formalized, "and that these forms of play can often be considered games. In this sense, it is clear that 'game' is a subset of 'play'" (p. 84). Having described this view of games, they then delve into the second relationship where play is thought of as a component of games. "The experience of play is but one of many ways of looking at and understanding games. Within the larger phenomenon of games, then, the play of the game represents one aspect of games. Although play is a crucial element of the larger concept of games, 'play' is in fact a subset of 'game'" (p. 84). They then explain that "there exists important differences between the words 'play' and 'games'" (p. 85) and as a result, a good definition of game should "distinguish it clearly from play in both of the senses described here" (p. 85). It is important to note that Salen & Zimmerman, as game designers, are interested in the typologies and workings of games not due to a theoretical wondering, but rather a wish to concretize tools and clarifications of terms which aid other game designers. As such, they approach the study of games much like a narratologist would, by disassembling games into their core components and asking what the roles of each are. This proves rather useful to the present paper as it aims to study the interplay between game components, narrative, and story. Thus, a question akin to: "how do rules influence story?" can

be answered by comparing Salen & Zimmerman's observations of rules with what has been examined about story. Returning to the question at hand: What exactly is a game? Salen & Zimmerman go on to explain the difficulty of defining games, and that some issues arise time and time again:

> These issues not only include articulating the unique qualities that make a game a game, but also differentiating games from similar phenomena, such as other forms of play, conflict, and contestation. It is also clear that there is a difference between defining games themselves and defining the act of playing a game (p. 85).

After establishing the difficulty of defining the subject, they then set out to outline and introduce eight different definitions from various scholars and historians, a selection of which will be examined by the present paper.

Game historian David Parlett distinguishes between *formal* and *informal* games. "An informal game is merely undirected play, or 'playing around'" (David Parlett, quoted in Salen & Zimmerman, p. 86), whereas a formal game "has a twofold structure based on ends and means" (p. 86). He then further specifies that 'ends' implies a contest, and the goal is thus to achieve an objective where there can only be one winner, individual or in a team, since achieving the goal ends the game. A formal game then has a winner by definition and winning acts as the end of the game (p. 86). 'Means', Parlett describes, specifies that the game must have predetermined and agreed upon sets of equipment and procedural rules, "by which the equipment is manipulated to produce a winning situation" (p. 86). This definition, as Salen & Zimmerman note, reveals the challenge of defining games as being separate from other forms of play (p. 86). His definition's demands of a predetermined set of rules and equipment, as well as his idea of having a concrete winning condition, are, according to Salen & Zimmerman, "key ideas in defining games" (p. 86).

Moreover, as will be presented, this point remains significant for the other definitions which they outline. As Salen & Zimmerman have gone to great lengths to collect and describe definitions from various authors, the present paper will abstain from unnecessarily reiterating, and will instead refer to their comparison of the various definitions as presented in figure 1 as it succinctly sums up the distinct characteristics of the definitions. For the sake of convenience, Salen and Zimmerman provide the table seen in figure 1 as a means to compare the various definitions and their key points. In this, the scope of definitions is clearly shown. However, one can observe that all except Costikyan believe rules to be integral to the definition of games. Interestingly, he is also the only to define games as being a form of art.

Elements of a game definition	Parlett	Abt	Huizinga	Caillois	Suits	Crawford	Costikyan	Avedon |Sutton-Smith
Proceeds according to rules that limit players	√	√	√	√	√	√		√
Conflict or contest	√					√		√
Goal-oriented/outcome-oriented	√	√			√		√	√
Activity, process, or event		√			√			√
Involves decision-making		√				√	√	
Not serious and Absorbing			√					
Never associated with material gain			√	√				
Artificial/Safe/Outside ordinary life			√	√		√		
Creates special social groups			√					
Voluntary				√	√			√
Uncertain				√				
Make-believe/Representational				√		√		
Inefficient					√			
System of parts/Resources and Tokens						√	√	
A form of art							√	

Figure 1. Comparison between definitions of games (Salen & Zimmerman, 2004, p. 91)

Whether games are a form of art is beyond the scope of the present paper, but it is clear from their table that Salen & Zimmerman struggled to find a conclusive agreement between theoreticians of what makes a game a game. They note: "Although 10 of the 15 elements are shared by more than one author, apart from rules and goals, there is no majority agreement on any one of them" (p. 92). They then go on to critique some of the proposed definitions by stating:

> Some elements, such as games being voluntary or inefficient, do not seem to apply to all games. Others, such as the fact that games create social groups, describe the effects of games rather than games themselves, […] the representational or make-believe quality of games, appear in many other media and do not help differentiate games from other kinds of designed experiences (p. 92).

This shows that, despite their best efforts, Salen & Zimmerman failed to find a definition which they see as adequate and descriptive, they therefore propose their own, using the definitions of others as a setting-off point: "A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome" (p. 93). Worth noting about this definition is the introduction of conflict as a necessary element. This provides insight into the workings of games; they require conflict to be engaging. This, the paper would argue, is likewise an essential component of traditional narratives. Imagine, for example, that Odysseus merely sailed home to his wife, or that The Empire never built the Death Star. As Abbott (2002), notes, "you might say that conflict structures narrative" (p. 51). Conflict is the struggle of opposite goals against one another, e.g. Batman's struggle versus The Joker. In this example, conflict arises when the goals of Batman encounter the goals of The Joker. Salen & Zimmerman say of conflict: "All games embody a contest of powers. The contest can take many forms, from cooperation to competition, from solo conflict with a game system to multiplayer social conflict,

conflict is central to games" (p. 93). Conflict is central to games due to them being, essentially manifest struggles. You, the player, struggle against the rules of the game to overcome the obstacle, whether that obstacle is internal within the game or the game itself. Rules, they later specify, "provide the structure out of which play emerges, by delimiting what the player can and cannot do" (p. 93). In the section titled 'Rules and Aesthetics', the present paper will discuss the interaction between player, rules, emergent play, and inevitable conflict that arises when players collide with authored systems. However, for the time being, rules will be observed to be the mechanics and inner workings of a given game.

Egenfeldt-Nielsen, Smith & Tosca (2009) outline the same struggles of defining games as discussed by Salen & Zimmerman and contrast their definition with that of Jesper Juul, who states:

> A game is a rule-based formal system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels attached to the outcome, and the consequences of the activity are optional and negotiable (Juul, 2003, p. 34).

Egenfeldt-Nielsen et al. then compare the definitions of Salen & Zimmerman and Juul and note:

> Salen and Zimmerman's definition is brief and elegant, but it is not exclusive to games. Depending on how we read 'artificial conflict' it might […] include university exams. Here, the student is engaged in a conflict (to outdo her fellow students […] or to overcome the 'challenge' of the situation); this conflict is defined by rules, […] and it results in a quantifiable outcome (her grade) (p. 35).

They further discuss that the conflict is artificial because it remains inside what Johan Huizinga, in his book *Homo Ludens* (2000), referred to as a 'magic circle'. The term 'magic circle' refers to

the idea that when playing a game, one enters into a mindset or imaginary circle within which only certain rules apply, such as in the case of a game (Egenfeldt-Nielsen et al., 2009, p. 24). Juul's definition above is interested in the negotiability of the consequences of the game, which implies that the participant(s) should be free to exert as much effort and become as invested in the outcome as they would like. Egenfeldt-Nielsen et al. comment:

> of course, this may invite objections. Inevitably, for example, there will be players who neither exert much effort in their games nor feel particularly attached to the outcome; but we would not want to exclude such a person's game of poker – much less *the game of poker* – from the 'game' category (p. 35).

They suggest that this thinking might lead one to think that games in which the players can 'play' but exert little or no effort, nor be attached to the outcome, are not games at all. Juul's definition further mentions the need for a negotiable outcome, and that a 'fixed outcome' is impossible within a game. This means that, for Juul, games must conclude in variable ways, the conclusion should be influenced by the player, meaning that the player must have agency. However, one might question where the line between fixed and variable should be drawn? Is it variable if the player can influence how the game concludes, but not the conclusion itself? Consider the game *Shadow of the Colossus* (SCE Japan Studio & Team Ico, 2005), in which the player must defeat titanic beings who roam the world to save the life of a princess. No matter the player's actions, the game will end in the same way; the player will have defeated the colossi and doomed the kingdom. Players can influence how long it takes complete the task, but cannot alter the conclusion. As such, is this a negotiable outcome? The present paper would like to contest that a fixed or negotiable outcome is to be a determining factor for whether a game can be classified as a game. Many games hold no possibility for the player to influence the ultimate outcome.

Instead, the player must discover the story's ending by interacting with the game. One could anticipate that Juul might argue that this detracts from the intention of games, that they should allow agency to be applied to all aspects of the game, and thus result in an outcome which is completely tailored by the player. This point is discussed in Janet Murray's *Hamlet on the Holodeck* (1998), in which Murray imagines a virtual space in which all possibilities of action can be actualized and thereby create a completely realistic virtual experience. This is perhaps the epitome of an interactional medium but remains unattainable at the moment of writing.

What the above discussion ultimately shows is the difficulty of defining video games in a concise and consistent manner which allows for no deviation. Above, the present paper presented a variety of definitions which mention rules as being a defining characteristic for video games. In the following section, the paper will delve deeper into the topic of rules and what illuminate their relation to video games as a whole and later their relationship with narrative.

Rules and Aesthetics

Rules, as briefly explained above, are the boundaries of play, they determine what the players can and cannot do. Juul notes:

> Game rules are paradoxical: Rules and enjoyment may sound like quite different things, but rules are the most consistent source of player enjoyment in games. We may associate rules with being barred from doing something we really want, but in games, we voluntarily submit to rules. Game rules are designed to be easy to learn, to work without requiring any ingenuity from the players, but they also provide challenges that require ingenuity to overcome. Finally, the rules of a game tend to add up to more than the sum of their parts: For most games, the strategies needed to play are more complex than the rules themselves (2005, p. 48).

The rules of chess, for example, are simple in comparison to modern video games; the pawns can move one square forward and only diagonally when opposing an enemy and so on. However, the simplicity of the rules allows for incredibly complex interplay between them. Skilled players have found complex webs of moves that are used to gain an advantage over the opposing player. However, in common for all these players is that they abide the rules and only manipulate the pieces in predictable and legal ways. The players willingly submit to the rules because breaking them would lessen the experience. The crucial element here is the challenge. The challenge of overcoming the rules and to figure out the best possible use of the game's systems is, this paper would argue, immensely satisfying to some players. This signifies that the rules allow play to transcend the simplicity of the rules and to create something greater than each disparate element. This is known as 'emergence' and will be discussed in greater detail later. Bernard Suits (1978) writes:

> To play a game is to engage in activity directed towards bringing about a specific state of affairs, using only means permitted by rules, and where the rules prohibit more efficient in favour of less efficient means, and where such rules are accepted just because they make possible such activity (p. 34).

In other words, if no rules were in place in a game of chess, the goal of eliminating the other player's king, would become trivially easy as you would simply remove it. While being the most efficient way of achieving the goal, it also ruins the enjoyment of playing. Paradoxically, boundaries and rules are necessary for the conflict, which is created by the player interacting with systems prohibiting the players from achieving a goal, to be satisfying. Winning is only satisfying if it is achieved through conflict. In his definition of games, Chris Crawford specified four features which he deemed are fundamental aspects of video games: Representation,

interaction, conflict, and safety (1984). In the present argument, his definition of conflict is especially noteworthy. He writes: “Conflict arises naturally from the interaction in a game. The player is actively pursuing some goal. Obstacles prevent him from easily achieving this goal.” (p. 13). When the player encounters a rule, such as ‘you lose if your king is taken’, the player enters into a conflict with the game’s systems; given that the obstacle for success is the imposed rule. The system’s internal rules have created conflict. Returning to Cobley, rules are the narrative stoppages that halt the player’s progress towards the end of the experience. In this manner, rules facilitate conflict and are necessary for interesting and complex games. Egenfeldt-Nielsen et al. write:

> Rules, arguably, are the most defining characteristic of games; they are the element shared by everything we usually understand as a game and are the element that sets games apart from linear media such as novels or movies. (A novel, for example, has its own geography, its own representation—text—and its own narrative and setting.) An important feature of rules is that they are not tied to one particular type of material; in other words, they are transmedial. (2013, p. 99).

Egenfeldt-Nielsen et al. seem to indicate that rules can be translated to virtually any material, setting or medium and the game would still be recognizable. For example, chess is easily recognizable because the aesthetics are insignificant. One might even say that the most interesting aspect of chess is its rules and mechanics and the mastery of these. It could then be concluded that the aesthetics and the narrative of video games do not matter since the game’s mechanics and rules are what truly shape the experience. This, however, a simplification and fails to encompass the complexity of the medium. For example, a professional player of the game *Counter-Strike* (Valve, 2000), one could imagine, stopped ‘seeing’ the game and instead

focuses on the precise movements he must make to win. However, for less enfranchised players, the rules, while certainly one of the most vital elements of a video game, exist within a spectrum of modality. Video games function using audiovisual elements in concordance with the underlying rules and mechanics to create an experience. The players see the game's rules in the context of the audiovisual elements. This further implies that the narrative context is important to the experience. As such the discourse of the medium, the shape of the narrative is significant for the player. Juul writes:

> On a formal level, games are themable, meaning that a set of rules can be assigned a new fictional world without modifying the rules. A game can always be changed from one setting to another; the gun can become a green rectangle, the players can control wooden figures rather than humanoid characters. But on an experiential level, fiction matters in games, and it is important to remember the duality of the formal and the experiential perspective on fiction in games (2005, p. 125).

What Juul mentions here is that the innate fiction, meaning the story, as well as the aesthetical representation of the game, affects the player's experience. Thus, narrative reasoning is important. One could imagine changing the aliens of *Space Invaders* (Taito, 1978) to nuclear missiles. While this would impose no changes to the rules of the game, the context and story have been altered. This would ultimately, according to Juul, affect the experience. As Salen & Zimmerman put it: "the formal system of a game, the game considered as a set of rules, is not the experience of the game" (2004, p. 130).

What can be derived from this discussion is that games function through the combination of aesthetical elements, such as the visual representation of the world, and the underlying mechanics. Also, the narrative of the game can serve as an extension or justification for the rules

in place, e.g. the most important piece in chess is called a king. Egenfeldt-Nielsen et al. concisely say: "[Visual elements] mostly add to the atmosphere, provide a sense of realism and generally make the world seem alive" (p. 105). A game's audiovisual elements are simply the ways in which the game is presented to the player. Egenfeldt-Nielsen et al. refer to this as the game's 'geography' and 'representation'. This, in concordance with Juul, seems to suggest a connection between the rules and the audiovisual representation of the game world. This further implies that the internal logic of the game must cooperate with its aesthetical representation. The player must 'believe' in the internal logic of the fiction or risk being alienated from it. Many video games, though they have no reason for it, willingly adhere to simulations of the real world and thus find it necessary to follow realistic laws of physics (Dormsch, p. 16). One can, for instance, imagine that a car within a game would operate on a horizontal axis and move according to the laws of physics, if it instead moved vertically, there would exist a disconnect between what we can derive from the aesthetics of the game and the rules. It follows, then, that the interplay between a game's rules and its audiovisual expression would combine to create an experience. This is emergence, which Egenfeldt-Nielsen et al define as: "A phenomenon where the interaction of simple principles on one level creates complex results on another, higher, level" (p. 129). The interaction between the rules and aesthetics thus add to the player's experience of the game. If the game's aesthetic elements are coherent with the game's rules the player is, this paper would argue, more engrossed with it and thus the game is more able to convey its intention. For example, *Space Invaders'* rules and aesthetics are perfectly synchronized and clearly communicates to the player not only how they should play the game but also the intention of the game, as well as the themes of the game; the player being a soldier saving the world from invasion.

Much akin to when analyzing the mise-en-scene in films, images, symbolic representation or metaphors in novels or poetry, one can analyze the aesthetics of video games. It is worth mentioning here that the field of game studies has made no effort to develop its own methods of interpreting images or metaphors; it is deemed as simply not necessary. These are instead borrowed from other fields of study. This is because video games, to express stories, draw heavily on the cinematic, pictorial and literary arts. For example, much of the story of *Nier: Automata* (PlatinumGames, 2017) is, for the most part, told through dialog. Likewise, many of the game's themes are expressed through the aesthetical representations of the characters. Many modern games lend themselves well to be analyzed with regards to how the game represents characters and environments, given the capabilities for this afforded by the medium. However, since the focus of the present paper is to explore how video games express story and theme in methods unique to the medium, the analysis of, for example, expressions of theme and story using game mechanical systems will be favored. However, aesthetical representation and the analysis of this remains an important aspect of video game analysis as it offers a deeper understanding of the capabilities of the medium.

Interaction

Games are made up of the way in which they function in concert with the way they are presented to the player. It is understood that the rules act as the 'what' of the game. However, the paper has yet to explore the 'how' of video games. To specify, how the player influences and interacts with the video game rules. In video games the player either constructs goals for themselves or is handed a goal from the game, to achieve this goal the player must manipulate the game's state. How the player does this through interaction. For example, in *Nier: Automata*, the player embodies, for a large part of the game, the android known as 2B. whether the player

instructs 2B to pick up an item on the ground or to attack an enemy, the player is interacting with, and, importantly, affecting the game state. This is the backbone of the medium. Without interaction, games would instead be a passive medium akin to books and film. Simply put, interaction is the capacity for *agency.* Sebastian Dormsch (2013) writes: “The appeal of games lies in their promise of agency, in the promise of an openness that is dependent on the player and her choices. All games are therefore necessarily non-unilinear since true agency implies choice, and choice implies differing outcomes" (p. 3). What this means for the current discussion is that, according to Dormsch, video games must be able to offer an opportunity, or at least the illusion of opportunity, for the player to alter the outcome, thus mirroring the ideas of Juul’s negotiable outcome. Chris Crawford’s definition of video games likewise mentions interaction as being instrumental, he writes:

> Some media for representing reality are static. A painting or sculpture depicts a snapshot of reality frozen in time. Some media are dynamic; they show change with time. Movies, music, and dance are dynamic in this way. They are able to represent the changing aspect of reality more richly. But the most fascinating thing about reality is not that it is, or even that it changes, but how it changes, the intricate webwork of cause and effect by which all things are tied together. The only way to properly represent this webwork is to allow the audience to explore its nooks and crannies to let them generate causes and observe effects. Thus, the highest and most complete form of representation is interactive representation. Games provide this interactive element, and it is a crucial factor in their appeal. (1984, p. 9).

For Crawford, and likewise the present paper, interaction is a crucial part of video games and is interesting due to the unique opportunities which it presents. Interaction is the unique element of

the video game medium. Interaction is also, as shall be explored, the method through which the game medium can communicate stories and themes in ways which would be otherwise impossible. For example, *What Remains of Edith Finch* (Giant Sparrow, 2017) has the player acting out the last moments of various people. In one such instance the player embodies a man working at a fishing cannery where, due to the monotony of the work, the character begins to daydream. The player must now control two actions at once, the character in the daydream and the character in the cannery, who must continue to process fish. The player quickly realizes the difficulty in balancing the two, as the daydream is colorful and requires some amount of dexterity, whereas the other has the player carry out the same motion over and over. These two narrative levels then overlap, as shown in figure 2, when the character in the daydream encounters a bridge with a fish barring his passage. The player realizes that they must chop the head of the fish in the diegetic reality to lower the bridge in the daydream. Demonstrated here is a clever use of interaction to allow the player to empathize with the character by witnessing and interacting with his innermost thoughts. Through the player being subjected to the monotonous act of processing fish, it becomes clear to the player why the character would spend more and more time in his daydream, which, at a point, overtakes the entirety of the game. Essentially, the mechanics of the game become metaphors of the story content. This concept is explored further below.

Figure 2. What Remains of Edith Finch

To Juul, interaction, the active participation with a medium is so strong that most people change their physical position. For him, interaction is leaning forward, while passivity is leaning back (2001). And the present paper finds that this is an apt description. Imagine playing a game involving a daring prison escape. As players, we lean forward because the story relies on us to see it to its conclusion. Conversely, as passive viewers, we lean back and watch the events unfold in other media. Like Crawford, Salen and Zimmerman likewise believe interaction to be essential to meaningful play:

> The careful crafting of player experience through a system of interaction is critical to the design of meaningful play. Yet, just what makes an interactive experience 'meaningful'? We have argued that in order to create instances of meaningful play, experience has to incorporate not just explicit interactivity, but meaningful choice (2004, p. 73).

Interaction is, essentially, Salen & Zimmerman argue, meaningful choice. Interaction which has no discernable and impactful outcome is without meaning and thus detracts from the experience.

They then go on to say that these choices exist on the micro and macro levels (p. 73). Using *Nier: Automata* as an example, a micro level choice is pressing the 'attack' button instead of the 'dodge' button. This has no effect on the overarching story nor the game in any intelligible way. A choice on the macro level, on the other hand, "represents the way these micro-choices join together like a chain to form a larger trajectory of experience" (p. 73). For example, pressing the attack button many times might mean that you could not dodge and thus lost the game as a result. Choices and their interconnectedness over the course of a game is, as Salen & Zimmerman note, "a complex multi-layered process" (p. 74). However, they also state that there must be a clear indication to the player the result of their choices. The player must understand why they made the choice, and the effect it had on the game state for it to be meaningful. They draw on the example of a fighting game, in which two players battle. Player A knows what his choices mean and how they affect the game, should he then be beaten by player B, he must be able to discern what choices player B made to beat him for player A to view the choices as meaningful (p. 74), otherwise, one can imagine, player A would feel cheated, and his experience is lessened. Later, Salen & Zimmerman describe the anatomy of a choice by listing the five stages of a choice:

1. What happened before the player was given the choice? – describes the current state of the game and the context of the choice
2. How is the possibility of choice conveyed to the player? – for example, is the player aware of the possible options of controlling their character?
3. How did the player make the choice? – What mechanics did they interact with? Did they press a button, or did they do nothing?

4. What is the result of the choice? How will it affect future choices? – For example, the outcome of attacking in *Nier: Automata* might leave you open to counter attacks, thus influencing future choices for the player.
5. How is the result of the choice conveyed to the player? – For example, if the player chose to attack and were successful, the game should represent this by showing audiovisually that damage has been dealt. (p. 76).

According to Salen & Zimmerman, these are the five events that "transpire every time an action and outcome occur in a game in a game. Each stage is an event that occurs internal or external to the game" (p. 76). Internal here refers to the "systemic processing of the choice" (p. 76), whereas external refers to "the representation of the choice to the player" (p. 76). In this sense, one can conclude that the game does not represent all the processes involved in choice, which would most likely be nonsensical to the player. Rather, the player is interested in the aesthetic representation of their choice. As game designers, Salen & Zimmerman lament the lack of study of interaction from the perspective of the player. They write: "this style of over-the-shoulder journalism fails to recognize that interactivity is something to be experienced, rather than observed" (p. 79). The present paper will here note, however, the difficulty in expressing the feeling of interaction. Throughout this paper, *Brothers: A Tale of Two Sons* (Starbreeze Studios, 2013) will be used as an example, as the present paper will argue that it contains some of the most tactile expressions of interaction as a storytelling method which the author has encountered. This will be explored in depth in the 'Mechanical Storytelling' section. Translating the tactile and emotional experience of interacting meaningfully with a video game into words proves problematic. The explanation necessitates the context and specific interpretation which the player has. In this respect, the experience of play is unlike any other medium. As readers, we can

express how a book made us angry or sad. Expressing how pressing a specific made us sad because of the implications of said button, is another thing entirely. This notion is central to the present paper as it encapsulates the field of study most interesting to the topic of narrative video games: Interaction as a method of communicating experience and story. It is the goal of the present paper to express the importance of interaction in relation to video games as narratives, but also in relation to their stories. As the defining trait for video games, interaction offers a wealth of possibilities for study regarding its effect on story. One might ask: what does it mean to press a button to kill a monster to save a dying friend? What does it mean to press a button to staunch the bleeding of a fellow soldier? The present paper believes cases such as these to be indicative of what will later be referred to as game-mechanical narrative devices, which, simply put, are expressions of story communicated to the player through interaction with a game's ludic systems.

In summation, interaction is expressed through the choices players make during gameplay, which allow for significant, observable change to the medium. Furthermore, the above section explored the implications of interaction in a narrative environment and explained the difficulties of expressing and studying the effects of interaction, due to the nature of it being something which must be experienced, rather than observed. These observations lead the discussion to consider the implications of identifying with characters within video games.

Identification and Story

"The purpose of fiction is to supply satisfying vicarious experience. The word 'vicarious' denotes a substitution. The word 'experience' implies activity" (Bley, 1945, p. 27). According to Bley, when engaging with a text, the reader wishes to be subjected to a vicarious experience, i.e. they wish to place themselves into the story. As readers, we empathize and sympathize with the

fictional characters of narratives. For example, when Rick says “here’s looking at you, kid” at the end of *Casablanca* (Curtiz, 1942), viewers understand the emotions of the characters. They can place themselves in that situation. Empathizing with characters in a text, this paper would argue, is second nature, it happens unconsciously and naturally. In this section, the present paper will explore the role of identification in video games and compare this to the concept of immersion. However, given that Bley’s work is from shortly after the Second World War, the present paper will look to a more recent explication of the subject, which will be provided by Jonathan Cohen and Klimmt et al., Cohen writes:

> One of the advantages that communication, especially mass communication, provides humans is that it enables us to be part of many experiences to which our immediate environment does not provide access. We can experience many places, events, sights, and sounds through communication with others and media. […] we can experience them more fully by adopting the perspective of the protagonists who participated in them. Taking on a character’s perspective allows us to see the world through his or her eyes, feeling their feelings and adopting the character’s goals. This allows audiences to produce emotional and empathic responses that create a more meaningful media experience. This is referred to as “identifying with a character,” which means taking on a character’s identity and vicariously experiencing events from within that identity (Cohen, 2014).

Identification is thus the concept of inhabiting a character to create a more meaningful experience. Cohen (2001) succinctly writes: “[identification] is marked by internalizing a point of view, rather than a process of projecting one’s own identity onto someone or something else” (p. 252). One might pose the question: How does this relate to video games? Since video games can have characters, who can express intelligence, goals and wants, one can argue that the

players can then, using empathy, respond to these goals and wants and understand and identify with the characters. This identification is, however, dependent upon the empathic skills of the player, as well as the skills of the authors in creating characters with which one wishes to identify. For example, one can imagine wanting to identify with Batman in *Batman: Arkham Asylum* (Rocksteady, 2009) due to his masculinity and ability to overcome almost any challenge but less so with The Joker in the same game. Consider, then, the following situation in *Brothers: A Tale of Two Sons*: The titular brothers, unknowingly climb into the den of a spider-woman. A battle for survival ensues and, should the player succeed, the spider-woman is defeated. In defeating her, however, the older brother is fatally wounded. Through playing the game, the player develops an understanding of the characters' goals and, if we find the characters to be empathetic, align our goals with theirs. As Keith Oatley (2013) writes, we then "experience our own emotions in the circumstances that occur with the character's actions" (Oatley, 2013, p. 14). Meaning that because the player understands the goals and feelings of the characters of the narrative. When, for instance, the younger brother buries his brother, the player mirrors themselves in the situation. Thus, as Oatley notes, the player has inserted themselves within the simulation (2013, p. 12). Having then inserted themselves in the game, the player feels as the younger brother feels and, this paper would surmise, feels tremendous sadness. This emotional response is however not guaranteed. As one can imagine, merely being subjected to the sight of a person burying another person in a video game does not spark a great deal of empathy, Oatley tersely writes: "you can't depict (for instance) a loss without a character and a sequence of events that concern the character" (Oatley, 2013, p. 8). For Oatley, media consumers must experience characters over time to develop empathy. This leads us to Cobley's thinking of representational signs requiring sequence; the 'sign' of empathy requires structure and order, in a word, plot.

Identification, as it relates to video games, can be a volatile subject. There have continuously been examples of relating violence in video games to real-world violence (see Hoerrner, 2006 & Anderson et al., 2007), as such, identification with violent characters, it stands to reason, evokes concern. Consider for example the video game *Grand Theft Auto V* (Rockstar North, 2013). The main characters, whom the player controls, commit acts of violence, theft, and fraud. A logical question to pose is then: Would identifying with such a character not affect the person playing them? Klimmt et al. address this by stating: "from the perspective of social psychology, identification is defined as *a temporary alteration* of media users' *self-concept* through adoption of perceived characteristics of a media person" (2009, p. 356, emphasis in original). They then go on to state that game players who, when playing as James Bond, believe themselves to be him. However, "after game exposure, internal processes and external cues (e.g. friends addressing the media user by their real name instead of saying '007') will quickly alter the situational self-concept toward the original configuration" (p. 356). Klimmt et al.'s theory of the 'merging' of characters, can then be viewed as a temporary change in the players self-perception "through adoption of salient properties of the game character" (p. 356). This means that, when playing, players can adopt violent and antisocial behavior, for example, while playing *Grand Theft Auto V,* but will quickly readjust to their normal selves after turning off the game. Interestingly, they note that identification with smoking characters increased the player's short-term motivation to smoke (Klimmt et al., p. 368). The effect of violent and otherwise counter-social behavior has been debated since the earliest examples of violent video games and remains at the time of writing a hot-button issue. It is, however, not within the scope of the present paper to debate the legitimacy of these concerns. It will, however, point out that identification with characters in video games seems to invoke stronger concern than identification with characters in

other media. This, the present paper will argue, is not only due to the recent emergence of video games as a medium, but because critics are acutely aware of the effectiveness of identification with a video game character.

As explicated above, the player can through interaction affect the game's state and alter the circumstances of the game. This relates to identification in the sense that when reading a novel, the reader cannot participate nor change the outcome of the novel. The ending is the ending. In this instance, identification means the reader is subjected to events and reflecting on these as if it was happening to themselves. In video games, however, the player can affect the situation and have agency over the events as they unfold, in a sense, they are the ones acting. Along a similar vein, Klimt et al note:

> Through interactivity, then, video games (partly) override the distance between media users and media characters: Players either directly control one specific character or take on a social role represented in the game world. In both cases, players do not observe autonomous social entities performing on screen, but they *make* characters perform or actually perform themselves. (2009, p. 351, emphasis in original).

They further comment that consumers of media are what they refer to as 'dyadic', which they describe as being the ability to "perceive a social distinction between themselves (the observers) and the media characters" (p. 352), as such the media consumer takes on the role of 'the audience'. They then contrast this saying:

> The experience of playing an interactive video game differs fundamentally from conventional, noninteractive media experiences in the sense that mere observation of characters or events is not a convincing description of game players' 'audience role'. Instead of providing opportunities to follow autonomous characters' actions, playing

> video games simulates the circumstances of *being* a media character, […] Video games thus seem to facilitate a nondyadic or *monadic* user-character relationship […] players do not perceive the game character as a social entity distinct from themselves, but experience a merging of their own self and the game protagonist. (pp. 353-354, italics in original).

This seems to point to video games being capable of facilitating what is a deeper level of identification, where instead of the player carrying out acts 'as a character', in line with Oatley's thinking on simulating the acts as if they were that character, they carry out acts as themselves within the virtual world; the 'character' ceases to exist and is replaced by the goals and wants of the player. When the older brother dies in *Brothers: A Tale of Two Sons*, is it then the younger brother's experience, or is it the player's? How does identification then relate to stories in video games and the construction of narrative? The present paper will suggest, in light of Klimmt et al.'s findings, that video game narratives are generally strengthened by the possibility for strong identification. This paper will suggest that games wherein identification is strong, such as *Brothers*, have lasting and meaningful emotional value because of the connectedness to the characters within the game. Through interaction with the game's ludic systems and the clever use of physicality between the characters on the screen and the physical act of manipulating the controller, the player becomes tied to the events in an almost visceral way. Through interaction, identification becomes easier for the consumer. When playing, the player feels anxious when running from a foe and elated when escaping it. This, the paper would argue is because interaction establishes a connection between identification with a character and the act of realizing the events of the story. Restating, Klimmt et al note: "players do not observe

autonomous social entities performing on screen, but they *make* characters perform or actually perform themselves" (p. 356).

After having delved into the definitions of both video games and narratives in general, as well as having highlighted many of the difficulties contained within this endeavor, the present paper will now seek to collect this and shift its focus towards the main topic of the paper: The presence of story in video games, the implications of narrativity and story, as well as the methods with which the medium expresses these. To explore this topic the paper will begin by discussing the relevance of story in video games and will then move on to discuss the intricacies of narrative construction in the medium, drawing on the ideas found in narratology and discussing their application.

Narrative Games?

Are video games narratives? Is it relevant to talk about narratives and stories when discussing video games? In the following chapter, the present paper will seek to answer these questions by first exploring Espen Aarseth's theory of how software can combine games and stories. Later, the paper will discuss the perceived importance of narrative content in video games by examining ludologist and narratologist perspectives. The paper will then present the various difficulties surrounding the application of traditional narratological concepts, especially focusing on video game narrative in relation to narrative time. Finally, the paper will explore the concept of conveying story content through ludic systems. This is presented in the 'Mechanical Storytelling' section.

Echoing the question posed at the beginning of this chapter, Espen Aarseth wonders: "Are games a type of narrative? If not, do they contain narratives?" (2012, p. 129). In his article *A Narrative Theory of Games,* he explores whether narratology can be useful in understanding

narratives within video games. He further expresses that applying the methodology of narratology can be problematic and asks:

> Do theoretical concepts such as ‘story’, ‘fiction’, ‘character’, ‘narration’ or ‘rhetoric’ remain meaningful when transposed to a new field, or do they turn into empty, misleading catachreses, blinding us to the empirical differences and effectively puncturing our chances of producing theoretical innovation? […] When we study games through the lens of narrative theory, the lens itself must be critically examined as well” (p. 129).

In other words, does it make sense to apply narratology to video games? Can we ask why the player is shooting at an alien in *Space Invaders*? The present paper agrees wholeheartedly with Aarseth’s assessment and will refer to the discussion below in the section titled ‘Ludology versus Narratology’ for a thorough examination of the topic. Despite his initial speculation, Aarseth later concludes that much can be gained from the application of narratology within the study of games as he notes:

> The difference between games and narratives is not clear-cut. However, games and stories seem to share a number of elements, namely a world, its agents, objects, and events. It is crucial to note that these elements are also the cognitive building blocks of human reality, as well as of mediated representations of the same (p. 130).

As Aarseth means to present a model for interpreting story in video games, he mentions that one should, to avoid giving priority to either games or stories, “base the model in the primary reality that spawned both, and that they both are part of, in somewhat different ways” (p. 130). As theoreticians, one should, much like Juul notes above, keep in mind that video games and stories emerged from the same tradition of media. Interestingly, he here presents that games contain

similar elements to traditional stories. This, as shall be made clear, is an important aspect in the present paper's argument. He then points out, that games are complex pieces of software and highlights that they can "emulate any medium, including film, text/novel, graphic novel, and, for that matter, simulate board games and sports" (p. 130). For example, *Nier: Automata* borrows from the cinematic and theatrical media heavily in its depiction of character drama. For this reason, Aarseth becomes wary of using the term 'game' as a nomenclature for the medium, as he says "we often commit the mistake of using the metonymic term 'games' for software that in reality are integrated crossmedia packages" (p. 130), and mentions *Max Payne* (Remedy Entertainment, 2001), which features graphic novel pages and cutscenes, which are cinematic sequences without player interaction, in concert with ludic elements. He then wonders:

> Is *Max Payne* a story or a game? Is it a hybrid? An amalgam? Whatever the answer, it seems clear that it is not purely a game, but a piece of software that does contain, among other things, a game" (p. 130).

Aarseth presents the interesting notion that there can exist a 'pure' game, and a game which is crossmedial, and therefore not purely reliant on ludic elements to provide an experience. He goes on to explore the common elements of games and stories and writes:

> There is not one, but many different techniques which have been applied more or less successfully, to make 'games' 'tell stories,' and a ludo-narratological model of this design space must account for the ways in which 'narrative games' differ from one another. There can be no *single* mode of narrativity in entertainment software, given the diversity of design solutions (p. 130, emphasis in original).

To Aarseth, the myriad of different games, genres, and methods of play all "occupy different positions within this design space" (p. 130), thus, much like defining the term 'game' one must

account for this diversity when constructing a model. He begins by stating that he views ludo-narrative design space "*as four independent, ontic dimensions: World, Objects, Agents, and Events*" (p. 130, italics in original). Harkening back to Vladimir Propp, these are, Aarseth argues, the building blocks of every game and every story, they merely apply them in different configurations. They are methods by which a story can be expressed.

Aarseth begins by describing how the sequence of events within video games can be defined as:

> *Open, selectable,* or *plotted,* and the narratological notion of nuclei (kernels; events that define that particular story) and satellites (supplementary events that fill out the discourse) can be used to describe four different game types (p. 130).

The concept of kernels echoes what has been established about the recognizability of story within a narrative. Therefore, one could consider replacing the term kernel with 'story'. However, 'kernel' seems to signify the specific story elements, whereas story refers to the whole. For this reason, both terms will be used throughout. Later, he introduces the term 'satellites' which mark the points in between the necessary story elements. Offering four examples of this he provides the following list:

1. *The linear game* (*Half-Life*): fixed kernels, flexible satellites
2. *The hypertext-like game* (*Myst, Dragon's Lair*): Choice between kernels, fixed satellites.
3. *The "creamy middle" quest game* (*KOTOR, Oblivion*): Choice between kernels, flexible satellites.
4. *The non-narrative game* (Chess, *The Sims*): No Kernels, flexible discourse: just a game (pp. 130-131, italics in original).

This reveals itself to be a very applicable way of describing how video games approach narrative in simple terms. For example, *Nier: Automata* can now be described as having fixed kernels and flexible satellites. This is evident because the player has no control over the 'main' story points but can diverge from the story and, effectively, choose their own path towards each of the fixed kernels. Conversely, a game such as *Skyrim* (Bethesda Game Studios, 2011), has a central story focal point but makes it clear to the player that, beyond the introductory sequence, they are never required to engage with it. It can thus be described as having few or no kernels, flexible satellites. Furthermore, according to Aarseth: "There are many ways in which a game can be combined with a story, and so it does not make sense to look for one singular type of ludic story" (p. 131). In other words, when analyzing whether video games are narratives one should not look for a narrative of a specific type as video games can express many variants of story. For example, one should not look only for folk tales or detective stories.

> According to Aarseth, every game (and every story) contains a world. He writes:
>
> Gameworlds are physical or pseudo-physical (virtual) structures that are clearly delimited, and which can be described by geometry or topology. They are different from so-called fictional worlds in that they, unlike fictional worlds, have a measurable, concrete extension that can be explored directly by an independent agent (p. 131).

Further, Aarseth explains that fictional worlds depend on imagination, whereas game worlds have objective existence, despite it being by virtue of computers (p. 131). He thus claims that the graphical representation of the game world is more tactile than an imaginary one. He continues; "the world presented in a game is not necessarily a game world only. A game can contain *two types of space, the ludic and the extra-ludic*; the arena of gameplay and the surrounding non-playable space" (p. 131, italics in original). To clarify with an example, the game world of

checkers is almost entirely ludic since the entirety of the game world is used to play, whereas the game world of *Brothers: A Tale of Two Sons* features an immense representation of a game world but only allows the player to explore a fixed path within said world. As such, much of the gameworld is extra-ludic. Beyond this, the game can be said to be linear as the player progresses on an authored path through the gameworld. Aarseth notes that gameworlds can be 'linear', 'multicursal', or 'open'. A linear game, he explains, is a game in which the player must traverse a path dictated by the game. 'Multicursal games' are games in which the player can choose between a fixed number of possible paths towards a fixed destination. 'Open' then refers to games in which the player is free to roam the game world choosing their own destination and the paths towards them (p. 131). However, Aarseth notes that games can combine these to form complex patterns. For example, *Nier: Automata* features segments that have strictly defined linear ludic spaces, while others are multicursal. Returning to Cobley's observations about space: Gameworlds and narrative space seem to be comparable. Narrative space refers to space within a story which is expanded by the structure of events within the narrative. Similarly, gameworlds are expanded by the events within the narrative. Had the game checkers featured a narrative which required the players to expand beyond the physical checkers board, the 'narrative space' of that incident would then expanded. In a more concrete example, the gameworld of *Nier: Automata* expands when the narrative calls for it to do so. For example, this is evident when the story has the player explore an immense desert beyond the boundaries of their initial gameworld.

Objects, Aarseth explains, "can be categorized in terms of their malleability: "a) Static, non-interactable objects b) Static, usable objects, c) Destructible, d) Changeable, e) Creatable, f) Inventible" (p. 132) A game can, Aarseth writes, "contain all of these categories, and most contain more than one type" (p. 132). Further, he notes that the importance of these is because

they "determine the degree of player agency in the game: a game which allows for great player freedom in creating or modifying objects will at the same time not be able to afford strong narrative control" (p. 132). Simply put, according to Aarseth, if the player can alter the world, the player then has more sway over the narrative. For example, players of *Minecraft* (Mojang, 2011) can create (or destroy) a virtually infinite number of objects and shape the gameworld to their liking, this, in conjunction with the game having no fixed kernels, means that the player can shape the narrative completely. This point is explored below by Hjaltason et al.

Characters, Aarseth argues, "[Are, after universe,] the most important element in crossmedia productions" (p. 132). This, he argues is because of the level of affordances they give in relation to the player's agency over the story. He writes: "[Characters] can be classified in terms of their depth/shallowness, and their malleability/potential for player control" (p. 132). Further, he classifies them into three kinds: "a) 'Bots' (short for robots), with no individual identity; b) Shallow characters (names and individual appearance, but little personality) and c) Deep characters" (p. 132). He then draws on E. M. Forster (1927), wherein he distinguishes between flat characters, who mostly stay the same, and round characters, "who change and develop as the story progresses" (p. 132). Characters, Aarseth writes, can be combined into various configurations much like objects, and notes:

> Again, the level of malleability determines the authorial affordance of the game. In addition, it can be claimed that the richness of character is an important authorial tool that characterizes the positive potential of authorship in games, where malleability and user control limit authorial affordances (p. 132).

Here Aarseth reiterates the importance of the level of freedom given to the player. According to Aarseth, affordances directly relate to the narrative's sway over the player and vice versa. If the

player inhabits a static character which is unaffected by the player's actions, the narrative power is in the hands of the story, where if the player can change, manipulate or otherwise express their player character, the players are, to some extent, in control.

Events, to Aarseth, refer to the plot, the events that are to be represented within the narrative, or perhaps non-narrative, as it were. These, Aarseth writes, "can be categorized by the status and presence of kernels and satellites: a) fully plotted (pure story); b) dynamic satellites (playable story); c) dynamic kernels (multipath/quest games), and d) no kernels (pure game) (2012, p. 132). Again, Aarseth convincingly presents the construction of story as a spectrum dependent upon the discourse offered by the game. However, the present paper will argue that games in which events are fully plotted remain engaging if they allow interaction with other elements such as World, Objects, and Agents. For example, *What Remains of Edith Finch* is fully plotted, yet the discovery of the events through interaction enables the player to engage deeper than the superficial level of being told a story without the means of influencing it, meaning that agency is vital for engagement.

Ontic level:	World	Objects	Agents	Events
Narrative pole	Inaccessible	Noninteractable	Deep, rich, round characters	fully plotted
	Single room	Static, usable		
	Linear corridor	Modifiable		Dynamic satellites/ playable story
	Multicursal labyrinth	Destructible	flat characters	Dynamic kernels
	Hubshaped quest landsape	Creatable		
Ludic pole	Open landscape	Inventable	Bots, no individual identity	No kernels (pure game)

Figure 3. Aarseth's Variable Model

Aarseth means to collect his observations into a model which he refers to as the 'Variable Model' seen in figure 3. For the present paper, Aarseth's model is not only usable as an explication of the variables within video game narratives and their effects on the story but also as a method of categorizing video games in relation to these variables. Furthermore, it can also be used to highlight the complexity of some video games. As an example, *Nier: Automata* features, at some points, an open landscape, placing it near the ludic pole, but has deep and round characters, placing it near the narrative pole. Further, the game features instances in which the player is restricted in movement and is confined to a linear corridor. Beyond this, some objects in *Nier: Automata* are static and usable, while others are modifiable, in most cases, however, the game's world remains static and unaltered by the player's decisions. The game's events are dynamic satellites surrounding fixed kernels; the player has no influence on what is going to happen but can influence what happens in between these fixed story-points. Finally, players of

Nier have enough agency over the story as to not be completely guided by the game and yet, the game ensures that the intended story is experienced by forcing certain events to happen through cutscenes. This would all indicate that *Nier: Automata* is closer to a ‘pure story’ than a ‘pure game’ but realistically falls somewhere in the middle. As such it can be classified as a narrative game, as will most of the games mentioned in the present paper as non-narrative games, while interesting, are outside the scope of the present paper. Aarseth’s model further shows how video games approach narrative. As explained, some games make no effort to explore a narrative and remain simply a ‘pure game’, while others are clearly narratives that express stories. Video games, Aarseth would argue, can then express this narrative in various ways. By allowing the player to manipulate or alter the events, objects or characters within video games, they drift further away from strictly narrative experiences and towards games. Therefore, video games express narratives through the affordances which they allow the player. Little or no affordances means that the narrative of the game is expressed using methodologies of traditional media, for example, through dialog or the player otherwise passively being subjected to events. In turn, the greater degree of player control over events, objects, and character means a greater level of control over the narrative and thus allows for other methodologies of expression such as mechanical storytelling which will be explored later.

Examining the game *Tetris* (Pajitnov, 1984), provides insight into what Aarseth might call a ‘pure game’. Placing it within Aarseth’s model it can be observed that the game’s world is either ‘single room’ or ‘inaccessible’, the objects are destructible, there are no agents, not even a player avatar, and the events are non-existent. This places it very near the ludic pole and ‘pure game’, which would indicate that it has no possibility for player agency, since there are no events for the player to interact with. The game gives no indication for why the player should exist or

act within the game space. The blocks, which the player must stack to score points, continue to fall indefinitely until, finally, the player cannot keep up with the progressing pace and loses. The game provides no reason for the blocks to fall, nor any indication of why the player must stack them, it is then simply a set of rules: stack blocks to score points. This rule is followed by a goal: achieve the highest score possible. This leads back to Ryan's ideas of possessing narrativity versus being a narrative. It can be assumed that the author has no intent for narrativity, or, if it exists, it is cryptic and enigmatic to the point of obscurity. Yet the continued falling of blocks signifies some manner of narrativity; after the blocks are stacked in a line, they cease to exist, they fall in a sequential fashion and a counter indicates the number of points scored. Does it make sense to talk about stories and narrativity in games such as *Tetris?* Aarseth, as well as the present paper, will argue that it does not. Conversely, *Brothers: A Tale of Two Sons* falls closer to the narrative pole in Aarseth's model. The game features two brothers who must journey to the tree of life to cure their father of his deadly illness. Along the way the must overcome dangers and suffer losses until they finally reach their goal. This structure is much akin to traditional folktales and echoes the themes and tropes of these at nearly every turn. *Brothers* attempts to mimic this structure while using player interaction as a way of engaging audiences, as well as separating it from traditional media. The game, however, features fixed kernels with little-to-no flexibility between satellites. The objects are either static or unusable and the characters are archetypical roles which we, as consumers of media, have encountered countless times. What makes *Brothers* a game, as opposed to a folktale or film, then, is its unique methodologies of expressing the familiar story, i.e. interaction. The present paper will explore this in detail later in the section titled 'Mechanical Storytelling'. Continuing, in *Brothers,* and other games which feature story, the game's rules, how and why you interact with the objects in the game, are

defined by the story. To clarify with an example: Within the diegesis, the brothers must work together to hoist their father up an elevator; on the player-level, the player must navigate the boys towards a lever and manipulate the controls of the game to achieve the goal. Thus, the story dictates how the player should interact and why.

If rules are the 'what' of video games, and interaction is the 'how' then story, as seen in the above example, acts as the 'why.' Why, for example, do players shoot missiles at aliens in *Space Invaders*? Because the aliens are evil and are trying to invade earth. Why are they aliens, and not ducklings? Because aliens are evil, etc. These simple questions, and likewise simple answers, reveal that games have a profound connection to story. For instance, why is the most important chess piece called a 'king' and not, for example, AF56? This paper would suggest that players and game designers ascribe values to objects which contextualizes the situation they exist within. The chess piece which, should it be taken by the opponent, results in you losing the game must be important. To contextualize this within an understandable frame, we refer to it as an equally important figure: a king. In most cases, however, the player needs not contextualize the story for themselves but can rely on the developer to provide this. For example, the 'why' of *Nier: Automata* is provided through the context of the story, which centers around sentient machines confronting emerging sentience in enemy machines. The story involves the characters seeking information and the gameplay is thus informed by this. The goals of characters within the diegesis and their attempts to achieve them are expressed by the player, they thus are involved in the articulation of the story, which, in the case of *Nier: Automata*, is the foundation for interaction with the game. For example, the story dictates that the player must survive an onslaught of robots to rescue your comrades, so the player's interaction with the game expresses this in the form of destroying the opposing robots. As expressed above, story in video games can

act as the reason and method of interacting with a given game, this is an example of story being expressed through the game's ludic systems.

As *Tetris* shows, stories in video games are not always apparent, nor even truly necessary. *Tetris* proves that simply interacting with the game's ludic elements provides plenty of entertainment, the game is then beyond any need for a traditional narrative progression, there is no beginning, middle, and end, narratively speaking. Games such as *Tetris, Candy Crush Saga, Sim City* or *World of Warcraft* are *process-oriented games*. If one imagines the end of a video game narrative as being winning the game, in what Juul would describe as a quantifiable outcome, then games such as *Tetris* offer no end. The purposes of process-oriented games are for the player to interact with a constant loop of conflict and resolution in a never-ending cycle. Egenfeldt-Nielsen et al write:

> Though winning seems an essential element of games, a (growing) breed of software exists on the edges of this definition of a game. Instead of giving the player one or more goals, process-oriented games provide the player with a system to play with. (2009, p. 27)

Process-oriented games, then, function without the need for any narrative progression, and instead draws the attention towards interaction with the game's ludic systems, which are the primary content. For example, instead of focusing on the end-goal of defeating the opposing army, process-oriented games will have the player endlessly fighting the same conflict with no one winning the war. Where, then, do process-oriented games fall on Aarseth's model? *Tetris* features destructible objects, no discernable events (beyond falling bricks), and no gameworld beyond the single room. Conversely, *World of Warcraft* features craftable objects, fully plotted events, round characters and an open landscape. This would suggest that it is not a 'pure game' but rather a 'narrative game'. Interestingly, process-oriented games, which omit narrative

conclusion, can then be narrative games. Beyond this, since process-oriented games have no narrative conclusion they are without structure in a traditional sense. Despite this, they are still beholden to narrative sequence; the events of *Tetris*, however insignificant in a story sense, follow each other in a linear fashion and would cease to make sense if the order was, for example, reversed, receiving points for stacking blocks and then having to stack them, the signs, as Cobley would put it, would be in the wrong order and we would struggle to interpret them. Moreover, the absence of conclusion invalidates Cobley's notions of narrative space and time, since events can happen forever. Thus, the narrative space, and therefore also narrative time, must also be infinite. This is doubly interesting when one considers that the entirety of the games mentioned is comprised of nothing but narrative stoppages, narrative questions that need answering. The answers, however, only create new questions for the player to answer. The implications of time in video games is discussed below in the section titled 'Time in Video Games'.

Ludology versus Narratology

The above paints the complicated image of the place of narrative in video games. Some games, it would seem, are purely games, with no expression of narrative, while others express narrative but lack the structure found in traditional media, others still express complicated stories with deep and round characters while still offering interaction. Juul addresses this in his article *Games Telling Stories? A Brief note on games and narratives* (2001). Juul begins by asking: "Do games tell stories? Answering this should tell us both *how* to study games and *who* should study them" (2001). To answer this question, Juul delves into the discussion of whether games should be thought of as 'narratives' or something other. Juul, being a ludologist, opens the debate with the intent of cementing the differences between games and narratives, as he believes that games,

due to their interactive nature, fall outside the narrative paradigm as the non-determined state, which, to Juul, games must include, is substantially different from traditional narratives (Juul, 2001).

Ludologists and narratologists have been in a what can be thought of as a war of definitions for years. Ludologists believe that games are not narratives, whereas narratologists believe that they are an extension of the narrative paradigm. According to Egenfeldt-Nielsen et al, "[A ludologist's] ambition is to consider video games as games, and not as narratives or anything else" (p. 195). The term 'ludology' was coined by Espen Aarseth but popularized by game theorist Gonzalo Frasca, who defines ludology as "the discipline that studies games in general, and video games in particular" (2003, p. 1). As such the definition is quite broad but entails that the ludologists view video games as being its own distinct form of media, and not merely an extension of film, literature, and theater. He further notes that his earliest definition: "[the term ludologist] describes someone who is against the common assumptions that video games should be viewed as extensions of narrative" (p. 1), was a simplification. His more recent view claims that

> Ludology does not disdain [the narrative dimension] of video games but claims that they are not held together by a narrative structure. Nevertheless, it is important to keep in mind that ludology's ultimate goal is not a capricious attempt to unveil the technical inaccuracy of the narrative paradigm. […] It should focus on the understanding of its structure and elements – particularly its rules – as well as creating typologies and models for explaining the mechanics of games (pp. 1-2).

What Frasca believes is, put simply, that video games are not necessarily bound to a traditional narrative structure, that they can exist without narrative, and that one must strive to understand of

video games' structure and its rules. For the present paper this means that, if one is to adhere to a ludologist perspective, one reads video games as not being traditional narratives, and must, therefore, analyze video games using new methods beyond the scope of narratology. Frasca, however, concedes in his article that narratives are inseparable from the way we as humans interpret the world. He paraphrases Mark Turner to say: "narrative mechanisms are cognitive structures deeply hard-wired into the human mind" (p. 2), and then continues, stating: "It is because of its omnipresence that it is usually difficult to accept that there is an alternative to representation and narrative: simulation" (p. 2). Frasca means to present an argument that instead of thinking of video games as being traditional representations of real-world events, they are instead simulations, which he with some hesitation defines as: "to simulate is to model a (source) system through a different system which maintains to somebody some of the behaviors of the original system" (p. 2). He notes: "Traditional media are representational, not simulational. They excel at producing both descriptions of traits and sequences of events (narrative). A photograph of a plane will tell us information about its shape and color, but it will not fly or crash when manipulated" (p. 3). To Frasca, this is the key difference between traditional media and games. Games, or simulations, he says, "are not only signs, but machines that generate signs according to rules that model some of the behaviors of [real world objects]" (p. 3). What Frasca means to say by way of presenting video games as simulations, rather than representations, is that video games can be thought of not as fixed events created by an author, but as systems which mirror real-world objects. Further, through simulation, games have the capability of conveying story, or at the very least a semblance of such. For example, interacting with a simulated city in *Sim City* (Maxis, 1989) can result in a narrative which features the story of the city of Duckburg, where the events of said story are the growth and troubles which the city faces. While this idea is novel,

it more than anything outlines the idea that one can think of video games as being separate from traditional media because of the inherent ability to manipulate the medium and the perspective of a ludologist on the presence of narrative in video games. Juul (2005) speaks of the conflict between narratology and ludology and mentions that one should not forget that "video games studies did not appear in a vacuum, so we need to remember the history that led up to this discussion" (p.21). He connects this notion with the previously mentioned ideas that, as humans, we understand experiences in the context of narratives (p. 21). He then continues, stating that the discussions of narratology, which he describes as the belief that games are stories, versus ludology, the belief that games are something unique, tended to alternate between a superficial battle of words and an earnest exploration of meaningful issues. He highlights that "from the outset, ludology has often been perceived as focused on distancing itself from narratology, and as trying to carve out video game studies as a separate academic field" (p. 20). He then notes that "some more recent theory has tried to stake something of a middle ground where the unique qualities of games are not denied, but the function of fiction or story in a game can still be discussed" (p.21). He mentions Rune Klevjer's paper *In defense of Cutscenes* from 2002, wherein Klevjer criticizes radical ludology for completely dismissing 'cutscenes,' which Juul defines as being cinematic intermissions in games. In greater detail, a cutscene occurs whenever the player is stripped of interactive ability, for example, in *Brothers: A Tale of Two Sons*, when the player is introduced to the narrative and is subjected to a short sequence within the story of the deadly ill father is introduced. Klevjer then argues that cutscenes can instead provide positive functions such as supplying the game with a unifying logic and act as rewards for the player's actions. Juul concludes:

> Realistically, video games are to some degree part of a general storytelling ecology, incorporating at least some elements of popular stories. Just as we can choose to discuss games or players, we can also choose between studying a specific game for its role in the general media ecology or focusing on the game itself and the playing of the game. There is no reason to commit ourselves to one side of the discussion (2005, p. 22).

Juul seems to believe one can combine aspects of ludology and narratology to create a deeper understanding of the topic of an individual video game or the video game medium as a whole. The present paper is likewise of the opinion that, to understand the breadth of the video game medium, one cannot exclude an entire aspect but must instead seek to understand the medium in the context of narratives and thus narratological concepts prove useful. Specifically, this means that when discussing narrative in the context of specific video games, the present paper will attempt to analyze these from a narratological perspective, while also acknowledging that games are separate from traditional media and that there might be instances where placing video games or their construction in a traditional media context might be nonsensical. These instances will then be used to highlight the unique aspects of video game narratives.

The Ideal Story

Frasca's ideas above outline the concept of presenting video games as separate from traditional media, and, returning to Juul, frame the question of whether one should think of games as stories, simulational systems for representing reality, or as pure games. In his 2001 article, Juul notes that the very human idea to think of everything as being a narrative is especially compelling:

> as it promises a kind of holistic view of the world: Since we use narratives to make sense of our lives, to process information, and since we can tell stories about a game we have played, no genre or form can be *outside* the narrative (2001, italics in original).

However, he explains that this is an a priori argument. He explains: "Narratives may be fundamental to human thought, but this does not mean that everything *should* be described in narrative terms. And that something that can be presented in narrative form does not mean that it *is* narrative" (2001, italics in original). This returns us to Ryan's idea of possessing narrativity versus being a narrative. Simply because one can think of a game as being a narrative does not, according to Juul, make it so. He notes that most games have story elements surrounding the games, for example, short stories written on packages, in manuals or intro-sequences which place the player within a larger story, "and/or creating an ideal story that the player has to realize" (2001). He mentions that in the case of *Space Invaders* "we are presented with an ideal story that we have to realise using skill" (2001), he further notes that the word invasion presupposes a state before the invasion, and cues given to us from science fiction tell us that the aliens are evil and should be repelled (2001). The player is thus introduced to an analepsis which denotes a peaceful state before the events of the game. It is then the role of the player to "recreate this original positive state" (2001). However, as he notes, when one plays *Space Invaders*, one cannot realize the ideal story. The game will indefinitely send waves of aliens until the player loses. "As players we are fighting to realise an ideal sequence of events, but the actual playing is not this sequence" (2001). This means that there can exist a conclusion to the story; either the aliens win, or the humans do but the play situation is meant as an excerpt from this story. Continuing to use *Space Invaders* as an example, one can place it within the concepts of story, plot and narrative, as explained by Cobley. The story of *Space Invaders* is the ongoing invasion of the aliens, against

whom the player must defend the earth, forever teetering on the edge of failure. The plot is then each successive wave of aliens attempting to reach the earth, which, being a process-oriented game, never stop advancing. The narrative is then the entire scenario of the battle. This is presented through successive 'levels', which refers to a complete cycle of the primary objective in a game. The battle, and thus the narrative, is in the form of a spiral: The player attempts to defeat the aliens, after which more arrive ad infinitum. The player succeeds until finally failing to do so, thus breaking the pattern. In this example, the story is unsatisfactory, the ideal story, as Juul mentions, can never be realized as the player is stuck in a narrative limbo, unable to reach a conclusion other than failure. However, as Juul notes:

> Most modern, single player non-arcade games such as *Half-Life* (Valve Software 1998) actually let you complete the game: through countless saves and reloads it is possible to realise the ideal sequence that *Half-Life* defines […] *Half-Life* does succeed in presenting a fixed sequence of events that the player can then afterwards retell. This means that some games *use* narratives for some purposes" (2001, italics in original).

Half-Life, which Juul mentions, revolves around the scientist Gordon Freeman, who accidentally opens a rift into another dimension, through which aliens invade the earth. The 'ideal story', as Juul puts it, is then that the player is clever enough to solve the crisis. Should the player character die, the ideal story would fail; the story of how Gordon Freeman saved humanity would then be cut short. Since failing to express the intended story of *Half-Life* would be disappointing to the player, and, the present paper would venture, the developers, the player can ignore the failure and try again through *saving* and *loading.* Saving and loading will prove important for the discussion of narrative in video games and will be explored in detail in the section titled 'Time in Video Games' below. For now, the present paper returns to the ideas of narrative serving a purpose

within video games. Earlier in this chapter, the present paper asked whether it mattered why you as a player were shooting an alien. Narrative, evidently, acts as the framing device for the rules within the game. When a player engages with a video game, the story, as it is presented to the player, informs them how they should interact with the ludic systems. For example, imagine if, instead of aliens, harmless ducklings advanced from the top of the screen in *Space Invaders*. Not only would this radically reframe the story but would perhaps change the player's perception of not only their role within the game but might outright refuse to engage with the game because ducklings are perceived to be non-threatening. Should they then choose to shoot the ducklings, instead of being a valiant protector of earth they are the murderer of innocent ducklings. Narrative frames not only the players role within the video game but dictates how they interact with the game.

However, the question posed of whether games are narratives posed by Juul still stands. Juul, in his 2001 article, states that games share some traits with narratives, as an example, he mentions that “many games feature reversals such as movements from a lack to the lack being resolved. […] Additionally, many games have quest structures, and most computer games have protagonists” (2001). ‘Quest’ here refers to the idea of a goal-oriented segmentation of a game, in which the overarching goal is divided into smaller goals. Juul then enters the discussion of the ability to translate video games from one medium to another. A story, he says, which contains the same events, existents (the actors and settings) can then, as Ryan also notes, be thought of as being ‘the same story’ (2001). He writes that one can use this thinking to test whether the video game is a narrative medium, as “stories from other media must be retellable in computer games, and computer games must be retellable in other media” (2001). We have since 2001 seen many video games adapted into movies. Recently, the movie *Tomb Raider* (Uthaug, 2018), acts as a

reimagining of the 2014 video game by the same name developed by Square Enix. Following Juul's criteria, this would indicate that the stories of video games are capable of being translated into the medium of film and can thus be classified as a narrative medium. However, Juul notes that when translating from movies to video games the translation is not as clear. He mentions games which use only segments of the original story and fail to completely encapsulate the circumstances of the original movie. This, in turn, makes the game unlike the original story, as well as failing to a narrative on its own. This highlights the necessity for a cohesive portrayal of the elements in storyworlds. Events, characters, objects, and worlds shared between media must remain intelligible. Furthermore, Juul concludes that one should be wary when attempting to define video games as narratives and in relation to other media, saying:

> With any sufficiently broad definition of *x,* everything will be *x.* […] Using other media as starting points, we may learn many things about the construction of fictive worlds, characters … but relying too heavily on existing theories will make us forget what makes games games: Such as rules, goals, player activity, projection of the player's actions into the game, the way the game defines the possible actions of the player. It is the unique parts that we need to study now.

The present paper agrees fully with Juul's sentiment. While it is interesting to research how the video game medium employs methodologies of other media, the scope of the paper limits a thorough analysis of this. Instead, the paper will focus, as Juul suggests, on the unique methodologies available to the video game medium. However, suggested further studies would include the analysis of aesthetics as storytelling devices within the video game medium. In this light, the following sections will illuminate time as it relates to video games, focalization, and finally ludic systems as a means of conveying story.

Time in Video Games

As has been illustrated by Prince, Cobley, Genette, and Metz, time is an essential component of narratives. Not only is it important to distinguish when something is happening within a narrative, but also for how long, i.e. the order and duration are significant. As explained above, there exists the time of the narration and the time of the narrated. These are known as story time and discourse time. Juul (2001) draws on Genette to point out that:

> While movies and theatre do not have a grammatical tense to indicate the temporal relations, they still carry a basic sense that even though the viewer is watching a movie, now, or even though the players are on stage performing, the events told are *not* happening *now* (2001, emphasis in original).

Here Juul outlines that there exists a disconnect between the events portrayed and the time which is narrated. This disconnect is what Genette refers to as engaging with a pseudo-time, within which we are aware of this temporal disconnect when engaging with a narrative. Conversely, Juul draws a comparison to the action video game *Doom II* (ID Software, 1994), of which he writes:

> It is hard to find a distance between story time, narrative time and reading/viewing time. […] It is clear that the events represented cannot be *past* or *prior,* since we as players can influence them. […] In this way the game constructs the story time as *synchronous* with narrative time and reading/viewing time: the story time is *now.* Now, not just in the sense that the viewer witnesses events now, but in the sense that the events are *happening* now, and that what comes next is not yet determined. (2001, emphasis in original).

This is perhaps the most notable observation regarding time in video games as it opens avenues of discussion. As Dormsch notes: For video games to be appealing, they must carry the

possibility for agency (2013, p. 3). Agency requires meaningful choices, which can affect the outcome of a situation in an observable and significant way. This necessitates the need for the narrative 'now', as explained by Juul. The events of the video game can be carefully planned and meticulously created by the designer but should always be a result of the player acting 'now'. For example, in a sequence in *Nier: Automata*, the player can choose whether to erase a character's memory of his family's suicide or let him live with the loss he has suffered. However, to be as impactful as possible, this event needs to be interactional, i.e. the player must be able to affect the game's state. As such, it cannot be predetermined and be in the 'narrative future', nor in the 'narrative past' but must be in the narrative 'now.' Conversely, one might consider games such as the strategy game *Civilization VI* (Firaxis Games, 2016) in which the player oversees a nation. In this game, the actions on the game-level, in the diegesis, can leap forwards years at a time, where on the player-level they take mere seconds. In this case, and many other forms of video games, the action is asynchronous; story time and narrative time are, for the most part, disconnected, the story time has thus been narratively compressed to function in a video game situation. However, when the possibility of choice in these types of games is offered, for example, when the player must choose where to send his army, the temporal flow stops, and the player acts in the narrative now. When the player has made their choice the time once again flows asynchronously with reality.

Time in video games is unlike the temporality of any other medium. Through *saving* and *loading*, the storing of a game state so that it might be accessed later, and the accessing of said data, players can skip forward and backward within the medium and affect the narrative. For example, if a player saves her data before a skill testing battle, then, should she lose, she can simply return to the moment before the battle and try again. This is because video games

fundamentally cannot progress without the actions of the player(s). However, there are exceptions to this. Notably, cutscenes often progress the story of a video game without the interaction of a player. However, because games necessitate an interactive element, losing the aspect of interaction signifies the end of play. To avoid simply ending the experience should the player fail once, games allows the implied 'reversal' of time to a point before the mistake, and for all intents and purposes, ignores that it ever happened. In many instances, there is no consequence to failure other than perhaps the player being left with a feeling of disappointment over their skills. Failure, in many games, is merely a setback and results in no narrative consequence. This maxim can, however, be used to the benefit of the story of a game. For example, at the beginning of *Nier: Automata,* the player must fight a horde of robots. The player must maneuver their character to the best of their ability, but should they not be skilled enough their character dies. Experienced players might imagine that they would simply be able to try again with no consequence. This is where *Nier: Automata* differs from most, if not all, video games. Instead of letting the player try again, the game, from a story perspective, ends, and a text message reads: "The YoRHa force was annihilated… And Earth went on to become a paradise for the machines", along with a cryptic message saying "Broken [W]ings" (PlatinumGames, 2017). The credits roll, after which the game displays the main menu of the game, where one initially starts the entire experience. Narratively, one might imagine that the exemplified failure would have no consequence. That, as in other games, the game would not acknowledge the failure. However, when one begins the game again, one finds that the game has, effectively, remembered the player's failure and noted it with a "W" signifying that the player reached one a possible of 26 endings, each ending signified by a letter. *Nier* thus recognizes the conventions and axioms about manipulation of time and failure in video games and uses them to strengthen

the narrative by adding consequence. *Nier* thus illustrates the merits of being cognizant of one's medium and uses this to approach narrative in unique ways.

Time in the video game medium can, for the most part, be thought of as being cyclical. In *Tetris,* you progress until you cannot progress further and fail, and then repeat this. But, as has been explored above, *Tetris* has no conclusion other than failure, so the diegetic time is never-ending and can only be ended if you fail, nor is it a narrative game. The cyclical nature extends into any game which has the possibility of saving and loading instances or repeating events. In narrative games, such as *Brothers,* however, time functions more linearly, while still containing the cyclical loop of failure and progression until finally ending. In the case of *Brothers,* there is a distinct endpoint to the narrative and the task of the player is to guide the characters to that point. The player thus moves along a linear path between fixed kernels. As a fully plotted game, the only way in which the player can alter the events is through the micro-level choices they make regarding how to progress the story, not how it should progress. Should the player fail if they, for example, misjudge the length of a jump, the game does not narratively end as *Nier: Automata* does. Rather, *Brothers* places the player characters where they were before the player made the choice to jump, allowing the player to make a different decision. In figure 5 time in video games is imagined as being a line, traveling from beginning to end. Along this line, the player, or the game itself, can record, or save, the current game state so that the player might load, in effect

return to a previous point in the narrative, later.

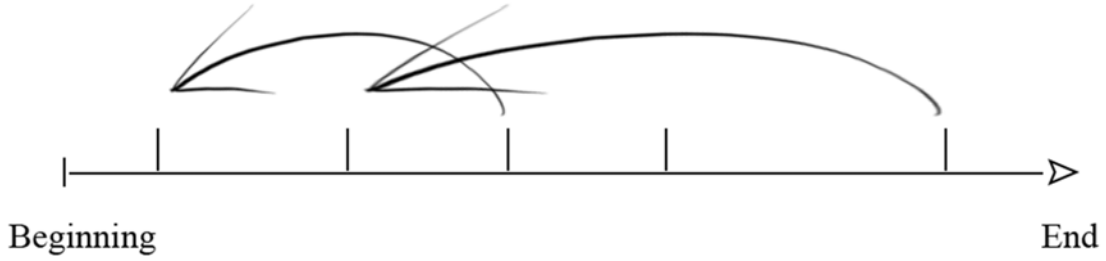

Figure 4. Time in video games

Functionally, this allows the player to save a game state, make choices that affect the game state and then load the previous instance and make different choices. Genette might refer to this narrative anachronies, as it is a "discordance between the two orderings of story and narrative" (1980, p. 36). However, the paper would argue that this goes deeper than it seems at first glance. The narrative time (Erzähltzeit) flows forward, while the story time weaves backward and forwards. One could reasonably counter this notion with by comparing this to returning to a previous page when reading a book. Therein the time of narration is extended, and story time is reordered. However, the most important aspect of time in video games, which sets it apart from other media, is the opportunity for choice; the player can affect situations within the medium. One could then further compare this to 'choose your own adventure' books, which emulate video game choices in a textual format by allowing the reader to make choices and turning to specific pages to witness the outcome. However, a 'choose your own adventure' book is simply a game presented in a textual format.

Saving and loading have interesting implications for the construction of narrative. For instance, it raises the question whether one can create narrative tension when one can return to a point before the narrative question was raised? Imagine, for example, playing a game where your

character must defend a village from a dragon. “Will the hero survive and save the day?” Would be the narrative question which, according to Cobley, creates tension. Should the player fail and their character die, they can simply return to a point before the dragon attacked and try again until you succeed. The narrative tension is, in effect, nullified as the answer will eventually be yes. Since most games employ a function to save and load games, does this then mean that most games lack any narrative tension? Video games which feature the save/load function, cannot have tension in a traditional narrative sense, instead, they must rely on the tension of the conflict between the player and the game’s rules. When defending the village, the player is testing their knowledge of the game’s systems and the skills they have against the system itself. Failure thus remains failure, despite its nullified narrative implication. Thus, as a medium, video games manipulate narrative time in ways in which no other medium can. Through interaction, the player can affect the game state and, should it result in failure, or if they simply choose, the player can return to a previous point in the narrative and alter the game state again. Games that in this fashion allow the reversal of time at the point of failure, through saving and loading, effectively negate the possibility for narrative tension in a traditional sense. These instead create tension by establishing conflict between the game’s ludic systems and the player. Likewise, tension is created by the player not wanting to experience failure and thus having lost narrative progress. Anachronistic time and the manipulation of narrative and story time thus stand as important aspects of the medium, which are unlike that of traditional media.

Voicing Concerns

Undoubtedly, the narrator has power over the narrative but who narrates video games? Is narration necessary for video games to function? In this section the paper will examine the role of focalization in video games and illustrate the unique aspects of player framed narrative versus

authored focalization. Much akin to countless films, the events of video games are seldom narrated by an extra or heterodiegetic narrator. Rather, they are 'narrated' via the images shown, by a virtual camera, which acts as the focalizor. Instead of a narrator 'telling' the events of the story, the camera 'shows' the player the order, duration, and frequency of the events, as well as the objects and characters, thus it functions like a narrator. It does, however, come with limitations. As in film, we, as viewers, never learn the inner thoughts of characters except when they are explicitly told. Thus, we must rely on what is shown, rather than the told. Moreover, since the player frequently has control over the camera, they themselves can act as the narrator of the events, in effect controlling which events to include and which to omit. For instance, in *Nier: Automata,* players can face the camera away from the actions, purposefully choosing not to experience the events of the game. This, the present paper would argue, means that, in accordance with Aarseth, that control of the focalizor, gives the player greater affordances over the narrative. The question remains whether this pushes the game further towards 'pure game' or 'pure story'. The present paper would argue that the ability to alter the narrative by player focalization means that the player can create or shape the narrative within, which, in turn, places it further from 'pure game'. Additionally, this suggests that the player is, in some cases, a co-constructor of the experience. As the player moves and interacts with the game's systems, they are effectively creating the narrative alongside the designers. As no designer can account for the virtually infinite possible ways for the player to interact with the world, no two games will ever be identical. Co-creation, while an interesting topic, is, however, outside the scope of the present paper.

Diametrically opposed to player co-creation is the cutscene. Klevjer (2002) highlights ludologist criticism of the cutscene: "one could say that not only cutscenes but any pre-written

narrative, fixed path, scripted event or movie-based character are a sign of immaturity, a dependence on film parallel to the way much early film was dependent on the conventions of staged drama" (p. 193). The argument against cutscenes is thus that they detract from the ludic elements of the game. The game should, from a radical ludologist's perspective be distinct, and perhaps distant, from the discursive modes of traditional media. Klevjer offers the example of a story-based action game which offers "highly structured, linear and progressive gameplay, framed by a pre-written story" (p. 194). He then asks: "what can possibly be the reason for cutting up the players configurative activities with close-to-parodic, B-movie-type cinematic sequences?" (p. 194). The present paper would point to the comments made by Aarseth above. Video games, as a narrative medium, relies on the traditions established within other narrative media, such as films and novels. In this light, it is natural that designers, who wish for their games to contain narrative content, would seek to express these using methodologies which have been proven effective. The criticism above stems from a wish for video games to 'transcend' the film medium and rely entirely on the methodologies offered by the video game medium. This criticism, the present paper would argue, is admirable but unrealistic. It aims to push the video game towards new methods of expression but game developers, this paper would argue, will continue to use the methodologies best able to present their creative vision.

Returning to the question posed at the beginning of the current section: The need for a narrator is, as evident by the film's success as a narrative medium, not necessary. Instead, the player can, if the game allows it, act as the narrator and focalizor for the events in the game thus becoming a co-creator of the experience, rather than a passive consumer. In other cases, mainly in cutscenes, the game remains in control of the focalization and thus presents an authored narrative to the player. The following section aims to explore the ability for video games to

communicate narrative through interaction and the possibility for players to induce narrative into games.

Mechanical Storytelling

As explained in detail above, narrative video games and traditional narratives share many common elements; each is reliant upon narrative time, as opposed to static media such as paintings or sculptures. Further, each contains worlds, objects, events, and characters. These are the fundamental building blocks of narratives. Moreover, the methodologies of expressing story found in traditional media, this paper has found, are easily transferable from traditional media, such as theater and film, to the video game medium. Likewise, cinematography and mise-en-scène can be used to convey story and express themes in video games, though this occurs mostly in non-interactive segments, i.e. cutscenes. Beyond this, dialog or representational signs, as per Cobley, are tools which the video game medium has access to as an audiovisual medium. However, interaction with ludic systems, this paper would argue, stands as an effective method of communicating story which only the video game or interactive story, can apply. The paper has previously hinted at this methodology of expression in the form of examples from *Brothers: A Tale of Two Sons*, *Nier: Automata*, and *What Remains of Edith Finch.* These, the paper finds, are prime examples of narratives using ludic systems to convey a story. However, the paper has yet to encounter a concise and academic examination of the relationship between narrative expression and game systems. The inverse relationship, narrative being induced into a narrative by the player, has however been explored and is outlined by Hjaltason et al. below. In this section, the present paper will present mechanical storytelling from a ludo-narratological standpoint and examine how ludic systems express narrative, or inversely, how narrative can be expressed through them.

Hjaltason et al. (2015) explore the concept of storytelling through mechanics. In their paper, they set out to examine "whether the use of *game mechanics alone* can induce narrative in the player" (p. 1, emphasis in original)., Hjaltason et al. aim to determine whether players can construct narratives of their own using game mechanics. In other words, whether the player can create narrative where none was authored. To illuminate this subject, Hjaltason et al. constructed a game prototype that aimed to be as aesthetically minimalist as possible, consisting only of simple shapes. They begin by stating that: "There are some fairly obvious ways a game can directly frame narratives through its explicitly authored narrative content, such as cutscenes, dialog, and so on" (p. 1). This is much in line with the present paper's arguments. They acknowledge that these methodologies are established within the medium and take steps away from these to examine the creation of narrative without the use of cutscenes, dialog and other methods. They, like the present paper, instead choose to focus on the unique aspects of video games: interaction. Continuing, they ask: "Do the mechanics matter when it comes to the narratives spawned, or are they purely undetermined formal elements, on which any kind of explicit narrative content can be layered?" (p. 1). In other words, are the mechanics important in the creation of narrative or are they an expression of the narrative? They approach this question from the perspective of examining whether players will construct narrative content which is not authored by the designer, using solely game mechanical systems. Essentially, they assume that storytelling through game mechanics is emergent, meaning that it is the interaction between the player and the systems that surmount to a story, rather than the mechanics being an expression of the story within the game. Expanding on this, Henry Jenkins, in his 2004 article, mentions *The Sims* (Maxis, 2000) as an example of emergent narratives. *The Sims'* gameplay functions much like a dollhouse; the characters within the game behave either according to very limited authored

instances or are completely controlled by the player. Furthermore, the game has no fixed kernels of story, thus the player is free to introduce their own stories. Jenkins writes: “[the game’s designer] has created a world ripe with narrative possibilities, where each design decision has been made with an eye towards increasing the prospects of interpersonal romance or conflict” (2004, p. 11). *The Sims* is without any preconstructed goals, Players are free to author their own goals and work towards them in their own manners. The virtually non-existent narrative content of the game allows players to use the ludic systems to induce narrative into the game. For example, a player might have created two characters who live together. The player then decides that these characters should become mortal enemies and uses the game’s dialog mechanics to have the characters insult each other. Seen here is an example of the systems of the game interacting with the player to create narrative content which was not intended but made possible by the designers. It should be noted, however, that not all games allow for the same degree of creation of non-authored narrative content. For example, players of *Nier: Automata* would be hard pressed to construct a meaningful expression of unauthored narrative content due to the structure of the game per Aarseth's variable model. A strict event/object configuration conflicts with emergent narratives; as Jenkins writes: “In the case of emergent narratives, game spaces are designed to be rich with narrative potential, enabling the story-constructing activity of players” (2004, p. 13). One could, however, when playing *Nier: Automata* create a fiction of the two main characters 2B and 9S being angry at one another and express this using the ludic systems of the game. For example, the player could refuse to rescue 9S when in danger. This allows the player to construct a narrative using the mechanical systems available to them but has no authored intent. It, however, does not make it any less valid as an expression of story.

Returning to Hjaltason et al., they, to inform their thesis, constructed an experiment in which players would control a simple geometric shape moving in a 3D gameworld while interacting with similarly simple non-player characters. They then assigned the player character with random methods of interaction for each iteration of the experiment. One iteration, for example, had the player shooting a ranged projectile capable of destroying non-player characters. In this manner, they constructed a variety of possible combinations for interaction with the environment. By randomizing the methods of interaction, the participants of the experiment would then all have, ostensibly, varying views of the narrative content of the game. Having asked the players to then describe the 'story' of the game, they then concluded that the players indeed were able to, in many cases, construct a simple story, using the mechanical interactions as a foundation. For example, one player wrote:

> You are playing as a supervillain who is destroying a city and killing civilians. Some of them stand and fight, but you are so strong that you cannot die. The civilians are stupid because they run around aimlessly. They don't seem to avoid you, they just run around randomly (Hjaltason et al., p. 4).

Based on the answers received from the participants of the study, Hjaltason et al. conclude that: "The results of our study do show that all other things being equal, game mechanics play a role in shaping how a player perceives the narrative of a game" (p. 7). This, the present paper would relate to Aarseth, and argue is due to the affordances given to the players by Hjaltason et al. By limiting the aesthetical representation of their gameworld, as well as offering no kernels nor satellites, the players are free to introduce their own visions of the narrative. The study further shows how flat characters, which were essentially only materialized mechanics, can be given depth by player imagination through the interaction between them and the systems in place.

Hjaltason et al. thus present a convincing argument that the interactional elements of video games can be used to communicate, or even construct, narrative content. This echoes Jenkins' theory of emergent narratives and concretizes the player's ability to author narrative content based on the mechanical systems available to them. For the present paper, this means that, in a narratological context, one should, when examining the methodologies of video games, consider mechanics as storytelling methods alongside traditional methods such as for example, dialog and mise-en-scène.

While Hjaltason et al. outline the possibility for players to introduce narrative where none was authored via mechanical systems, *Brothers: A Tale of Two Sons,* exemplifies the inverse, a game which communicates narrative to the player through its ludic systems. In *Brothers,* the player moves two characters at once, each of the two brothers taking up one half of the game's input system. This method of player interfacing becomes relevant when the player must solve puzzles by controlling two characters in tandem to solve a task. This control scheme, the paper finds, is quite difficult for the average player, as it is uncommon. Therefore, the act of controlling the characters is a challenge. A question then follows: Why would the developers risk alienating their audience by using this difficult and unique control scheme? Succinctly, because the mechanics of how you control or interact with the game, can express the themes of the game. The overarching narrative theme of *Brothers*, overcoming hardship as a family, is, this paper would argue, strengthened by the clever use of the control scheme; how the player controls the characters and player interaction in a broader sense. To clarify: At a point in the game, the titular brothers become trapped within a spider-woman's nest and must defeat her to escape. The player must then control the two characters in tandem, working together to survive. In doing so, the player expresses the overarching story of the narrative: working together. The mechanics which

the player interacts with, then reinforce this theme and utilizing the ludic systems of the game becomes a metaphor for the story. How the player interacts with the game expresses the game's themes. By simply playing the game the game has informed the player, using the mechanics in concordance with the aesthetical representation of the gameworld, of its thematic content. The player understands that the game is ultimately about working together. This is an important aspect of mechanical storytelling. Likewise, in the example from *What Remains of Edith Finch,* the player's interaction with the game's systems in the fish canning scene, shows how mechanics can transcend 'showing' the player events and rather become metaphorical for the content within the game. In that example mechanics are not only metaphorical but as a method of identifying with the character. Returning to *Brothers,* the physical controller becomes a metaphor for the characters. Following the death of the older brother, the younger brother must swim across a river. However, the younger brother is afraid of water and earlier relied on his brother to carry him. Now, however, the younger brother cannot cross. The player realizes that since the death of the brother they have not been able to use the left half of the controller, which was assigned to that character. The control scheme, the physical controller itself, and player interaction with the game is once again used as a storytelling device; the death of the brother is actualized in the way you manipulate the game. Further, through the player identifying with the younger brother, this physicalizes the loss of a loved one. In *Brothers*, the left half of the controller is a metaphor for the older brother and the right for the younger. The player, realizing that they must cross the water to progress the story, pushes the younger brother into the river. However, the younger brother refuses to do as the player wishes, yelping out in fear. The player is now unable to progress. Likely, the player will remain in this narrative limbo until they press the button associated with controlling the older brother. They now find that the younger brother can push

through the water. Within the diegesis, he is summoning the strength of his brother. The player is aware of this through the association of the control scheme with the older brother's character. Put simply, by pressing a button, the unspoken story element of the younger brother thinking about his brother's strength is made clear to the player. This, the paper would argue, is among the best examples of mechanical storytelling. The player-level interaction becomes part of the diegesis, and the methodology of interaction becomes a narrative device capable of conveying story. Through mechanical storytelling, the game communicates to the player both its story content, as well as how ludic systems can affect said story content. Relating this to Aarseth's variable model, the affordances which the narrative gives players of *Brothers* is limited. The game's events are presented as fixed kernels, there are few interactable objects, of which none can be created or destroyed outside of the fixed kernels, the characters are round, but cannot be changed at the player's discretion. This results in a story which is unable to be affected by the player and their choices. This means that the narrative content is completely authored. However, the usage of mechanics as storytelling devices presents *Brothers* as gripping and interactive. The game's mechanics become not only metaphors for the story itself but become an anchor point for the experience. As a method of expressing narrative, interaction has no comparison in traditional media. The pages of a book cannot, for example, be turned in a specific way to be interpreted in a certain manner. Translating the above instance into text proves difficult, let alone impossible into a film or novel. This is because in the examples mentioned throughout this section, the interactive element is the driving force of the construction of the narrative. Interaction combines with the associated aesthetical representational elements and elevates the experience through emergence.

In summation, interaction with game mechanics can either express the authored story of the game's developers, as seen with *Brothers: A Tale of Two Sons* or, as presented by Hjaltason et al., be used by the players themselves to introduce narrative content into an open game structure. Further, the player's ability to introduce narrative into a game is directly linked to what Aarseth calls "narrative affordances", meaning the amount of agency the player has over either the events, objects or characters. Few or no affordances push the game towards a 'pure story', whereas the opposite push it towards a 'pure game'. Pure story games, such as, for example, *What Remains of Edith Finch,* rely heavily on traditional narrative methodologies as means of expression but can use game mechanics as metaphors to convey story content as seen in figure 3.

Conclusion

Seeking to answer the question of how video games approach narrative and the methodologies which they employ to convey story, the paper first sought to understand the composition of narratives. Examining the works of narratologist, such as Gérrard Genette, Vladimir Propp, and Paul Cobley revealed that especially order and the time in which events occur is vital to the understanding of narratives. This later proved relevant given the capabilities video games have for manipulating narrative time via saving and loading, allowing the player to skip backward and forward within a narrative and make different decisions. This, the paper suggested, indicated that narrative tension would be nullified in a traditional sense. This because players could return to a point in the story and ensure the desired outcome. This resulted in the argument that games that employ saving/loading systems must then construct conflict between the player and the game's systems such as mastery of the control scheme or mechanical interactions. Further, the paper found that, because of interaction, games seem to be capable of facilitating a deeper level of identification than traditional media, where instead of the player carrying out acts 'as a

character', they instead act as themselves within the virtual world. The paper later found that, according to Espen Aarseth, all narratives contain: events, world, characters and objects, and that these elements can likewise be found within video games. Thus, the video game medium has the capacity for narrative expression, but developers can choose to omit narrative in service of a 'pure' game experience. Furthermore, according to Aarseth, the affordances given to the player by the narrative affect in what ways the player can influence the story. The greater the player's ability to affect the game world, the less control the game designers have over the narrative, and vice versa. Further the paper found that narrative can be used as a framing device, providing context for the player's experience and dictating how the player interacts with the game. Finally, the paper sought to illuminate how mechanics can be used as storytelling devices. Hjaltason et al. expounded the concept of an inverse storytelling relationship wherein the player induces narrative into the game, rather than the game, as the paper found in analyzing *Brothers*, communicating narrative to the player via its ludic systems. Finally, the paper concluded that narrative can be expressed and conveyed in video games using many of the methodologies of traditional media but can employ interaction to allow not only the player to induce story into the narrative, but also express story in ways unique to the video game medium. Beyond the research of the paper, it would be pertinent to investigate how video games employ ludic space as storytelling devices, as interaction and player-controlled focalization allow for unique storytelling capabilities. Furthermore, the paper would suggest further research into identification with video game characters as it exemplifies the significance of interaction in the media landscape.

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