MASTERARBEIT / MASTER'S THESIS

Titel der Masterarbeit / Title of the Master's Thesis

"Choice Matters?
A Typology of Narrative Player Choice in Video Games "

verfasst von / submitted by

Sandra Perger, BA BA

angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of

Master of Arts (MA)

Wien, 2022 / Vienna 2022

Acknowledgements

This thesis has been a long time in the making, and while it has always stayed in the back of my mind ever since I first put together the topic, life doesn't always go the way one plans. But in some case the last chance is the one you need to take, and I am grateful that I've been given the opportunity to make use of it.

Throughout my academic journey, there have been many lecturers and teachers who shared both their knowledge, but also their passion for various topics under the Anglophone Literatures and Cultures umbrella with me - I am thankful to have been their student, and I'll always carry some of that passion with me. My gratitude goes out to Gabrielle Smith, MA, who first encouraged me to write about narrative structures in video games. But I am particularly thankful to ao. Univ.-Prof. Dr. Eva Zettelmann, who has taught the first lecture on literature I have ever taken, and who has agreed to take these last steps in my studies with me by becoming my thesis supervisor. Her early feedback on my research proposal and planned thesis structure helped me to get more clarity when I couldn't see the forest for the trees, and her literature pointers became foundational material for a large part of this thesis' theoretical background.

Thanks go out also to many of my friends, who let me ramble about the topic of this thesis at length and gave me gentle encouragement, but also knew when all I needed was just a cup of coffee. Melinda Hilgers, Melanie Haberhauer and Karoline Eadie - each of you has played an important role in getting me to this point, and I'm happy to have met you.

And last, but certainly not least: a big 'thank you' to my family. I would not have been able to do any of this without you, and I will always be grateful for your support and love. (Next time you ask me "How far are you with your thesis?", I'll finally be able to say "I'm done".)

Table of Contents

1. Introduction

"Stanley, this is important. The story needs you. It needs you to make a decision. It cannot exist without you. Do you understand me? Whatever choice you make is just fine, they are both correct; you cannot be wrong here." (*The Stanley Parable*)

Video games have made up part of the cultural landscape for about sixty years now, arguably finding their starting point with the development of *Tennis for Two* in 1958 (see Kocher 13; Malliet and de Meyer 23).[1] While this marks them as a still relatively new medium, especially if compared to other creative media such as literature, painting or even film, video games have developed into much more than the stereotypical young boy's pastime, not only engaging a large and diverse crowd of people, but also constituting profitable economic ventures. Numbers like those presented by the ESA (Entertainment Software Association) are telling; in their 2020 Economic Impact Report on the video game industry, they note a total economic output of more than 90.3 billion dollars for 2019 in the U.S. alone (see ESA 1), with 64% of American adults playing some form of video games (see ESA 4). Similarly, the PC gaming platform *Steam* reportedly hit a new record in the beginning of this year, boasting of more than 27,9 million concurrent users in February 2021 (Tu par2)[2].

The number of users, however, is not the only aspect of the medium which shows rapid development. As a digital medium video games share a strong link with technology as a whole, and advancements in e.g. processing power, artificial intelligence, or data storage space have also opened up numerous new possibilities for the design of digital games. The changes the medium experienced during the small number of decades of its existence are probably most easily observed in the development of graphical capabilities. One only needs to think back to early games like *Pong* or *Space Invaders* and compare their visual output to that of any game dominating the sales charts during the last few years, such as the action-adventure Western game *Red Dead Redemption 2*, or the colourful online multiplayer

---

[1] Alternatively, some would name *Spacewar!*, released in 1962, as the first real video game, because it was reportedly created with entertainment as an explicit goal in mind. Such was not the case for *Tennis for Two*, where the entertainment factor happened to be a pleasant side-effect of playing around with the limits of available technology (see Malliet and de Meyer 23-24; Wolf and Perron 2).
[2] Texts which were published online will, if lacking page indications, include either a reference to the respective paragraph (par) or chapter (chap).

Overwatch. A similarly striking picture is shown when comparing the earliest installations of the well-known *Tomb Raider* series with its newest iterations.

Despite the exciting creative opportunities the video game medium presents, much of the academic focus has been directed at different topic areas. One that has most enduringly garnered attention is the connection between gaming activity and violent behaviour. A quick glance at a variety of academic publications provides one with a number of examples that illustrate this interest: This ranges from issues of moral disengagement (see Hartmann and Vorderer 2011), the influence of violent video games on adolescents (see Ferguson 2011), to their connection to crimes committed against women (see Beck et al. 2012). That these topics also consistently remain relevant in both the popular discourse and the news is also easily showcased by examples taken from the online portals of the *BBC* (see Kleinman 2015), the *CNN* (see Scutti 2016), *The Telegraph* (Bodkin 2017) or *The Guardian* (Stuart 2019).

Another area of academic interest can be identified in the possible use of video games in educational settings (see Michael and Chen 2006; Ritterfeld and Weber 2006). Mathematics, physics and computing/informatics are just some among the subjects discussed (see Kiili et al. 2015; Pittman 2013; and Smith and Chan 2017 respectively).

While the above-mentioned make up two very large research areas in video game studies, there are, of course, many more topics to be looked at. Video game studies are, even more so than the medium itself, still a young academic discipline. While a few select works may be found before the turn of the millennium, in many cases the beginning of video game studies is identified with the publication of its first online academic journal, *Game Studies*, in 2001 (see Wolf and Perron 11). As Aarseth, the journal's Editor-in-Chief himself, writes: "2001 can be seen as the **Year One** of Computer Game Studies as an emerging, viable, international, academic field." (*Computer Game Studies* par2; emphasis in the original).

Due to the medium's multimodal nature researchers from many different fields, using many different methodological approaches, have gravitated towards video game studies. As early as 2003 Wolf and Perron remark that "video game theory is already diverging into a variety of approaches, including narratology, cognitive studies, theories of representation, and ludology (the study of play)" (11). This diversity has, not surprisingly, been fruitful, but it has also led to tensions and difficulties. A particularly heated debate has taken place between ludologists and narratologists, the latter seeing video games as an exciting new opportunity for story-telling, the first fearing that video game studies would be subsumed under narratology as a discipline, its game-elements ignored in favour of issues they viewed as primarily belonging to another field of studies. Fortunately positions have mellowed out in

recent years, but many points of apprehension may still serve as guiding posts to remind any researcher of the multimodal nature of this particular subject.

Indeed Neitzel explicitly mentions that the intersection between game and story elements makes up one of the areas where further research is particularly desirable. "What is required are more case studies, as well as a closer look at the modes of mediation and at the relation between narrative and ludic elements in specific games" (*Narrativity of* par38). With an in-depth look at the way narrative choices are implemented in a select group of games, both the issue of much-needed case studies, as well as the difficult topic of ludic and narrative relations are to be addressed in this thesis.

Investigating narrative choice, i.e. decision-making on the story-level of a video game, marks this subject as a sub-category of one of the most essential aspects of (video) games as a whole: interactivity. Choice can be understood as the manifestation of interactivity in the actual product, as playing a game, or in other words interacting with it, can also be described as a constant string of decision-making, whether it concerns in which direction to move, or which character to save from danger. "Choice is at the core of video games, and by allowing the player to choose, the game progresses" (Cardoso and Carvalhais, *Breaking* 25). This holds true for any game, regardless of whether it is an abstract one like *Tetris*, one praised for sprawling worlds with engaging narratives like the *The Witcher* series, or even a card game like *Blackjack*. As Salen and Zimmerman comment, "'choice' does not imply *obvious* or *rational* choice, as in the selection of an action from a menu. Choice can take many forms, from an intuitive physical action (such as a 'twitch' firing of [a digital] pistol) to the random throw of a die" (*Meaningful Play* 71; emphasis in the original).

Even though choice is therefore such an integral part of playing a game, there is not a large amount of literature devoted to it, as often the more abstract concept of interactivity is chosen as a focal point.[3] Among those who explicitly deal with choice in (video) games Domsch, as well as Salen and Zimmerman, deserve particular mention, and will feature in more detail in later parts of this thesis.

As this very brief, introductory foray into the interactive aspect of video games has shown, choice is to be understood as a very complex and far-reaching issue for the medium. Attempts to categorise moments of choice as a whole would therefore go far beyond the possible scope of this thesis. Instead the focus shall lie on a particular subset of choices: narrative choices. Looking at how players are able to influence the story level of a game necessarily restricts the pool of games to choose from in terms of primary material. Abstract

---

[3] This is in part due to the need to define video games both as a medium and research object, and to emphasise in what ways they differ from any other form of cultural object.

games, sports games or strategy games, which rely far more on intricate gameplay mechanics and challenge-based skill mastery in order to attract players, would obviously not serve the purpose of this project. In order to yield useful results, it was necessary that the games' focus lie on the story, and they allow the players to make choices that affect the progression of the narrative. Both RPGs (role-playing games), such as the aforementioned *The Witcher* or *Dragon Age*: *Origins*, or action-adventure games like *Dishonored* allow for such player involvement, but often space out the moments of narrative choice over long stretches of gameplay and do not yield an overall large amount of such moments.

Instead the most ideal objects for more in-depth studies are found in games that make narrative choices their main mode of player engagement. Telltale's *The Walking Dead*, *Life is Strange* and *The Stanley Parable* are three such video games, and have been chosen as primary texts for this thesis, based on the one hand on their popularity and critical acclaim (see the ratings on websites such as *Metacritic* or platforms like *Steam*), and on the other hand as being both representative of how narrative choice is typically approached within the medium (*The Walking Dead, Life is Strange*) and challenging these approaches (*The Stanley Parable*).[4]

An in-depth analysis of moments of narrative choice in these three video games shall serve as the basis to develop a typology of narrative player choice in video games, and thus contribute to the theory of medium-specific narrative strategies. While a typology based on three specific games is naturally a reflection of the past or at best current state, it might also be used as a model for future design ventures.

Before, however, one can turn to the development of the typology, it is necessary to first establish some general notions. A section shall therefore be devoted to define the object of analysis and describe the (video) game medium by explaining some of its most characteristic elements, and attempting to present a working definition.

Furthermore some time will be spent deliberating on the relation between video games and narratives, only briefly touching on the ludology-narratology debate. The focus will instead lie on the concept of a media-conscious narratology, the particular case of the quite recently coined Future Narrative and its applicability to video games, and what types of narratives the medium has produced.[5]

It will hardly seem surprising that another part of the thesis will go into further detail about the issue of 'choice', i.e. what factors into a choice, both in general and in particular in the case of interactive media and narratives.

---

[4] The reasons for this particular choice of games will be further elaborated in a separate part of the thesis.
[5] It shall be noted that in this case 'types' refers to structures, rather than themes or typical topics.

These three theoretical blocks will then serve as the basis on which the typology is constructed. The model itself will aim to give insight into a number of aspects concerning narrative choice in video games, such as presentation and the in-game implementation of consequence, which will be illustrated through examples taken largely from the three chosen games.

As video games are a rapidly evolving and innovative medium, lastly the typology shall also serve as a starting point for a contemplation of the opportunities and challenges inherent in introducing interacitivity in the form of player choice to narrative structures, touching upon issues involving immersion, feasibility and player expectations.

2. What's in a video game?

"I don't even know what this game is, but I love it. [...] ...what is this game supposed to be? I can't figure it out." (*The Stanley Parable*)

2.1. The beginnings of game studies

Video games have become an object of study for researchers from varying disciplines, such as film studies, psychology or literature studies, who each recognise at least some part of a video game relating to aspects of their respective fields of study. Regardless of where one's academic roots lie, however, there is one important line of heritage that video games can be traced back to and which should never be disregarded - and that is their status as games. Whether one enjoys playing strategy games, fantasy role-playing games (RPGs), puzzle games or a digital adaptation of a popular card game, and whether one prefers to call them video games, computer games, console games or digital games, the common and unchanging denominator is 'game'.

> [V]ideo games are a comparatively *new* cultural form, intimately linked to the appearance of computers, postdating literature, cinema and television. However, if we think of video games as *games*, they are not successors of cinema, print literature, or new media, but continuations of a history of games that predate these by millennia. The Egyptian board game, senet, found in the 2686 BC tomb of Hesy-re is a precursor of contemporary backgammon and Parcheesi, games that are commonly played *using computers* today. (Juul. *Half-real* 3-4, emphasis in the original)

While the above passage makes it obvious that Juul felt a strong need to distinguish video games from other current media, and establish them as their own field of study by connecting them to a much larger and historically rich practice, it is still undoubtedly important to be aware that video games are not, in fact, mere extensions of, for example, movies.[6] Situating video games in the larger context of games as such not only stresses the expansive cultural heritage of the medium, but also allows the video game researchers to draw on game studies as over-arching discipline.

---

[6] The passage was taken from a monograph by Juul, which was published in 2005. Juul has been known as an advocate of the ludological approach to video games, and at this time the debate between ludologists and narratologists was still a major issue in video game studies, which puts the explicit distinction from other media into perspective.

It should be noted at this point that the term 'ludology', i.e. game studies, is still a rather recent construct as well, coined only in 1999 and largely as a counterpart to narratology. Frasca, who is often credited with the development of this formal term for game studies, notes that the idea behind it also comes from the need to unite existing approaches under a common name and purpose. "We will propose the term ludology (from ludus, the Latin word for "game"), to refer to the yet non-existent 'discipline that studies games and play activities'. Just like narratology, ludology should also be independent from the medium that supports the activity" (*Ludology* par12). The latter also makes it clear that video game studies would thus not be considered synonymous to ludology, but are rather to be understood as a subsection that deals with games played via electronic means. In order to prevent terminological confusion, it needs to be mentioned that the field of game studies also distances itself from the similarly named game theory, which models idealised rational decision-making processes and has found wide application in e.g. economics and political science[7] (see par14f).

Instead ludology draws on studies on play and games, which were first conceived in the twentieth century in fields such as anthropology and sociology. The two most famous and most often cited scholars are the Dutch cultural historian Johan Huizinga, whose work *Homo Ludens: A study of the play element in culture* was first published in 1944, and the French writer and philosopher Roger Caillois, who would later build upon Huizinga's ideas and propose a model of categorisation of games in general.

In order to posit play and games as a subject worthy of broad intellectual and cultural interest, it was first of all necessary to establish their importance. Huizinga takes up this work as one of the first scholars, stressing that play is an integral pattern of behaviour, preceding even the likes of culture as such. In this sense, his efforts can be understood as "an attempt to redefine and elevate the significance of play, [...] which [had] been maligned in recent history as trivial and frivolous" (Salen and Zimmerman, *Meaningful Play* 59) Indeed his seminal work *Homo Ludens*, i.e. Man the Player[8], opens with the following lines:

> Play is older than culture, for culture, however inadequately defined, always presupposes human society, and animals have not waited for man to teach them their playing. We can safely assert, even, that human civilization has added no essential feature to the general idea of play. Animals play just like men. We have only to watch

---

[7] This also explains a preference for the term with Latin roots in some publications. This thesis, however, will use both the terms 'game studies' and 'ludology' synonymously.

[8] The choice of *Homo Ludens* as the title of his work is immediately telling of the stance Huizinga takes towards the important role of play in and beyond culture. Modelled after the likes of terms such as 'Homo Sapiens', Homo Ludens elevates play to a central position by defining man as a player.

young dogs to see that all the essentials of human play are present in their merry gambols. (1)

Even though play would thus not seem particularly sophisticated, as it is even encountered in animals, Huizinga takes care to stress its significance, as there is more to it than meets the eye.

> Even in its simplest forms on the animal level, play is more than a mere physiological phenomenon or a psychological reflex. [...] It is a *significant* function. [...] In play there is something 'at play' which transcends the immediate needs of life and imparts meaning to the action. All play means something." (ibid.; emphasis in the original)

The true nature of this 'significance' remains somewhat open to debate[9] - is it, for example, significant in its importance as element in cultural development, or is it significant because it acts as a signifier, and constitutes a "symbolic act of communication" (Salen and Zimmerman, *Meaningful Play* 59)?

Despite such instances of vagueness, Huizinga has undeniably been instrumental for the development of game studies, as he even puts forth a definition of play: "Play is a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy and the consciousness that it is 'different' from 'ordinary life'" (28).

This definition of play already contains a number of characteristic features which would also find their way into many later definition attempts of both play and games.[10] Nevertheless Huizinga's work has also sparked its fair share of criticism, some of which led to the development of alternative definitions or more intricate classifications of game and play, which use Huizinga's thoughts as the starting point for their own contemplations. The most famous scholar in this regard is the earlier mentioned Roger Caillois, who stands out also because he again turns to play as a subject decades before ludology as a discipline was formed.

Among other things, Caillois remarks on Huizinga's definition seeming both "too broad and too narrow" (123), as it disregards e.g. gambling and games of chance as play activity on grounds of their often monetary, or at least material, gains and losses for the

---

[9] Salen and Zimmerman spend extensive time on possible interpretations of these opening passages, and deliberate on what constitutes meaningful play, using Huizinga's ideas as impetus (s. Salen and Zimmerman, *Meaningful Play* 59ff).

[10] The characteristic features hinted at here will later be elaborated on in this thesis.

players (see 124)[11] - a play instance like this would not merely "[have] its aim in itself" (Huizinga 28), after all. By ways of rectifying this oversight, Caillois developed a well-known set of four categories, which ought to allow for a comprehensive classification of play and games in general. He distinguishes the following four different types of play: *agôn, alea, mimicry* and *ilinx.* (131ff)

Agôn marks any instances of competitive play, recognised in events like duels or tournaments. This also means that *agôn* puts dedication, a desire to win and the development of appropriate skills centre-stage. As far as video games are concerned, many multiplayer games, such as the well-loved *Mario Kart* series, and particularly MMO (Massively Multiplayer Online) games, e.g. *World of Warcraft*, belong to this category, as they pit either single players or teams of players against other users. Two other video game genres that can easily be subsumed under *agôn* are (first person) shooters, like *Call of Duty,* and so-called beat 'em ups, which often simulate martial arts competitions. As Dovey and Kennedy note, play categorised as *agôn* is particularly dependent on well-defined win and loss conditions (see 24).

Alea is the category of games of chance, such as a game of dice or roulette. These are "based on a decision independent of the player, [...] and in which winning is the result of fate rather than triumphing over an adversary" (Caillois 133). Of course any video games which are digital adaptations of games that could be imagined in a casino-like setting belong to this category, but in many other cases chance will not be the most descriptive feature of a video game. This is not to say, however, that chance has no place at all in video games - on the contrary many games do make use of randomised elements, but still leave some control over the outcome with the player. If the player character has to fight against monsters, for example, they might have a low chance of inflicting a critical hit on an enemy, but by strengthening the character's dexterity the player may raise the odds of triggering a critical hit. Some games, particularly those belonging to the so-called roguelike genre, also make use of procedurally or randomly generated levels to offer players fresh experiences, regardless of how often they replay a game.

Mimicry is the third of Caillois' categories and describes play activities that involve some form of 'playing pretend' and require a large amount of imagination. Often, a player will take on a specific role - imagine children playing 'house', for example - and simulate certain activities. Caillois calls mimicry "incessant invention" and notes that "continuous submission

---

[11] It should be noted that, in order to make this point, Caillois refers to an earlier definition in *Homo Ludens*, which explicitly describes play as "an activity connected with no material interest, [by which] no profit can be gained" (Huizinga 13).

to imperative and precise rules cannot be observed" (137). A definition like this would exclude almost all video games, as their programming code will always give a player rules and conditions under which they can take action, while other activities may be entirely excluded; in a video game some doors may be interacted with and ventured through, and others may be merely part of the background. Even keeping that in mind, the games that can best be understood in terms of *mimicry* are aptly called sandbox games, like the hugely popular *Minecraft*, or RPGs (role-playing games), which call upon the player to take on a particular role within the game world. The three games chosen for this thesis, *The Walking Dead, Life is Strange* and *The Stanley Parable*, could also be categorised as mimicry, as they cast the player in the role of each game's protagonist. Their highly restrictive nature, however, stands in opposition to Caillois' paradigm of 'incessant invention'.

Ilinx is play that aims at disorientation, or inducing a feeling of vertigo; it is thus strongly linked to physical sensations and reactions. The most typical example would be riding a roller-coaster. This category is difficult to make out among video games, although dancing games such as *Just Dance* or *Dance Dance Revolution* may be understood in terms of *ilinx* (see Dovey and Kennedy 24). A more recent development in the gaming sector, however, also leans strongly towards *ilinx*: the advancements in Virtual Reality technology, which many will associate with headsets such as the *Oculus Rift*.

As may perhaps already have become apparent, Caillois' four categories are, in their purest forms, seldom easily applicable. In fact many games, both digital or not, likely fit under more than one category. As mentioned earlier, randomisation or chance are in effect in many games, but even dancing games, which seem to be good examples of *ilinx*, due to their nature of physical exertion and sometimes dizzying speed, are often played competitively, either in tournaments or to beat high scores, which would then mark them as play activity in accordance with *agôn*.

2.2. Play and games

Aside from this four-part categorical system, Roger Caillois also put some focus on one central game aspect: games as a rule-governed system. In keeping with his other Greek and Latin-based terminology, he coined the two concepts of *paidia* and *ludus*, or free-form play and rule-based games respectively.

Caillois defines *paidia*'s main driving forces as improvisation and joy, and considers it "the spontaneous manifestations of the play instinct" (141). In that regard it is most often

exemplified by instances of simple child's play like bouncing a ball, climbing a tree or skipping rope. Drawing the connection to Huizinga, *paidia* would be what Huizinga refers to as the common, instinctual play behaviour that both humans and animals exhibit. Noticeably, it is always a voluntary activity, even when it occurs in a group setting - a shared aspect between *paidia* and *ludus*. But *paidia*, much more so than games or *ludus*, as will be demonstrated shortly, is characterised by a certain open-endedness: It is easy to slip into *paidia*, but is equally simple to stop it again, as there are no defined goals that need to be reached or rules to be observed. When skipping rope becomes more tedious and exhausting than enjoyable, children will most likely simply stop the activity and move on to another thing that catches their interest. Hypothetically, in that case disregarding e.g. physical limitations, it would, however, also be possible to extend the activity indefinitely without reaching any end-state per se.

It should be noted that *paidia* is nevertheless not entirely without boundaries. Indeed there is a marked difference between modes of play and moments when no playing takes place. Even if there are no well-defined starting- and end-states, which would make the borders perhaps more easily recognisable, it is still temporally limited and often also has physical boundaries, such as a play-ground, a garden, or perhaps a specifically marked play-corner in a primary school classroom. On the level of imagination and mental concepts Kampmann Walther describes this as a "playing world, [whose] basic characteristic is precisely that it is not the world itself" (par17).

Defining *paidia* more closely than mere free-form or open-ended play often becomes quite difficult, because at its very basis lie aspects such as spontaneity, freedom and indetermination. Its counterpart *ludus*, on the other hand, is characterised around aspects like regulation and determination (see Neitzel, *Narrativity in* 229). Caillois understands *ludus* as a natural development from *paidia*, which occurs when "a desire to invent rules, and to abide by them whatever the cost" arises. He considers it as "complimentary to and a refinement of *paidia*, which it disciplines and enriches" (142). One could therefore imagine the movement from *paidia* to *ludus* as the moment when a system of rules is super-imposed on free play activity, e.g. when merely running around develops into a game of tag, or climbing around on the playground-facilities turns into a variant of *The Floor is Lava*.

Caillois remarks upon the fact that this invention of rule-systems usually coincides with the introduction of gratuitous difficulty and arbitrarily designed problems, and thus the level of *ludus* is marked by a higher level of artificiality. Regardless, this is not to be interpreted as the joy associated with *paidia* being opposed with a sense of tedium in *ludus*.

On the contrary Caillois takes time to clarify that there is pleasure to be found in solving these artificially created puzzles (see 141-143).

For the purpose of illustration, chess is usually mentioned as one of the clearest examples of *ludus*. Most of the more abstract games, such as *Pong* or *Snake* to name some digital examples, are more easily associated with *ludus*, as their high level of abstraction and their removal from actual, physical space makes any sort of play dependent on a clear set of rules. I would argue that most digital games belong to this type of play, because they can only be experienced on grounds of pre-defined, coded rules. True equivalents to e.g. merely bouncing a ball are hardly to be found in a digital medium. Dovey and Kennedy state that simulation games such as *Civilization*, *Age of Empires* or *The Sims* can be subsumed under the idea of *paidia*, because they essentially function as mere sandboxes[12] for largely unrestricted, not objective-driven and creative play (see 25), but even those cases display strong restrictions on what actions can be taken within the context of playing the game, simply because all of them have to be coded into the game software, i.e. the underlying system, beforehand.

It is indeed much more likely that, like with the earlier categories *agôn, alea, mimicry* and *ilinx*, a large number of games offer a mixture of both *paidia* and *ludus*; the mere play impetus and the creative, free play of *paidia* combined with sections defined by *ludus*, which are much more restricted, offering less interactive opportunities for the player.

As one might perhaps have already noticed, *paidia* and *ludus* have very strong connections to the terms 'play' and 'game' in English. The online version of the Oxford Learner's Dictionary, for example, defines play as an "activity for enjoyment and recreation rather than a serious or practical purpose", while game is described as "an activity that one engages in for amusement or fun" as well, but also "a form of competitive activity or sport played according to rules", therefore explicitly making reference to the underlying system of rules. While in some cases *paidia* is understood more as an impulse, rather than the action of playing itself, play is often used to describe the sort of free, unsystematic playful behaviour that is so characteristic for Caillois' term. Even more clearly than this, games are usually defined as determinate structures, with clearly outlined rules, as well as win and loss

---

[12]The most famous of the so-called sandbox games would be *Minecraft*, which some players use in a sort of adventure game style, with enemy creatures and fighting mechanics, and others as a tool to build famous landmarks and architectonical structures, e.g. the Colosseum, or even fictional places like the Hogwarts school building within the game space.

conditions, and thus correspond to *ludus*.[13] This distinction between the terms play and game is a particularly lucky affordance of the English language, which cannot necessarily be transported into any other language. German, to give an example, only offers the terms 'Spiel' and 'spielen', as the respective noun and verb for both play and game meanings.[14]

2.3. Defining a game

The study of play behaviour and the properties of the play and game dichotomy are certainly some of the larger areas of interest in general game studies, and to a somewhat lesser extent in video game studies as well. For the purpose of this thesis - that is the development of a typology of a specific game feature - it is, however, necessary to go beyond the sometimes almost philosophical deliberations about the nature of play and games as e.g. cultural manifestations, and define the characteristic features of the game as an object.

This is, of course, not the first time that an attempt would be made to define the game as such, which is why it appears opportune to look at some of the previous definitions found in academic texts. That should allow for a good insight into those features which are considered a game's most essential ones, as these are likely to come up more than once. The next sections will therefore look at four examples of answers to the question of what a game is, and explain some of the most central features they mention.

Returning to Huizinga's definition of play[15] may serve as a good starting point. As mentioned in an earlier section, Huizinga describes play as "a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and [being] accompanied by a feeling of tension, joy and the consciousness that it is 'different' from 'ordinary life'" (28). This definition takes note of the existence of temporal and spatial boundaries, which put play apart from 'the ordinary', the existence of a set of rules, as well as emotional involvement, but negates the

---

[13]This is also why the choice has been made to use play in connection with *paidia* and game when commenting on *ludus* in the earlier paragraphs of this section. The clear distinction of *paidia* and play, or *ludus* and game is not relevant for the purpose of this thesis, therefore, and in order to prevent a convoluted use of terminology, the English terms will be used for the majority of the remaining text.

[14] This might also explain why Huizinga's famous *Homo Ludens* almost exclusively uses 'play' as its word of choice, as the text was originally published in German in Switzerland and thus would not have distinguished between game and play originally.

[15] In this case play is to be understood also in the sense of game, as Huizinga's text does not distinguish between the terms, likely due to the linguistic issue outlined above.

possibility of objectives outside of the activity itself, e.g. monetary gains.[16] Much of what Huizinga alludes to touches upon some of the more abstract and elusive qualities of games and play, but falls short of explicitly naming them, which ultimately leaves it too broad and indistinct (see Salen and Zimmerman, *Rules* 75)

Some decades later, in an article published in 1994, Greg Costikyan offers a radically different answer to the question "So What Is a Game?" and writes that "[a] game is a form of art in which participants, termed players, make decisions in order to manage resources through game tokens in the pursuit of a goal" (par28). Whether or not games ought to be considered a form of art opens up an entirely different topic of discussion, and will therefore not be looked into further in this thesis[17], but Costikyan nevertheless offers a number of new game components. The terminology he uses may seem unfamiliar in some instances, as Costikyan is strongly influenced by his background in digital game design, but some basic features can be paraphrased the following way: A game requires participants, as it is an interactive object, and this property is realised in a game system through its containing of elements which can be manipulated by the player, i.e. the game tokens in Costikyan's words. Furthermore a game requires the existence of a goal that the player wants to realise by means of their interaction. Remarkable for a description that is so dependent on systemic features is the absence of rules as a necessary game component.[18]

This is clearly not an issue in the next definition, which states that "[a] game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome" (Salen and Zimmerman, *Rules* 80). Salen and Zimmerman use this as their working definition for their monumental monograph *Rules of Play*, and indeed it has many merits. This concise statement manages to incorporate a number of aspects referred to in either Huizinga's or Costikyan's definitions: Players, rules and artificiality are considered essential elements of the game as an object of study, but Salen and Zimmerman also emphasise a game's properties as a system, and in lieu of a general goal explicitly make mention of quantifiable outcomes. A somewhat unique feature of this definition is the mention of conflict, both in the sense of struggle against other human players, and struggle

---

[16] Juul also calls into question the aspect of voluntariness, although in regard to a definition proposed by Caillois, which, so he argues, lacks clarity and unnecessarily complicates the status of something 'being a game' by making it dependent on issues of internal motivation, which is hard to gauge. (31)

[17] The interested reader may find Henry Jenkins' article "Games, the new lively art" a rewarding text on this topic.

[18] It should be mentioned briefly that Costikyan returns to the topic of defining a game at a later point in his work. With even more brevity he writes that a game is "an interactive structure of endogenous meaning that requires players to struggle towards a goal" (2002, 16).

against the game system. This hearkens back to Caillois' idea of *agôn* as a form of competition and a test of skill.

Salen and Zimmerman's definition is in general applicable to a large number and many different types of games, both digital and traditional, but it excludes some of the most popular games to date. Among those are simulation games, the most widely played of which is probably *The Sims*, or e.g. so-called tabletop or pen-and-paper role-playing games, as Harrigan and Wardrip-Fruin note (xiii). Salen and Zimmerman themselves explicitly comment on the additional effort needed to categorise both the aforementioned types, as well as any sort of multiplayer RPGs, as games according to their own definition. Identifying these as games would depend heavily on framing them a specific way, as they include "emergent quantifiable goals, but usually no single overriding outcome" (*Rules* 83), i.e. they lack a designed point of termination.

Another aspect that is lacking in both the latter definition and in Costikyan's is any type of emotional involvement on part of the player, which is a quality made reference to in Huizinga's much more elusive description. Salen and Zimmerman and Costikyan mention the player as almost subservient to the game as a system, i.e. only in their role as interacting party that affects change within the game system. This is remedied in the last definition of games to be mentioned here, which is the product of Jesper Juul's work.

Jesper Juul is likely one of the most well-known (video) game scholars, and his monograph *Half-Real* is often mentioned as a well-rounded introduction into the world of ludology and the video game subject. It is there that he also examines previous game definitions and tries to find the common ground between them to ultimately arrive at his own, somewhat expanded definition. Juul draws up a list of six essential features that form the baseline for his definition, and are reproduced here (see 36):

- Rules
- Variable, quantifiable outcome
- Valorisation of the outcome: This implies that each potential outcome is assigned a specific value, which can be either positive or negative.
- Player effort: In order to influence the outcome, players must take actions within the game system. This may be more or less challenging depending on the desired outcomes.

- Player attachment to outcome: This feature describes an emotional involvement with specific outcomes. It is also one of the areas most strongly influenced by immersion.[19]

- Negotiable consequences: Playing a game can either include or exclude real-life consequences - playing the card game *Blackjack* with your friends or family will likely not have severe repercussions, but playing the same game at a casino may very well result in big monetary gains or losses. This is also true for any games played in a tournament setting.

Juul then summarises all these aspects in one sentence: "A game is a rule based 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 emotionally attached to the outcome, and the consequences of the activity are negotiable" (*Half-real* 37). This, then, makes up the entirety of what constitutes a game, in Juul's words.

Recalling some of the points of critique discussed beforehand, Juul appears to strike a good balance between retaining central aspects of earlier definitions, while expanding on some other issues. As many before him, he maintains that a game, at its most reduced and basic, is a system built upon a specific set of rules. In relation to the player, these rules are usually understood to manifest in the form of limitations - actions that can be taken, and those that remain beyond the players' reach within the bounds of the game.[20] These limitations are not necessarily intuitive, although sometimes they may be - a wall may be an obvious choice to 'naturally' guide the player's movement within the game space - but it is likely that visual elements may suggest potential actions that are not available to the player.[21]

Rules are also one of the constituting factors of games' artificiality; they are understood to make games inefficient, because it is assumed that the rules exclude the most efficient solutions to a challenge or problem, in order to allow either more creative or otherwise guided play. Suits is credited with one of the most poignantly negative statements regarding the topic: "To play a game is to engage in activity directed towards a specific state

---

[19]The concept of immersion, which one may know from its use in other types of media studies, will be discussed in a bit more detail in a later section of the thesis.

[20]There is a possibility that one may argue that a player is not entirely bound by the rules of their object of play. The exploitation of faults within the game system, so-called bugs, is not uncommon, and neither is the controversial action of cheating. This, however, will be excluded from further contemplation - if interested, Cardoso and Carvalhais' "Breaking the Game" (2013) may shed further light upon the topic.

[21] Juul himself, in the article "On Absent Carrot Sticks", offers an illustrative example in his description of the gameplay contained within the game *Cooking Mama*, where carrots can be sliced, but not cut into sticks, although no logical explanation is given. Cutting carrots into sticks within a game that asks the player to prepare meals does not seem to be a particularly odd expectation, yet the action is off limits for the player (see 173).

of affairs, using only means permitted by the rules, where rules prohibit more efficient in favour of less efficient means, and where such rules are accepted just because they make possible such activity" (48). A distinct perspective is offered by Tulloch, who aims to position rules as a creative principle, the most basic of which enables play (see 339-340).

Another aspect that Juul retains from earlier game definitions is the existence of an outcome, i.e. the state which lies at the end of a game, or at the least a play session. Arguably this implicates the existence of a goal or objective players work toward, although it should be kept in mind that it is not explicitly mentioned.[22] In any case, Juul's definition positions games such as the simulation game *SimCity*, which would have been excluded by Salen and Zimmerman before, just at the border of the game-medium, as Juul himself attests (see *Half-real* 47). This is to be expected, however, as any general definition cannot perfectly encapsulate all actual products, just as the description of a prototype will never include all individual realisations.

One thing that Juul's definition does in particular is assign the player a much more central role within its conception. He does not go as far as some scholars do, who argue that a game is only such when it is played, or in other words that the absence of actual play invalidates any game status.[23] Nevertheless, if compared to previous definitions, where only the barest mention is made to the human interactor, the player and his influence within the game, as well as his attitude towards it, are considered in three of Juul's game features: valorisation of outcome, player effort, and player attachment.

While, for this particular thesis, the possibility of consequences beyond the game is not relevant[24], the player and his relation to the game as a system is an important basic concept for a study concerned with an aspect of interactivity. Interaction can, after all, only be realised when two participants act and react to each other. This, then, is the reason why, among the considerable number of different definitions available, Juul's is the one that seems the most suited for the thesis and will be the one implicit, when reference to a game as such is made.

---

[22]Depending on whether or not one considers goals implicit, the reservations of Harrigan and Wardrip-Fruin regarding Salen and Zimmerman's definition still apply to Juul's conception of a game as well.

[23]This statement automatically begets the question of what, then, is that which remains even when a game is not played? What about the chess board and its pieces and rule book? Or the levels and avatars of a *Super Mario* game?

[24]These real-life consequences are most likely to be discussed in connection with games that allow for competition or heavily rely on chance, i.e. games that would correspond strongly to *agôn* or *alea* to use Caillois' terms.

2.4. Video games as digital media

The last aspect that remains to be clarified about the status of video games as subject of ludology at large is their digital properties, i.e. that which distinguishes video games as their own sub-category within the more general category of games.

The name as such, perhaps even more pronounced when calling them computer games, already implies the strong connection between digital technology and video games. Some basic definitions do not even go beyond that fact. Kocher, for example, writes that computer games, as she chooses to call them, are those games that are produced with the help of digital technology, and experienced via a screen (see 11). That is certainly not wrong, but there are more factors that should be mentioned when dealing with a videogame in an academic context.

The first of these is its status as a multimodal medium. As Ryan and Thon explain, multimodality[25] is applicable, when "different types of signs combine within the same media object - for example, moving image, spoken language, music, and sometimes text in film (10)". The types of signs encountered in video games include those mentioned by Ryan and Thon[26], but its interactive nature also allows for other types - consider the vibration function of many of the more recent controllers, which can be used to alert the player about their in-game avatar taking damage, for example.

Multimodality as a characteristic feature of video games has a lot to do with technological affordances and developments in hardware and software, and certainly is dependent on things such as the screen Koch mentions. Many types of signs have become increasingly important the more sophisticated the technology behind it has grown. The inclusion of voiced character speech or almost cinematic visuals would have been hard to imagine in the early days of the medium, but is hardly unusual for games published nowadays - the Playstation game *The Last of Us* can serve as an impressive example of this.

Apart from multimodality, which of course can also be used as a descriptor for other types of media, there are other aspects which are more exclusive to video games as a digital

---

[25] Multimodality is sometimes used as a synonym for multimediality. To avoid confusion between the two common meanings attributed to medium, i.e. "a channel or system of communication, information, or entertainment" or the "[m]aterial or technical means of artistic impression" (Merriam-Webster Online Dicitionary), which are therefore implicit in multimediality, multimodality will thus be used in this thesis to describe the use of more than one type of sign in one product.

[26] This also explains one very large factor of why many researchers from other types of media studies are interested in studying video games, as some of the modes employed by video games are likely to also find use in other media. Long, graphically elaborate gameplay sequences, which include e.g. character speech or camera movements, will feel familiar to someone involved in film studies, to give an example.

medium. Ryan has put together a list of four features of digital media, all of which also apply to video games.

- "Interactive and reactive nature: the computer's ability to take in voluntary or involuntary user input and to adjust its behaviour accordingly.
- Volatile signs and variable display: what enables bits in memory to change value, causing pixels on the screen to change color. This property explains the unparalleled fluidity of digital images.
- Multiple sensory and semiotic channels: what makes the computer pass as the synthesis of all other media.[27]
- Networking capabilities: the possibility to connect computers across space, bringing their users together in virtual environments (Ryan *Avatars*, 98).

Additionally, Ryan makes a reference to programmability as an underlying principle, i.e. the fact that all digital systems operate on the basis of algorithms (see ibid.). Wolf and Perron also mention the algorithm as "the heart of every video game program", as it is "the program containing the set of procedures controlling the game's graphics and sound, the input and the output engaging the players, and the behaviour of the computer-controlled players within the games" (15-16). This feature therefore defines the technological core of every digital system and product, including video games, but the study thereof belongs much more strongly to the field of e.g. computer engineering, and will not be at the forefront of this thesis.

Similarly, the networking capabilities are an indispensible aspect for a large number of video games, including entire video game genres like the MMORPG, and any type of multiplayer experience, but they only come into play for a very tiny part of the three games chosen for the construction of the typology, and thus largely lie outside this paper's scope.

The feature which is absolutely indispensible, however, is interactivity, which is defined by the interplay of action and reaction of both players and digital systems. If one does indeed consider the computer the synthesis of all other media, as Ryan has suggested, then apart from mere technological properties such as the necessity of screens or algorithms, interactivity marks the only novelty about the computer. Or, as Crawford puts it: "The only factor that is truly new and revolutionary about the computer as a medium is interactivity" (*Interactive* 262).

Interactivity as such is not a new idea, and certainly has been around before the advent of digital systems. Games have, of course, always been dependent on interactivity - playing a game essentially means interacting with both its material assets and the rule system which shapes it. Many of the definitions of games, which were discussed earlier, therefore imply

---

[27] Ryan's particular phrasing may seem hyperbolic, but she does refer to a very essential capability of digital systems, including video games - their multimodality.

interactivity; whenever the player takes action within the game system to achieve a goal, interactivity occurs.

Nevertheless, interactivity as a concept has developed strong connections with digital technology. If one looks up 'interactive' on the online version of the Oxford Learner's Dictionary, the second definition is the very broad idea of "involves people working together and having an influence on each other", but the more specific "allows information to be passed continuously and in both directions between a computer or other device and the person who uses it" is actually the first one presented to a reader.

Both the general and the specified dictionary entries make it clear that interactivity presupposes two involved parties, either people or devices, and that actions taken have an impact of some sort. In order to gauge this impact, it is necessary that feedback is made available to the user or acting participant, which, in the case of video games and digital systems in general, means that feedback mechanisms must be programmed into the software (see Ensslin 48). With regards to digital texts, Ryan describes how this results in a

> feedback loop that sends information from the user's body and its extensions (mouse, keyboard, joystick [...]) to the processor, often through the mediation of a virtual user body; from the processor to the display, which is modified by the execution of the command issued by the user; from the modified display to the mind of the user; and back to the acting body. (*Narrative across Media* 329)

The communication between a user and a digital system, which enables this feedback loop, occurs at the so-called interface, which can include both material objects, as well as sound or images on the screen. In more detail, "[it] can include such things as the screen, speakers (and microphones), input devices (such as keyboard, mouse, joystick [...], steering wheels [...]), as well as onscreen graphical elements such as buttons, sliders, scroll bars, cursors, and so forth" (Wolf and Perron 15).

Actions that a user can take within the game are connected to a specific input method, and in that way translate the real, physical action of the player into another action that the player character within the game undertakes. To provide some rudimentary examples of player input in video games: Pressing the space bar on the keyboard may cause the character to jump, while pushing the 'right arrow' button might lead to character movement to the right, and pressing the circle button on the Playstation controller could lead a character to attack an enemy.

These above-described instances should also make clear how integral an active participant is to a game - without them it would grind to a halt, and its content could not be

experienced, until user input finally takes place. In that sense interactivity is certainly one of the most essential properties of video games.

When considering video games a modern sub-category of traditional games, however, interactivity as a feature does not necessarily stand out - games have always been interactive, after all. But if one sees video games, and other digital formats such as the hypertext[28], as new creative media along the lines of art, literature or films, then interactivity becomes an exciting new development and a distinguishing feature. In the latter case interactivity marks the progression from passive audience to active participant.

Keeping in mind all of the above deliberations, video games can be defined as a multimodal medium, which makes use of visual, auditory and sometimes haptic signs, and is dependent on hardware such as gaming consoles, computers, controllers and screens in order to be experienced. At its heart lies interactivity, i.e. the mutual influencing between players and game systems, which happens in consequence to the player's input and the system's output on either one or several of the different modal channels. In order for this to be possible, video games and their attached hardware systems rely on the feature of programmability and the existence of algorithms, which regulate both the designed game as such and the player-system interaction.

Making an impact on a story, that is to become an active participant on the narrative level as a recipient, is only possible whenever interactivity is explicitly instrumentalised, as is the case for video games, or some experimental theatre and film productions[29]. Understanding video games as an interactive medium is therefore of utmost importance - but so is realising how and when narrative comes into play, which is why the following section will largely be concerned with conceiving of a narratology applicable to video games, as well as becoming aware of how narratives have been incorporated into video games up until now.

---

[28] Nelson defines hypertexts as "forms of writing which branch or perform on request; they are best presented on computer screens" (314). This often takes the form of a reader exploring the written text via links (how we would nowadays interact with e.g. the online encyclopeadia Wikipedia), and thus generally includes interactivity only in terms of influencing the order in which the separate fragments of the text are presented.

[29] One such theatre production is *The Rocky Horror Show*, where the narrator and the audience frequently trade comments, and interaction on part of the audience is encouraged.

3. Narrative in video games?

"Did you move the story somewhere, or... Hold on, why am I asking you? I'm the one who wrote the story. It was right here just a minute ago. I know for sure that it's here somewhere. [...] Come, Stanley. Let's find the story!" (*The Stanley Parable*)

3.1. A media-conscious narratology

When discussing narratives and narrative features in video games, there are two things one should be reasonably sure about: What is a (video) game? And: What is a narrative? These questions are, not surprisingly, not as easy to answer as it might appear on a first glance. As has been illustrated in the last chapter, trying to answer the first question has led to a number of incongruent definitions, often foregrounding different features and using different terminology. Narratology has been around for longer than ludology and its related subsections, but even so one encounters a number of differing perceptions as to what is to be considered a narrative.

When dealing with a new medium, in this case one that is reliant on technology and digital systems, it is, of course, not possible to merely take any definition of the narratological subject as a working one, similar to how scholars had to adapt concepts, models and theories to discuss how movies convey their stories to the audience. Both films and theatre productions are widely considered narrative media nowadays, even though explicit narration is a rare occurrence for both of them and some definitions of a narrative presuppose the narrator as fundamental part, describing a narrative as "someone telling someone else that something happened" (Smith 232), i.e. ultimately a speech act. Equating story-telling with a speech act would, however, exclude the majority of dramas, as well as movies and, unfortunately, also video games.

Adopting a concept of the narrative which also allows one to discuss narrative structures in video games requires a step back from established categories like narrators or implied readers, and taking on a broader scope again, which loosens the ties between the narrative and a specific medium. One of the strongest arguments for a medium-independent concept of the narrative lies in the fact that stories may be told in different media and still remain recognisable as the same story. Commenting on this phenomenon, Chatman states

clearly that "[t]his transposability of the story is the strongest reason for arguing that narratives are indeed structures independent of any medium" (20). Even earlier than Chatman, Claude Bremond writes that

> [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 we follow; and it could be the same story (ibid).[30]

The large number of movie adaptations of literary works that have been produced may serve as illustrations of this point - the movie *Pride and Prejudice*, starring Keira Knightly and published in 2005, the 1995 TV mini-series of the same name, which was produced by the BBC and features Colin Firth, as well as Jane Austen's famous novel, will all be recognised as essentially telling the same story, despite not belonging to the same media categories.[31]

The existence of a narrative structure, which is not dependent on a specific type of media, should not be taken as disregard of the differences between each medium. Doing that would diminish much of the creative potential and, in the case of video games, lead to negation of ludic elements in favour of sometimes very basic narrative ones, just as ludologists feared in the early days of video game studies. Instead it is important to be aware of both similarities and differences between media with regards to their narrative potential and affordances. In a work of literature it will seem natural to partake in characters' thoughts and to gain insight into their emotional states, but the same thing is not as easily done once the medium changes to a visual one. On a stage or on television actors need to convey emotions as much through body language and facial expression as through spoken words, while directly sharing characters' thoughts becomes possible only through instances of explicit narration, diverging from typical visual story-telling. On the other hand it becomes much simpler to convey space through a camera lens, where a single shot can deliver a wealth of detailed information, which would have to be spelled out minutely in a novel, causing a pause in story-time.

Simple examples such as the above showcase that each medium has different strengths and weaknesses, making some narrative aspects easier, others more difficult to convey.

---

[30] This is a translation by Chatman of the original French passage on the fourth page of Bremond's *Le message narratif*.

[31] This will only hold true as long as the adaptations are made with the intent to stay true to the original material. If that is the case, a recipient familiar with one version will recognise the central story elements, even if e.g. the titles differ.

"Medium imposes its possibilities and limitations on the user. [...] [W]e select media for their affordances, and we work around their limitations, trying to overcome them or make them irrelevant" (Ryan, *Narrative across Media* 19). Each medium has its own combination of modes, which may be prioritised to different degrees - the opera will depend much more heavily on musical elements than a video game, and even though the latter often includes written text, it is a much more central part of literature. In a narrative medium these things decide "what kind of narrative messages can be transmitted, how these messages are presented, or how they are experienced" (ibid.).

In order to study narrative across media, Ryan has proposed a definition of narrative that foregoes the traditional communicative model, and instead focuses on three features that any text, both verbal or non-verbal in nature, must include. She posits that narrative texts have to

- create worlds, which are populated with characters and objects. These are the existents, each of which has to be ascribed properties. This can be understood as static - a world frozen in time, where both characters and e.g. aspects of the setting are determinable, but fixed.

- include changes of state. Either through accidents or deliberate actions the initial state of the storyworld changes. Characters may move to different places within the storyworld, important items may be lost, or a natural catastrophe may occur, to name just a few possible moments of impetus. This is also how a temporal dimension is introduced - where the first feature is static, this one makes the storyworld dynamic through the introduction of events.

- allow the reconstruction of an "interpretative network of goals, plans, causal relations, and psychological motivations around the narrated events" (Ryan, *Narrative across Media* 9). It is here that establishing coherence and intelligibility takes place. The above-mentioned changes of state, which occur because of events within the story, can now be connected in a logical manner and be conceived as a plot (see *Narrative across Media* 8-9).

To illustrate the three features briefly, one may consider the following example: The storyworld features an existent in the form of the character 'Mr Doe', whose properties include 'living alone in an apartment', or 'working at a law firm'. Two events take place in the form of event A 'Mr Doe witnesses a crime' and event B 'two days later Mr Doe is found dead in his apartment'. A change of state has occurred, as Mr Doe's associated properties

have changed from 'alive' to 'dead'. The third of Ryan's features of the narrative text can be identified when a connection between the two events is drawn - 'because Mr Doe witnessed a crime he was killed, and his body discovered two days later in his apartment.' This is, of course, only a very rudimentary plot construction, but it exhibits each of the narrative features needed according to Ryan's characterisation of the narrative. [32]

What makes Ryan's description of a narrative more widely applicable to a number of different media, including non-verbal ones, is that narrative is disentangled from instances of speech, and instead located within the spheres of textual representation and cognitive constructs, which are created by the audience as result of interpretative processes (see *Narrative across Media* 9). On a spectrum from the narrative as a purely verbal phenomenon to its characterisation as a medium-independent phenomenon, Ryan is firmly located at the latter end. For her "[n]arrative is a medium-independent phenomenon, and, though no medium is better suited than language to make explicit the logical structure of narrative, it is possible to study narrative in its non-verbal manifestations without applying the communicative model of verbal narration" (*Narrative across Media* 15).

Video games, which depend on a combination of different modes to transport information and narrative constructs to their players, can only rarely be analysed on the basis of narrative as a speech act.[33] This is why definitions such as Ryan's are particularly useful - by characterising narrative as largely medium-independent, it allows research to be conducted on newer and perhaps more experimental developments of narrative media. Nevertheless, as Ryan emphasises by acting as editor for a number of works published under names calling for a media-conscious narratology, understanding narrative as a medium-independent phenomenon also enables one to discuss medium-specific issues and affordances, thus remaining conscious of differences between media.

It will not be surprising that a medium, which takes pride in interactivity as its distinguishing feature, has led to the development of narrative structures that differ in many ways from traditional ways of story-telling. To understand how player choice affects a game on the story level, it is first necessary to look at how narratives are integrated into video games in general. The following section will therefore give an overview about both types of narrative structures in video games, and terminology central to the topic.

---

[32]This also shows that discussing narratives, regardless of medium, is not an exercise of value judgements. As Ryan herself makes clear, even „[a] narrative that falls flat is still a narrative" (*Narrative across Media* 9). Similarly, criticising a lack of complexity in narratives within a specific medium does not strip it from its status as a narrative medium.

[33] One example where it might be fruitful is the game *Tales from the Borderlands*, which makes use of two different narrators telling in principle the same story from different perspectives, which leads to some, often humorous, contradictions.

3.2. Narrative structures in video games

Even in their early days, video games arguably used the promise of a story to draw a potential player in, and situate a given game within a more easily relatable fictional context. Juul makes reference to these back-stories, as he calls the rudimentary narrative constructions evoked by things like e.g. the title, illustrations, or short summary-like paragraphs on the back of the packaging. *Space Invaders*, published in 1978, may serve as a simple example: It necessarily had to rely on very limited in-game graphics and not particularly intricate game mechanics, so much of the information about the setting and the role the player occupies within the game space had to be delivered through other means. Juul paints the suggested narrative in the following terms: "An invasion presupposes a situation before the invasion. It is clear from the science fiction we know that these aliens are evil and should be chased away. So the title suggests a simple structure with a positive state broken by an external evil force. It is the role of the player to recreate this original positive state" (*Games Telling*, par10)

Constructing a narrative such as this from the limited information given by packaging, title and minimalistic in-game graphics ultimately necessitates a lot of guesswork and genre-knowledge from potential players, but fortunately the available technological means have expanded since then, and with it the ways in which narrative structures can be implemented within individual games.

Jenkins distinguishes four different ways in which narratives are realised in video games and lists evocative spaces, enacting stories, embedded narratives and emergent narratives as categories.

The earlier example of the narrative of *Space Invaders*, whose construction relies largely on the knowledge of genre conventions, is an example of story construction through what Jenkins calls 'evocative spaces'. These are spaces that either clearly fall into certain genres with established general settings, rules and tropes, or connect to already existing and often well-known narratives, e.g. the video games *American McGee's Alice* and its sequel *Alice: Madness Returns*, which are interpretations of Lewis Carroll's *Alice in Wonderland*, re-imagining popular characters in a psychological horror setting. Despite very rudimentary technological means, as in the case of *Space Invaders*, or shifts in genre, like showcased in *American McGee's Alice*, the spaces serve the construction of a narrative, because they call upon pre-existing cultural knowledge to further the telling of its stories - it is precisely in this sense that they are evocative.

In many cases the resulting narratives are quite simple, because few concrete details are given, and rather than a story a setting is established.[34] "Such works do not so much tell self-contained stories as draw upon our previously existing narrative competencies. They can paint their world in fairly broad outlines and count on the [audience] to do the rest" (Jenkins, *Narrative Architecture* par19). Jenkins points out that this does not make games depending on evocative spaces failed narratives, and rather sees them in the larger context of transmedia storytelling. Making reference to an old *Star Wars* game, he comments that "the *Star Wars* game exists in dialogue with the films, conveying new narrative experiences [...]. One can imagine games taking their place within a larger narrative system with story information communicated through books, film, television, comics, and other media" (*Narrative Architecture* par20), rather than re-hashing e.g. the plot of a film.

Making use of such a shared universe across various media can also be a convenient way to establish a basic narrative upon which to build upon, however. Such is the case for Telltale Games' *The Walking Dead*, which situates itself in the post-apocalyptic story-world prior established by Robert Kirkman in his comic-book series *The Walking Dead* and AMC's identically named popular television series. Some places and characters are revisited in the game, and the basic premise of the zombie apocalypse and its repercussions on 'normal life' are taken over from the print and TV publications. While each of the different media products can be experienced separately, they may also serve to present a more complete picture of a larger storyworld by answering questions such as 'what happened to character A while they were not part of the TV series' narrative'.

If answering a question like this is a central part of the story told within a game, one often experiences those by enacting stories, which constitutes the second of Jenkins' narrative categories. He returns to the example of Star Wars and explains "Most often, when we discuss games as stories, we are referring to games that either enable players to perform or witness narrative events - for example, to grab a lightsabre and dispatch Darth Maul in the case of a Star Wars game" (*Narrative Architecture* 21). To enact a story means to partake in it, rather than remain a passive member of the audience - it is on a very basic level what happens when a narrative medium becomes interactive. A player is put into the shoes of an entity within the game and experiences the unfolding story only when taking action as this entity, like in Jenkins' example of grabbing a lightsabre and engaging in a battle.

This particular category, enacting stories, is the result of carefully pre-designed narratives, e.g. in adventure or RPG games, which to some extent limit a player's choice to act

---

[34] This can also be inferred from the name of this category: In contrast to the other categories Jenkins establishes in his article, 'evocative spaces' is the only one which does not directly refer to either story/narrative.

within a game in order to be able to present a coherent and conclusive narrative. This is often a point of contention, as either player participation is framed as threat to the development of a coherent story, or the inclusion of a narrative thread which the player has to follow is conceived as an infraction on the player's agency and freedom of choice (see *Narrative Architecture* par24). These arguments become particularly clear when a game designer divides their game into interactive play sections, i.e. fighting enemies or completing races, and story sections presented in cutscenes, where the player is relegated to the role of the audience of a short film sequence. These can seem particularly jarring when they do not fit with the user's play experience - when a player wins all of the battles in the interactive section, but then witnesses their player character be easily knocked out by an enemy during a cutscene, this does not seem like a coherent development.

Many more recent games, however, make an effort to integrate aspects of story-telling into the playable parts of the game to avoid player frustration, which makes Jenkins' concept of enacting stories more relevant than ever. Not only are there whole genres of video games known for their inclusion of carefully designed narratives, but the fewer players find themselves in the role of the spectator in a game with narrative aspirations, the more often they actively enact the story. Arguably, this therefore makes up the biggest of Jenkins' four categories.

On the opposite end of narrative game design one would find the so-called emergent narratives - they are the free-form to the enacting stories' strict pre-design. "Emergent narratives are not pre-structured or pre-programmed, taking shape through the game play" (*Narrative Architecture* par31). Every video game operates on the basis of a programmed set of rules, so as a whole they can never be 'not pre-structured or pre-programmed', but in some cases the programming does not include a clearly defined narrative, even though the setting might suggest it. These sandbox games offer the player a world to play in and conceive their own stories, as *The Sims* illustrates. *The Sims* invites a player to create their own characters and take control of their everyday lives, deciding which activities they will perform - cooking, sleeping, repairing the sink? - which job they take on - chef, entrepreneur, astronaut? - and how their relationships develop - fighting with their neighbours or starting a romantic relationship with their co-worker? Through making these, often mundane, decisions, the life story of each of the player's characters takes shape, and allows a unique narrative to emerge from the sea of possibilities.

Enacting stories and emergent narratives constitute two opposing poles of Jenkins' narrative architecture, but video games offer many opportunities to include either

micronarratives that serve to enrich the games' storyworld, e.g. the books one can find and actually read in the *The Elder Scrolls V: Skyrim*, which include legends, mythological texts and even just adventure stories set in its storyworld, or narrative information that either adds depth to the main plot, but is not necessarily essential to understanding it, or offers additional, but on the whole redundant, opportunities to discover the main narrative, to ensure that every player may experience a coherent story. "Within an [...] exploratory narrative structure like a game, essential narrative information must be redundantly presented across a range of spaces and artifacts, since one can not [sic!] assume the player will necessarily locate or recognize the significance of any given element" (Jenkins, *Narrative Architecture* par26). These are the so-called embedded narratives, spaced out and sometimes hidden within the expanse of a game.

Jenkins' types of narrative architecture certainly offer a helpful starting point and allow for categorising the majority of ways a game designer might go about implementing narratives in their game, but it is not sufficient to describe what happens when the product is out of the hands of the developers and subjected to interaction on the side of the players. Games which allow for varying narrative experiences of its players, beyond the reading of non-essential embedded story-material, necessarily require an extended set of terminology.

Cardoso and Carvalhais have shifted their point of view away from the game designer and opted for a look at what happens to the game's narrative in action, coming up with a complementary set to Jenkins' structures. Where 'architecture' implies a rigid construct, Cardoso and Carvalhais inspect what they call the 'traversal' of the narrative, as it is done by the player, ever changing and shaping their individual narrative experiences.
According to the proposed categories, player interaction with the narrative can be differentiated along five categories, four of which are relevant to the shaping of the narrative as intended by the game design, while the last category is a description of irregular player behaviour, namely the exploitation of faulty game design, so-called bugs or glitches (Cardoso and Carvalhais, *Breaking* p24f). As behaviour of this category usually does not lead to a complete and varied narrative experience, but rather causes errors within the game and the narrative, it will not be discussed further.

The three most prevalent types of narrative traversal are branching, bending and modulating. Branching describes the realisation of the story development when a player has made a choice between mutually exclusive paths. To illustrate this system, tree diagrams are commonly made use of, as they showcase the many different paths a player may take, while also making clear that one cannot jump between the different diverging paths. It should be

noted, however, that video games allow for the traversal of all of these diverging paths in subsequent playthroughs[35]. Branching is often the most clearly realised form of narrative traversal, as it has the most easily notable impact on the overall story e.g. when the player has to choose which of two characters to save. A well-known example is found in the science fiction action-adventure game *Mass Effect*, where the player has to make the choice to save one of two soldiers, either Ashley or Kaidan, both playable characters[36], leaving the other one to die in the line of duty. As the character who has been left behind dies, they become unavailable for the rest of the game, which closes the player off from any story content involving the character. *Mass Effect* is a particularly notable example, because the choice made in this moment carries over to the next two games in the series: Depending on who the player has chosen to save, either Kaidan or Ashley will partake in scenes in the second game, and become playable characters again in the third game.

Where branching marks major divergences in individual story experiences, which exclude a player from some parts of the overall designed possible storyworlds - a character cannot be simultaneously alive and dead, to give an example, both bending and modulating refer to the manifestation of more subtle narrative differences. Bending occurs whenever a player "is able to explore optional non-mutually exclusive paths, lengthening the game and even experiencing parallel narratives" (*Cardoso and Carvalhais*, Breaking 26). In recent years many larger game developers have opted for developing so-called open world games, which offer an enormous programmed space for players to explore. These type of games not seldomly provide material for more than a hundred hours of playtime. Nevertheless they may often also be completed in a matter of hours, if one only follows the main story. All that occurs apart from major story events would then be categorised as bending: embedded narratives, such as diaries of an NPC one might find, caves or larger game areas encountered off the main roads, or quests activated by talking to NPCs that are not important to the main story. Open world games, such as *The Elder Scrolls V: Skyrim*, *Fallout 4* or *The Witcher 3: Wild Hunt*, often actively encourage exploration, because otherwise large parts of the product remain unplayed - but technically all of these activities remain optional. Bending often serves the purpose of providing longer play time, as well as more in-depth information about the storyworld, and this in turn makes games feel more immersive and in some cases more realistic. If one decides to wander around a game area instead of immediately travelling to the next bigger city where the main story will continue, and one encounters an inn along a road,

---

[35] A playthrough can be defined as the completion of a game from beginning to end. If, afterwards, the player replays the game, they start a new playthrough.
[36] Playable characters are those characters within a game which a player may control at a given moment, as opposed to non-playable characters, or NPCs, which are only controlled by the program.

filled with characters each with their own stories, it feels much more natural than not encountering any other person along the whole way; but these smaller events will not be part of every player's play experience, as not everyone will take the time to engage in conversation with NPCs. The purpose of bending also makes the content's non-mutually exclusive status understandable, as this ensures that a majority of the optional content remains open to the players.

The third of Cardoso and Carvalhais' categories is termed modulating, and serves to reinforce the consequences of narrative player action continuously throughout a game. As Cardoso and Carvalhais explain, „[m]odulating is possible when the player is able to craft relationships, and to regulate the disposition of characters [...] in the game towards the playable character and/or between themselves" (*Breaking* 27). A very rudimentary example of this can be found even in *Pac-Man*: The usual set-up places the ghosts as pursuers of Pac-Man, which means the player must evade them, but upon consumption of a power-up the roles change and Pac-Man becomes the hunter instead of the prey, if only for a limited amount of time. This is an early example of a changed relationship between game elements.

In general, modulating takes social roles and behaviour as basis for in-game structures, which is why modulating has become more common in recent years, as imitating changeable social structures in more depth often also requires higher technological capability. Telltale Games' *The Walking Dead*, which will be afforded a more in-depth analysis later, illustrates this category very well. One of its main objectives lies in developing and managing the relationships between a diverse group of characters, whose only commonality is their survival in a post-apocalyptic world. Depending on choices the player makes as the playable main character Lee Everett, the in-group dynamics change over the course of the game, as tensions may arise or alliances are forged. To provide a more concrete example, one can look at the developing relationship between the protagonist Lee Everett and Kenny, a character met early on in the game, who remains part of the core character group either until the end or very late in the game. Kenny's relationship with Lee is largely dependent on three factors: How much you agree with him and support his ideas, how well you treat Kenny's family, i.e. his wife and his 8-year old son, and how adapt you are at taking care of Clementine, a young orphaned girl Lee encounters early in the game, and who looks toward Lee as a father figure. As a reflection of the status of these three factors, Kenny's behaviour towards Lee changes quite radically: Kenny may act e.g. as trustworthy support, who has Lee's back even in spite of differing opinions, or his dialogue takes on a more antagonistic and angry tone, as he mistrusts Lee and accuses him of not caring about his family. Depending on which choices a player makes over

the course of *The Walking Dead*, the narrative they experience has Lee and Kenny placed as friends or distrustful companions, or even portrays an ambivalent relationship, if e.g. Lee tends to look out for Kenny's family, but does not agree with him on some important story decisions.

The last and most recent category Cardoso and Carvalhais have identified is the so-called profiling. This one is not as common, and, additionally, often not easily identifiable from the player's perspective. Like the technique used in criminal investigation, profiling as a term related to video games centres around behavioural analysis. In this case, profiling refers to how the video game may compile data on a player's playing style and choices in order to analyse in-game behaviour. This then allows the programme to adapt to the player in some ways, e.g. deciding on the appropriate ending, if there is more than one possibility. The example that Cardoso and Carvalhais bring up illustrates this technique well: The premise of the horror game *Silent Hill 2*, which was published in 2001, revolves around a man trying to deal with the aftermath of his wife's death, and offers three different endings as conclusions of the protagonist's struggle. To summarise briefly, the game either ends with the protagonist's acceptance of his wife's death, his inability to come to terms with what has happened, which results in the main character's suicide, or his delving into a new romance with a woman reminiscent of his wife. In order to reach either of the endings, not only does a player have to make specific choices in one time events, but also display particular behaviours over the course of the game. The latter may include things such as examining in-game items like letters, diaries or weapons, accessing certain in-game locations, listening to NPC conversations, or not doing the respective activities (see Cardoso and Cavalhais *Profiling* ch.1.5).

Another, more recent example of profiling in action can be observed in the first-person action game *Dishonored*. The player takes on the role of a queen's bodyguard, who is falsely convicted as her murderer when she is assassinated. He is able to escape from prison and goes on a quest to reveal the plot behind the queen's assassination, save her daughter and put the young princess on the throne as rightful heir. These goals can be achieved through two opposed playstyles: either one goes on a bloody quest for revenge, choosing violence as modus operandi, or one chooses a more peaceful and stealthy method and slips ghost-like through the game's world, with the goal of remaining undetected by any enemies. Depending on which playstyle a user favours, not only does the ending vary between either a chaotic or relatively peaceful future reign for the young princess, but the gameworld changes even as the user is still in the progress of playing the game. The more violent the playstyle, the darker and

grimier the surroundings get, as e.g. the rat populations in the different areas increase, the adversaries one encounters become more numerous, and the NPCs more hostile.

While profiling is currently still a relatively rare occurrence[37], in combination with the other of Cardoso and Carvalhais' categories, i.e. branching, bending and modulating, it allows one to describe the ways in which game narratives may dynamically adapt to player interaction. As such Cardoso and Carvalhais offer a complementary set to Jenkins' concept of more rigid narrative architecture. By shifting the focus from the game designer to the player, an important aspect that is allowed a more central role in Cardoso and Carvalhais' work is interactivity, or, as it often manifests, player choice. Which character a player chooses to save, decides which story branch they will be presented with; whether or not a player chooses to explore optional areas of a game-world, decides whether or not they will learn more about the game-world; which dialogue line a player chooses decides if they find an ally or an enemy in an NPC.

The above categories deal with the issue in broad strokes, describing overarching changes to video games' narrative structures. In order to understand how player choice is integrated into a narrative on a smaller level, it will therefore necessary to first consider the role of interactivity in video games in more general terms, and examine which aspects define a choice. Before that, however, a last narrative model shall be introduced to round out the discussion of narratives in video games.

3.3. Future Narrative - a narratology for video games

The difficulty of reconciliating interactivity on part of an audience with, what has hitherto been understood as a more fixed parameter, a narrative, has been the cause of much concern among literary scholars, as has been shown in earlier sections. There certainly are differences to consider when dealing with interactive media, as has been demonstrated earlier, and methodologies and analytic tools have often had to be either adapted or new ones conceived. The preceding section of the thesis has given insight into the broader narratological foundations needed, referring to the principles of a media-conscious narratology, but e.g.

---

[37]This pertains in particular to profiling as a means to develop a video game's narrative. Profiling as a means to change a game's technical parameters, e.g. adapting the enemies' level to that of the player, is more common. The opposite is true for branching, which is more common as a narrative structure than a mechanical one. The latter may still be encountered when a player has to choose e.g. a certain character class like the 'warrior', who would then be able to learn sword and shield skills, but no magic spells.

Ryan's defining aspects of a narrative remain necessarily vague. To analyse narrative constructions in a specific medium, more fine-tuned instruments are needed.

Developing a narratology suited exceedingly well to the needs of video game studies is an ambitious project, but, as of 2013, one such narratology has been proposed by Christoph Bode and Rainer Dietrich. Coining the term Future Narrative (henceforth shortened to FN), they postulate that a new type of narrative has become the centrepiece of a number of modern media. It is one whose orientation is geared towards the realm of unrealised possibilities, i.e. looking towards the future, rather than recounting events already passed and, proverbially, set in stone. As they state in their introductory paragraph, at the heart of the FN lies the notion of multiple possibilties:

> It does not only *thematize* openness [...] and the idea that every 'now' contains a multitude of possible continuations. No, it goes beyond this by actually *staging* the fact that the future is a space of yet unrealized potentiality [...] and by allowing the reader/player to enter situations that fork into different branches and to actually *experience* that 'what happens next' may well depend upon [...] our decisions. It might therefore be said that these narratives *preserve and contain* what can be regarded as defining features of future time, namely that it is yet undecided, open, and multiple, and that it has not yet crystallized into actuality. (1; emphasis in the original)

The steps of staging multiple possible future paths, and allowing an audience to experience them, are those which differentiate the FN from traditional ideas of the narrative. Moments of openness are certainly presented and thematised in products of traditional media: Whenever a character faces an important decision, or a turning point in a narrative is reached, the audience is presented with the idea of openness, as a story could conceivably continue in more than one way. When the protagonist Neo is offered the choice of either the blue or the red pill in *The Matrix*, it is possible to imagine versions of both possible continuations, but because *The Matrix* is a movie adhering to traditional story-telling principles, the audience will only ever be able to experience one way the story plays out.

If *The Matrix* belonged to the category of FNs, this would not be the case; rather than merely presenting a notion, the possibilities are made explorable to the audience. It would be possible to view both versions of the movie, without being given a definitive "correct" ending. This could be achieved by allowing the audience to partake actively in Neo's decision, e.g. via the push of a button on the remote control, or to view both versions one after the other. The first is reminiscent of the way video games engage their audience, i.e. making the experience an interactive one, while the latter has occasionally been employed in traditional media - consider the movie *Run Lola Run* directed by Tom Tykwer, or Fowles'

novel *The French Lieutenant's Woman*, both of which offer multiple points at which the story comes to an end, before presenting another way in which it may find its closure.[38]

Instances of narrative branching, as can be observed in the examples above, become the FNs central feature. Instead of focussing on events as a narrative's minimal unit, the FN uses nodes as its building blocks. These are defined as a „situation that allows for more than one continuation" (Bode and Dietrich 1), but it is not a prerequisite that a choice can be made on part of the audience in order to constitute a proper node and thus a FN, even though one may get that impression, in particular if dealing with video games as FN. It suffices that a character is presented with a choice and at least two different continuations are then presented to constitute a nodal situation. And, in order for a narrative to be considered a FN, it is necessary that it contains at least one such node, since otherwise it would simply be a traditional narrative structure[39].

As Bode and Dietrich remark, it is far more common to encounter FNs which offer more than one such nodal situation, each of which may allow for more than two possible continuations, or „a spread of continuations" rather than simple bifurcation. The earlier definitions merely detail the minimal requirements of a FN and state its multi-linear nature[40] (see 16-17).

Bode and Dietrich further distinguish between two main types of nodes: overt and covert ones. As the nomenclature implies, their distinction lies in whether or not they are recognisable as nodes, whenever a nodal situation takes place. Overt nodes are the ones clearly recognised as such: If one considers the earlier mentioned example of *The Matrix*, a choice between two pills, which are both visually distinctive and whose ingestion each entails clear consequences, it becomes easily recognisable that this would be a node within a FN, i.e. a branching point for the narrative.

A node can be classified as covert, when it is not made explicit that a different path could have been taken. On a mechanical/non-narrative level this can be visualised as a secret

---

[38] It has been questioned in how far those endings may be conceived as equal, i.e. if it can be possible that the last ending does not appear as the so-called 'definitive one', if its appearing last is a consequence of authorial/directorial intent. When the first ending of *The French Lieutenant's Woman* leaves one with roughly a quarter of the novel still to go, it seems natural, in accordance with a traditional reading experience, to somewhat disregard it, in lieu of whatever will be presented in the final chapters of the book. Similarly, *Run Lola Run*, despite multiple instances where the plot finds its end and is reset, is almost presented as a puzzle, where each rendition of the story allows one to get closer to the solution, thus seeming more like a piece of the puzzle, rather than a conclusive ending.

[39] It should be noted that this does not mean that a FN does not contain events; indeed one could also summarise any FN as a series of events in hindsight, but that would lead to an omission of the FNs defining feature (see Bode and Dietrich 2).

[40] This in opposition to the mono-linear plot-structure of traditional narratives. The concept of linearity still remains pertinent, as can be seen when branching narratives and FNs are visualised as tree diagrams of varying size and complexity.

path, or a shortcut one did not know[41]. An example of the narrative type can be found in some conversational choices within video games, where a player is provided with a menu of possible sentences to choose from, but is not made aware of the fact that they may also choose none of the provided options, thus leaving the game to continue on while the player's character remains silent, which is registered by the game as a choice made. In many cases the existence of such a node is only made known during a later part of the FN, or perhaps even outside of the specific product, e.g. in a conversation about said FN.

A last nodal category Bode and Dietrich comment on is that of the mock- or pseudo-node. These terms may refer to any such node which appears to offer a choice and a consequential branching of the narrative, but turns out to merely continue on in a completely linear fashion, regardless of choice. This type of node is actually no node at all, and may thus be mostly disregarded (see 49-50).

Summarising the properties which constitute a node, Domsch writes that „a situation is nodal if it allows for more than one continuation, which means that the two continuations that are both possible from one point have to be different from each other. The state after the node can only be one or the other, not both at the same time, they are mutually exclusive. And yet, from the nodal situation, each of these (...) is possible to be actualised " (1).

While Bode and Dietrich locate the FN both within some traditional media like film, e.g. *Run, Lola, Run* or *Blind Chance,* or literature, e.g. *The French Lieutenant's Woman* or *To Be or Not to Be*[42], or even in current historical events (see 162ff), Domsch uses this concept exclusively to analyse narrative construction within video games. This particular subject choice also entails setting the focus entirely on nodes as an interactive moment for a participating audience, rather than showcasing equally viable scenes one after the other, without any outside involvement at all. Thus, as becomes clear quickly, within the context of video games, nodes take on the guise of player choice. Therefore, the next section will return to the earlier mentioned concept of interactivity and player participation, as well as considering which are the most important characteristics of choices in general and as a narratively significant action.

---

[41]To provide an example from the video game medium, one need only look to the well-loved *Mario Kart* racing game series. A considerable number of the different levels offer shortcuts in the form of hidden paths, often outside the marked racing track. These are either discovered by chance, or require some form of prior knowledge.

[42]It is interesting that Ryan North's humorous take on *Hamlet*, which he presents as a FN, has, some time after its print publication, also been converted into a digital, game-like version, which is now sold on various gaming platforms.

4. Player choice as central video game element

"Choice. It's the best part of being a real person, but if used incorrectly it can also be the most dangerous." (*The Stanley Parable*)

4.1. Interactivity

As the earlier chapters have shown by circling back to it time and time again, one cannot talk about video games without considering interactivity as a central concept. It is an essential feature of video games as a digital medium, and is first in Ryan's list of properties that constitute this medium. Indeed she stresses its importance: "Of all the properties listed [...], I regard interactivity as the most important. Not all digital texts are interactive, but those that aren't could usually be taken out of the computer and played in another medium" (*Avatars* 99). It has also been shown that interactivity marks the defining characteristic of games as a broader category, and consequently is a defining characteristic for video games, when they are understood as a comparatively new development in the long history of games as such.

In the context of game design, Salen and Zimmermann distinguish between four different interactive modes:

- Mode 1. *Cognitive interactivity; or interpretive participation:* This is the psychological, emotional and intellectual participation between a person and a system. [...]
- Mode 2. *Functional interactivity; or utilitarian participation*: Included here: functional, structural interactions with the material components of the system (whether real or virtual). [...]
- Mode 3. *Explicit interactivity; or participation with designed choices and procedures*: This is "interaction" in the obvious sense of the word: overt participation like clicking the non-linear links of a hypertext novel [...], using the joystick to maneuver Ms. Pac-Man. Included here: choices, random events, dynamic simulations, and other procedures programmed into the interactive experience.
- Mode 4. *Beyond the object-interactivity; or cultural participation*: This is interaction outside the experience of a single designed system. (*Meaningful Play* 70; emphasis in the original)

Mode 4 is concerned with interaction in a larger social and cultural context. It takes on a wide focus that goes beyond interaction within the pre-designed borders of an interactive system, and looks at how participants interact with it outside these borders. Many aspects of fan culture would fall into this - writing fan fiction, or programming mods[43] for the game proper, such as designing a new quest, or adding new weapons or armour to a game to modify the standard game experience. This also includes reviewing games or interacting with other players on discussion forums, or even just taking the discussion off-line and talking about the game with a friend.

Mode 2 takes a much narrower focus and mainly deals with aspects of hardware and programming, e.g. the resolution of a monitor, which might influence the legibility of writing presented in the game, or how much detail one can make out on objects presented; how quickly the pressing of a button translates into on-screen action; or how the interface is designed - a badly designed one may lead a player to neglect parts of it, or not even becoming aware of certain functionalities of the menu.

The first mode may be of particular interest when going into topics like immersion, or cognitive processes happening during, and potentially after, an interaction between the system and the user occurs. Though this may therefore occasionally factor into some of the issues and examples discussed in this thesis, Mode 3 is ultimately the one that is of most importance for our purposes here. Explicit interactivity is the level of taking an action within a specific, designed gameworld or interactive text. This is the level of player choice and decision-making.

4.2. Choice and consequence

While choice and interactivity are not synonymous terms, they are undoubtedly tightly interwoven. "[Interactivity] mandates choice for the user. Every interactive application must give its users a reasonable amount of choice. No choice, no interactivity. This is not a rule of thumb, it is an absolute, uncompromising principle" (Crawford, *Assumptions* 191). Indeed,

---

[43] "Mod is short for modification. Mods are created when someone, usually a player, takes the basic code or structure of the game and changes it. These changes can range from simple things like changing the color of something to a completely new game made within the game world." (Tanner par3) While, technically, a mod may be programmed only for the use of the programmer, many creators of such mods make them publicly available to other players on dedicated forums, generally for free. While modding also necessitates interacting with and changing the game code, unlike the exploitation of bugs or developing cheats, it is not meant to break the game (although applying many mods to a game may lead to unforeseen technical complications).

when considering how a player interacts with a video game, one will ultimately find choice - and decision-making, the resolution of the choice moment - at the very heart of it.

Choices are ubiquitous in video games, but this thesis is ultimately interested in choices on a narrative level; these are often ones that are presented in a clear manner, and give the player time to consider various options, especially when moments of narrative choice are only interspersed among long stretches of other types of gameplay. Consider RPGs or action-adventure games, where a player will spend hours exploring areas and fighting enemies. Play sequences that offer narrative choices, e.g. dialogues with party members, a choice between two different factions, or the option to start or deny taking on a new quest, make up a considerably smaller amount of the play time. As they may nevertheless have a large influence on the content a player will get to experience, clarity and ample time are useful to have. Narrative choice is also often concerned with very large stretches of time, possibly even spanning the entirety of a game - but one need not take such a wide focus to encounter moments of choice in video games more generally.

It is easily found on much smaller levels: Does a player run or walk towards an obstacle in *Super Mario*? Do they jump over an enemy to evade it, or on it to possibly defeat it? Do they try to collect extra coins, or leave them behind in favour of not losing time? Do they turn the corner in *Pac-Man*, or just go straight? Do they shift the position of the piece in *Tetris*? No matter which game one looks at, or how simple the gameplay seems to be, one will always find a choice of some kind. Even *Dear Esther*, which offers no explicit interaction other than walking to different locations on an island, constantly has a player choosing where to go.[44] "In a game there must be choice. Even in games of "pure" chance there is choice: what to bet on, how much to bet, and so on. [...] In a game everything revolves around the player's ability to make choices" (Aarseth, *Quest Games* 366).

This does not necessarily imply a deliberate and well-considered choice on part of the player. Jumping over an enemy in *Super Mario* may have been the result of an involuntary button press right after landing another jump. Which direction a player chooses to walk in *Dear Esther* may be the result of a whim. As Salen and Zimmerman have clarified, " 'choice' does not imply *obvious* or *rational* choice, as in the selection of an action from a menu. Choice can take many forms, from an intuitive physical action (such as a 'twitch' firing of [a digital] pistol) to the random throw of a die" (*Meaningful Play* 71; emphasis in the original).

---

[44] The gameplay and set-up in *Dear Esther* is so particular and minimal that it challenged the perception of what may be considered a video game at the time of its publication in 2012. It has ultimately led to the coining of a new genre called "Walking Simulator".

As illustrated above, choices in video games cover a wide spectrum of possibilities. But how can one actually define a choice? At its most basic, Salen and Zimmermann see it as a unit of action > outcome, and define five leading questions which help understand the construction of a choice, or "anatomy of a choice" as they call it, in more detail.

1. What happened before the player was given the choice?
2. How is the possibility of choice conveyed to the player?
3. How did the player make the choice?
4. What is the result of the choice? How will it affect future choices?
5. How is the result of the choice conveyed to the player? (see *Meaningful Play* 72ff)

These five questions cover the context of a choice and the state of the gameworld as it is presented at the time of a choice, the presentation of the choice moment, as well as the material way a player can effect their decision in the game world (questions 1-3). Furthermore they include the consequence the choice has for the state of the gameworld, as well as how the player is made aware of these consequences (questions 4-5). While a game is in progression, these five questions may be understood as a loop, as each action > outcome unit then provides the current state of the gameworld for the next choice encountered.

Domsch argues that a further question ought to be added: "What information does the player have about the effect of her choices?" He amends that "this is implied in 4 and 5, but the information is not necessarily restricted to previous choices." Indeed a game may hint at possible consequences, or a player may learn to distinguish and categorise different moments of choice according to possible effects perceived, as examples provided in the upcoming typology section of this thesis will illustrate. One should consider the issue of information more broadly, however: How (much) and which information is provided to a player, both about a choice in general and its effects on the game world, is a central issue for narrative choice in video games.

An aspect that is inherent to a choice, but has not been made explicit above yet, is the existence of different options to choose from. This may seem obvious, but the action > outcome unit, as proposed by Salen and Zimmermann, does not necessarily include a variety of options being made available. To give an example: During an exposition section at the beginning of a game, a player may be prompted to press a button to progress the text or a scene; so they take an action (pressing a button), and are presented with the next section of

the game as an outcome, but there has never been a choice on part of the player.[45] I therefore argue that it may be more accurate to consider a choice as a unit consisting of three parts: Options > Decision > Consequences.

As both Salen and Zimmermann's unit and their five questions, as well as my own 3-part structure suggest, a choice necessitates the existence of an outcome, i.e. a change in the state of the gameworld. Here, too, there need to be a number of different results, just like there needed to be a number of different options to choose from. While it is not required that there are as many outcomes to a choice as there are options to choose from, it is imperative that there are at least two different ones; otherwise it is not truly a choice, even if it is outwardly presented as such. "The options will be perceived as differing if the information indicates that their outcomes will not be identical. There is a state of affairs before the choice, and a number of possible states after the choice. If all possible 'after' states are identical to each other or even to the 'before' state, the options have no differential consequence, and the choice is therefore not a real choice after all" (Domsch 113-144).

This understanding of the structure of a choice also makes it clear why the Future Narrative works well as a narratological backbone to analyse narratives in video games. A true choice in a game is reminiscent of the node in a FN, with the addition that it necessarily include agency on part of the player, and that all consequences may be explored actively in subsequent playthroughs. The FN therefore emphasises the one element that stands out as novelty in a long list of narrative media. "In a medium like video games the moment of choosing, located in the nodal situation, becomes one of the crucial aspects. No other medium provides its users as consistently with nodal situations that involve choice as do video games" (Domsch 112).

All that has been defined above as characteristics of a choice, however, might have related to choices on any level of a video game. What, then, makes a choice a narrative one? Domsch points out three aspects, which clarify this:

- "[T]he choice is perceived as a meaningful action that can be described with the semantics of the storyworld" (126): This means that purely mechanical or abstract choices, such as changing the position at which a Tetris piece lands, may well be choices, but not narrative ones. To put it very simply, one would need to be able to retell the moment of choice as if it were part of a story.

---

[45] The exception being to juxtapose the action of pressing a button with the option to not interact with the game at all, but this is not a choice within the game as such.

- "[T]he choice is made by the player also as a choice of a diegetic agent" (126): In many games the player is doubled, or represented, by an avatar in the game itself - when a choice is made, it is acted out by that avatar in game.[46] This also holds true when the player themself takes on god-like qualities within the game, as is often the case with strategy games. Then the choices made by the player are carried out e.g. by workers or military units.
- "[T]he choice has consequences on the internal development of a storyworld" (126): This is to be seen in contrast to choices that change the external shape of a storyworld, which often happen at the beginning of a game - when deciding on the appearance of the player character, or choosing a certain landscape for the setting of the storyworld.

Having thus defined what makes a narrative choice, the next section looks at how these "narrative choices" have been implemented in three video games in the past, and devises a typology on the basis of these observations.

---

[46] Examples of this can be seen in the games analysed for the typology in the following chapter.

5. Player choice in action - a typology

„What do you think would've happened, if you had told me that you wanted this to stop? Do you think it would've been particularly different? Would I have taken the same idea, but rephrased it superficially to fit that answer?" (*The Stanley Parable*)

5.1. A selection of narrative video games

While it may have been an exception in the early days of video games, nowadays one can find numerous games that provide examples of narrative choices in video games. Genres such as the role-playing game often pride themselves on offering the player ways to affect the storyworld and define their player character through choices they make. An older example of this is the fantasy RPG *Dragon Age: Origins*, published in 2009, which advertises the following features on its official website: "An epic story that is completely shaped [by] and reactive to your play style"; "Shape your character's personality and morality based on the choices you make throughout the game"; "There are no easy choices". But it also boasts of over 80 hours of gameplay, much of which is not spent making narrative choices. Similar cases can be made for many games belonging to the action adventure game genre, among them the popular *Far Cry* or *Bioshock* series.[47]

For the purpose of devising a typology of narrative player choice, which necessarily also includes looking at a variety of different outcomes to related decisions, these games are not a feasible primary subject of study, as exploring distinct options would necessitate hundreds of hours of play time.[48]

There is, however, a video game genre which has put the focus on its stories since its early days, and has made use of the considerable technical developments of the last decade to implement 'narrative choice' as one of, if not the, central modes of player interaction: adventure games. This genre has developed out of a purely textbased one, over an era of more

---

[47] It may be noted that these are among the video game genres with the strongest narrative proclivities. The stories and the bigger storyworlds make up an important part of their experience, so it appears natural that these would also experiment with moments of narrative choice. The same is not necessarily true for genres that primarily focus on player skill and competition, such as first person shooters, sports or rhythm games. Exceptions may be found even in those genres, of course.

[48] The typology provided in this section can, however, certainly be used to analyse and categorise moments of narrative choice in these games.

puzzle-focused point-and-click adventures, to almost cinematic game experiences.[49] Due to their often more limited overall playtime, as well as the high density of narrative choice moments, this genre provides a rich pool of examples to draw from for a typology of narrative choice. The decision was made to focus on three well-known titles, all of which have achieved considerable critical, popular and commercial success[50], as the main subjects of analysis for the upcoming typology: *The Walking Dead*, *Life is Strange* and *The Stanley Parable*.[51] Before this thesis delves into their analysis, a brief introduction to each of the three titles can be found below:

The Walking Dead is an episodic horror adventure game by the American developer Telltale Games. This game, published in 2012[52], is considered the break-out title of the developing studio, and has made Telltale Games a household name in the adventure game genre. It is also credited with playing a considerable part in the re-vitalisation of the genre in the early 2010s, and had garnered massive success, often attributed to its writing and character work (see Kohler). As such it is a central title of the genre, and showcases many features that are now considered typical, particularly for games with a focus on player involvement in the narrative. Even someone with little interest in video games may find this game familiar: It is set in the same storyworld as the original eponymous comic book series by Robert Kirkman, or the long-running AMC TV-series.[53] Although the setting is familiar, however, it does not merely transpose an existing story to a new medium, but features an original storyline and a new cast of characters. The player experiences the game via the protagonist and in-game avatar Lee Everett, and interacts with the storyworld by controlling Lee as he navigates gameplay moments of exploration, dialogues and brief action sequences. The story is centered around themes of survival and loss, and spends ample time on exploring character relationships, first and foremost that of the the protagonist and a young orphaned girl, Clementine, for whom he takes on the role of a father.

The second game to be afforded a closer look in this thesis will be *Life is Strange*, developed by the French studio Dontnod Entertainment. *Life is Strange* shares a number of aspects with Telltale's *The Walking Dead*: It is an episodic game that has spawned a number

---

[49] See Moss for a more extensive history of the genre.

[50] All three games are either set for a remaster and re-release in 2022 (*Life is Strange, The Stanley Parable*), or have already been re-released (*The Walking Dead*), which is indicative of their enduring popularity.

[51] Occasionally additional examples will be provided from other games, when it serves to illustrate certain aspects of the typology more comprehensively .

[52] It should be noted that, for this thesis, the focus lies on the first game, also referred to as season due to its episodic nature, of the series, which was published in 2012. There have since been a total of 4 seasons, and a few smaller games released.

[53] Telltale Games have become known to produce works within existing franchises. Other examples include *Game of Thrones*, *Batman* or Marvel's *Guardians of the Galaxy*.

of further installments, the player is put into the shoes of the game's protagonist, who becomes their avatar, and interaction with the gameworld happens mainly via exploration and dialogue sequences. And while the relationships of the protagonist and the other characters populating the story world too are a central point of interest, the overall setting is quite different. Max Caulfield does not have to find her away around an apocalyptic America, but rather has to navigate her last year of high school. In the process has to learn what she wants out of life and who she wants to be, all while trying to solve the mystery of another student's disappearance. *Life is Strange* is therefore both a mystery, but also a coming-of-age story, with a supernatural twist. This fantastic aspect is exemplified by the central mechanic around which *Life is Strange* is designed, and it presents an interesting innovation in how a player may interact with the narrative: an ability to rewind time.[54] Time travel, albeit generally for only for very brief stretches of in-game time, allows the player to explore various narrative choices, before deciding on one with which they wish to go forward. This contributes both new opportunities and difficulties in the area of narrative choice that will be explored in the typology.

The last game that will be analysed in more detail is *The Stanley Parable*, released as a stand-alone by the studio Galactic Cafe in 2013. This game was included specifically to provide an antithesis to the way choice is handled in *The Walking Dead* and *Life Is Strange*. *The Stanley Parable* presents an unusual and very experimental take on how choice and narrative can be realised in a game, often engaging with the topic on a meta-level, and occasionally even breaking the fourth wall. It features very minimalistic gameplay and is rather short, only amounting to about 2.5 hours of play time. As a player one takes on the role of Stanley, who finds himself alone in his office, all his co-workers having disappeared, but unlike in the other two games, this game is presented in the first person perspective, so Stanley is generally not visible to the player as a fully-formed avatar - the player rather looks

---

[54] Someone familiar with video games might argue that, technically, being able to go back in time is not such a new thing one can do in a video game: saving a game and later reloading a specific save allows a player to return to the game world in an earlier state, often far back. Not all games allow players to go back to a point of their own choosing, or save a game whenever they want, however. During their earliest years, video games often had no save systems and it was necessary to start from the beginning again, every time the game was turned. And nowadays many games employ an autosave function, which automatically saves the game state at certain points or intervals, so players can continue where they left off the next time they want to play the game (or if they experience a „game over"). This type of save system generally does not allow players to choose where they want to replay from and thus does not let them arbitrarily „go back in time". Adventure games, the three central to this thesis included, often use this auto-save system to establish a sense of finality inherent to the players' actions. .

[55] Stanley is only visible briefly, when the player cannot control him yet - in the short introductory section.

through Stanley's eyes.[55] The cast of characters consists only of Stanley and the narrator[56], so one cannot choose dialogue options to shape Stanley's character, and neither does one play through action sequences, and certainly not rewind time. For the majority of the game the only way a player can interact with it is to walk, which is why it is often also grouped among the sub-genre of the earlier mentioned 'walking simulators'. Information on the game's objectives or mechanics are similarly sparse, and players have to explore the game on a trial-and-error basis.

All three of the games included in this list provide a large number of choices to analyse, and together amount to more than thirty hours of playtime - if each game was only played through once. The examples presented in the following typology can therefore be no more than a selection of the narrative choices a player may encounter in each of them, and someone who has played these games before may easily remember many more, and likely different, outcomes.

5.2. How to stage a choice

As has been mentioned in earlier parts of this thesis, a choice can come in many forms. When a player makes a choice in a video game, this does not necessarily mean that it is a deliberate one, or one that has been considered carefully, though many are. But one could also push a button almost as an involuntary reaction, e.g. when one is startled by something that appears on the screen, or accidentally click on a dialogue option one did not mean to take. A player could also randomly decide between given options, or perhaps not even realise that they participated in a moment of choice.

All of these considerations focus largely just on what the player does, however. From the game developers' perspective, every moment of choice must be deliberate, no matter how a player will approach these choices. Every option, and every consequence, must be designed and programmed into the game for players to be able to take actions during their game sessions. In jump-and-run games like *Super Mario* the level design needs particular attention with regards to pathing - which are the different paths a player may take to complete a level? Where to put a platform, or simply a hole in the ground, which the eponymous protagonist will have to jump over? A first-person shooter often necessitates careful design of the

---

[56] Having a narrator is not very common in video games, and even among those games that include moments of explicit narration - *Life is Strange* includes instances, where the protagonist Max Caulfield will act as narrator, and the abstract game *Thomas was Alone* uses a narrator to infuse abstract gameplay with a narrative - the way *The Stanley Parable* makes use if its narrator is unique and just as experimental as the rest of the game.

environment and available weaponry - where a player can hide or take cover, or where they may get to higher ground will lead to a different choice in strategy, just like the properties of available weapons and the player's own skill with them will have them choose one to their liking, and adapt their playstyle to it.

Similarly, if a game designer wants a player to participate in their game's narrative, they must provide them the possibility to do so by programming moments of narrative choice, and setting the scene accordingly. The typology presented in this section will lay out different ways game designers can and have shaped moments of narrative choice, and thus influence the way players receive, consider and interact with them.

5.2.1. Marked and unmarked

Nowadays the video game medium has diversified into many genres, with often differing genre conventions that are also reflected in their gameplay and design. All of them have in common, however, their dependency on player interaction. It has been mentioned earlier that these moments of possible interaction must be designed and programmed in the system beforehand, but both the possibility and how to interact in a given situation must also be conveyed to a player in some form. This also holds true for adventure games like *The Walking Dead* or *Life is Strange*, whose niche and gameplay focus is player choice on the narrative level.

That this is a game's central feature is commonly already made clear at the very moment players begin the game. "The game series adapts to the choices you make. The story is tailored by how you play" (*The Walking Dead*). *Life is Strange* opens in a similar fashion: "Life is Strange is a story based game that features player choice, the consequences of all your in game actions and decision will impact the past, present and the future. Choose wisely..." In both cases, this initial information is just white text in the centre of a black screen. There are therefore no in-game distractions, visual or otherwise, which could prevent a player from receiving this information.

This is generally not true for the rest of the game. With explorable areas, the involvement of many characters, or even just background music, there are many things competing for a player's attention. Having received the introductory information, players of the two aforementioned games will therefore expect to find moments of choice in game, but without information of when and how to give input it would be rather difficult to do so in a

deliberate or meaningful way. Therefore, game designers have to set up moments of narrative choice carefully: this already starts by simply making the player aware of the possibility to interact with specific parts of the storyworld, most of the time existents such as characters or objects.

The following screenshot, Fig. 1, taken from the game *Life Is Strange*, shows one of the most common ways to do that. As the player explores the gameworld, in this case the campus of Blackwell Academy, text and symbols appear next to characters or objects that can be interacted with, as the avatar walks near them. In the case shown below, one can either look or speak with the character, or also do none of those things and just continue exploring, if one would prefer not to take the interactive opportunity presented. Often, as is also the case in *Life is Strange*, games will use this opportunity to indicate what physical action the player needs to perform in order to choose the option they wish to take. In this particular case, players are to use the mouse and left-click; in other instances or games they may be prompted to push a specific button. As Domsch puts it, "there must be an indication of the existence of differing options for the participant to become aware of having to make a choice" (113). This is why the design of a suitable user interface[57] is often an important task of game development, as it is used to give the player a frame for their interaction.

Fig. 1. Marking an interactive opportunity in *Life is Strange*

---

[57] The user interface can encompass quite a large number of things, since it includes both "the software and hardware tools that the player uses to understand and affect game state. The interface can include controller buttons, mouse clicks, menus, status bars and field of view" (Juul and Norton 107). For the purpose of the thesis the hardware components are of little concern; the focus will be on software issues, especially things such as menu overlays that frame specific moments of interaction, as seen in the screenshots.

It should be noted that, while a player has to choose to make use of this interactive opportunity, not every interaction of this kind will necessarily be or lead to a moment of narrative choice. In many cases interactive moments such as the above will simply be used to provide the player with information about the gameworld, or to make the game environment feel more alive and immersive, and not result in the possibility of in-depth interaction going beyond the inital moment of choosing to interact with a given character or object at all.

Since in the majority of (adventure) games players interact with the gameworld via avatars, actual narrative choices are often presented in the form of dialogues. Some of these moments of choice may be encountered through exploration of the game world, like shown above, but others come up in more strongly scripted sequences, like longer, carefully animated stretches of the game that appear like scenes from a film. So, similar to what has been shown earlier, during a longer animated sequence or a dialogue players must also be made aware of when they potentially can make an impact on the narrative, and what options are available to shape the interaction.

Which form this can take is illustrated in the following screenshot taken from the first episode of Telltale's *The Walking Dead*. In this scene the player's avatar and protagonist Lee Everett is engaged in an on-going conversation with a young girl called Clementine. The player character explores the house to try and reconstruct what happened there, while talking to Clementine, who hides outside in her treehouse, via a walkie-talkie, .

Fig. 2. Dialogue menu in *The Walking Dead*

For the duration of this conversation, the player is occasionally confronted with a set of dialogue lines from which they may choose from. In the above example there are four different options available, three questions and '...', which would have the protagonist remain quiet. The player may choose any of them, with their current selection highlighted, and any other option chooseable via a mouse-click or pressing a button.[58]

By providing the player with these options layed out clearly in front of them, and the conversation not progressing further until the avatar is given a line to say, this has been marked as moment of interactive possibility, and the conversation adapts depending on the choice made. While the user interface is relatively sparse, there is one further bit of information it provides: the time-bar at the bottom, which diminishes as time moves on, and alerts the player that they only have a limited window of time to make their selection. As this illustrates, moments of choice can have a temporal dimension, which is marked for the player here.

As regards the dialogue options themselves, a game designer is confronted with the question of how exactly to phrase the given options, and how much (and what) information players are provided in the moment. In the case of the choice moment depicted in the screenshot, the options are spoken by the player character exactly as they are written down, though each option is further expanded on with dialogue lines that the player did not choose beforehand. As there is only limited space available, it is not feasible to write out entire paragraphs on screen - often a player will be presented with either a paraphrase or just the beginning of a dialogue branch. The options must therefore be phrased in a way that clearly indicates the difference in content, or potentially a difference in tone, for the player to make an informed choice.

Occasionally game designers have tried out quite creative ways to make sure that players are not negatively surprised by an option they choose, which would be the result of a mismatch of assumed and actual content of a given option. In BioWare's *Dragon Age 2*, for example, the game designers have opted to enhance available options by marking them with specific colours or symbols to indicate the tone of the resulting interaction. They use a red fist to let the player know that a specific dialogue option will be delivered in an aggressive and confrontational manner, crossed swords to clue them in that choosing this option will lead to a fight, or a purple theatre mask with a laughing face to indicate that the option will take the

---

[58] The exact mechanics of choosing an option are usually explained at the beginning of a game, and depend e.g. on whether a player prefers to use the mouse and keyboard, or rather a controller/gamepad. as is conventional when playing games on a console like the Playstation. It should be noted that the options may be arranged differently, if a game is played on a different platform. While here the options are provided as a simple list, this is because the screenshot was taken while playing on a computer. Someone playing on a playstation would find them aligned in a circle, or dialogue wheel, corresponding to how the buttons are layed out on the controller.

conversation in a joking direction. As players interact with the gameworld via their avatar, they also shape the way a character is presented and perceived in the gameworld[59], and may themselves also have a mental image of what kind of character their avatar is. It would therefore be jarring to have a character, who has been generally played as a helpful and diplomatic person, make light of another character's problems and respond sarcastically, when the player has perceived a given dialogue option as a genuine response, since the written text indicated nothing to the contrary.

The way *The Walking Dead* presents its moment of choice is one of the most typical designs, however, and can be found in many older, but also newer games as well. Looking at an example from *Life is Strange*, the set-up of this particular moment of choice likely appears easy to read now.

Fig. 3. A dialogue wheel in *Life is Strange*

While the dialogue options are arranged in the form of a dialogue wheel, rather than a list, both the moment of choice in the conversation, as well as the options available to the player are marked by writing them out on the screen and indicating that each option may be chosen by using the mouse. This is also an example of an a-temporal moment of choice, as there is no timer (visible to the player or otherwise) that has the conversation move on without player input after a while. The scene is effectively 'frozen' without player input.

The top option, however, appears to be emphasised, as it is underlined. This is an additional piece of information for the player. As mentioned earlier in the thesis, *Life is Strange* employs a time-travel function. The main character can return to an earlier point in

---

[59] See Cardoso and Carvalhais' concept of modulating (*Breaking the Game*).

the game by turning back time within the game world. Unlike in the case of simply returning to an earlier save state[60], both the player and their avatar remain aware of what has happened earlier, and information gathered before may open up new interactive opportunities and options, which are then marked by being underlined. In this particular scene, the player character, Max Caulfield, has gone through the conversation before and remembered a quote by John Lennon, which her teacher referenced in the earlier version of the conversation. The player can now choose this option when the scene is replayed, but at an earlier point than it would have come up in the dialogue originally. Max will then try and impress her teacher with this knowledge, improving her standing with him.

In *Life is Strange*, turning back time and replaying certain scenes or conversations may therefore open up new options. These are not shown beforehand as options that exist within the game, but are unavailable as of the time of playing, however - the player must uncover these via trial and error. Other games take the opposite approach and show the entire range of options that might be available, but e.g. grey out options, for which necessary pre-conditions are not met, for example because the player has not found a relevant in-game item, or because the avatar is not on good terms with an in-game character. This might encourage further exploration or even replaying of the game to see the narrative play out differently.

In all of the above examples, one game has been neglected so far, although it was mentioned to be one of the central primary texts of this thesis. In the following paragraphs *The Stanley Parable* will therefore be looked at in more detail. The image below shows what is typically considered the first instance of narrative choice encountered by a player new to the game.

When Stanley came to a set of two open doors, he entered the door on his left.

Fig. 4. A moment of choice in *The Stanley Parable*

---

[60] In this case only the player retains knowledge of what happened, the game and all its existents would simply be reverted to an earlier game state.

There are several things that contrast with the way moments of choice have been depicted in the earlier examples. The gameworld looks quite empty; there are no objects or characters available, and no particular marking that would indicate a possibility of interaction for the player, e.g. by highlighting something or letting players know that a button may be pressed. There is also no list of options to choose from, or any other sort of extra-diegetic interface overlaid for the benefit of the player.[61]

Up until this point, a player has only walked through another room and two corridors, accompanied by the narrator's voice describing what the protagonist Stanley is doing, and has not found any moments of choice indicated to them in those parts of the game either. Upon arriving in this room, the narrator provides commentary, as he has done before: "When Stanley came to a set of two open doors, he entered the door on his left" (*The Stanley Parable*). There is therefore not much information a player can act upon, there has been no indication of how to interact with the game world except by walking, and the narrator does not phrase this moment as a question either. If anything, the narrator's voice line indicates a directive to follow, rather than a possible choice to make. However, both doors appear conspicuously open, and both show parts of corridors behind them that could be passed through. Except for the narrator's indication that Stanley walks through the left door, which he notably says before the player has done so, there is nothing that might hold a player back from walking through the right door. And so, by a process of trial and error, players may attempt to go through the door on the right and find it is possible.

The narrator adapts his narration accordingly, and the player learns that they are able to influence the story the narrator is telling and the game does not penalise doing things that contradict the narration. So the possible ways of interacting may seem limited in nature, i.e. walking, but there still appear to be narrative choices available to the player. More such choices are depicted in the two screenshots below.

Indeed, while the scene with the two open doors was initally called the first instance of player choice encountered by new players, the true first choice is shown in Fig. 5, where one can see the very first area of the game. Stanley is looking out of his dark office space, and the player has just been granted control over the character's movement. The narrator has presented the narrative hook of all of Stanley's co-workers having disappeared, and posits this as a mystery to be unravelled.

---

[61] The line of text seen here are merely subtitles, which can be enabled before starting the game. As is conventional in film or tv series, the subtitles are visible while a character, or in this case the narrator, is speaking, but are not part of the gameplay interface.

Fig. 5. The first area of *The Stanley Parable*   **Fig. 6.** A range of possibilities in *The Stanley Parable*

When a player starts a new game, they will typically be in a mood to actually play the game and explore the world and mysteries presented, so in the majority of cases they will move outside of the small, dark office and do just that. However, it is also possible to just move towards the open door, angle the camera to it and click the left mouse button. This will have Stanley close the door and remain in the office, which is commented on by the narrator as Stanley feeling afraid and unprepared to explore the mysteries outside of his office, and ends this rather short playthrough.

The second screenshot, Fig. 6, depicts a different area of the game, which can be encountered after going through the open door on the right.[62] To progress the game and its narrative the player will have to navigate onto the cargo lift, which will then be set in motion to take Stanley to the next area on the opposite side. Both of the earlier examples referencing sections with doors had two possible ways of continuing, but how many are available in Fig. 6? One or two, or perhaps even more? The first option is to simply stay on the cargo lift, which will take Stanley across. As the sign next to the lift helpfully informs, "[d]o not jump off the cargo lift while it is in motion. Will result in death." The rebellious player, who has disregarded the narrator before, may be equally inclined to disregard instructions at this point, and find two more available options: jumping off the platform, while it is in motion, and landing on the walkway seen in the middle of the screenshot, or jumping off the platform, missing the walkway, and have this playthrough and the narrative conclude with Stanley dying, as indicated by the sign.

---

[62] It should briefly be noted that the camera is controlled entirely by the player in this game. That means that, while these screenshots are taken to show a particular set of options, players may easily miss options at any given time, because they angled the camera differently.

All of the above screenshots are exemplary of how *The Stanley Parable* handles any such moment of choice: at best it makes no mention of additional available options, at worst it dissuades players from exploring an option, by having the narrator or an in-game object strongly hint towards one specific way forward. While each decision made is commented on by the narrator and influences which often wildly differing narrative the player will experience in their current playthrough, neither interactive opportunities, nor available choices are brought to the player's attention. They remain unmarked. It is purely up to the player to explore and find different options and the resulting narratives, mostly by using the classic method of trial and error.

While the the cases discussed so far are either examples of leaving moments of choice and available options either entirely unmarked (*The Stanley Parable*), or marking both of them quite explicitly (*The Walking Dead* and *Life is Strange*), this is not necessarily a situation of mutually exclusive extremes. Rather, there is a degree in how strongly marked a choice situation and available options are.

Is the player made aware of all options they might have available? As shown earlier in the case of *Life is Strange*, a player may uncover new options throughout the game. This means, however, that there is likely also a range of options they have not found; but they would likely not know of their existence, unless they e.g. replayed the game choosing different options, or other players pointed them to hidden options outside of the game, e.g. via a forum. In a similar vein, there might be smaller opportunities of narrative choice, which would allow for either bending or modulating the narrative (see Cardoso and Cavalhais, *Breaking*) that are simply not encountered by a player. It is entirely possible to miss interactive opportunities, because players did not fully explore areas and did not talk to all characters in a given scene, either because they did not want to, or they were not aware of remaining opportunities.

The Walking Dead also gives examples of how to make players aware of a narrative choice and the set of available options, without merely providing a list to choose from. The next screenshot illustrates one such instance with a lower degree of explicit marking. In-game the showcased image is preceded by a scene of conflict within the group Lee and Clementine are travelling with, which is the result of the difficulty of distributing food among the travellers when there is only a very limited supply left. The character, who had been responsible for the distribution before, finds themselves to be made out a villain for their choices of whom to give food, and leaves the next distribution to Lee with the words: "You

know what? I'm not doing it tonight. You do it. There's the food rations, but there's not enough for everyone. Good luck."

Fig. 7. Distributing food in *The Walking Dead*

The avatar's, as well as the player's gaze is directed towards the four items, and the interface gives the information that "[y]ou have only four food items for ten hungry people" in the top-left corner of the screen. The camera then pans over the entire group of people, giving the player an idea of the available options of whom they may give food to. Not all characters will necessarily accept food, but the potential range of options is made clear to the player regardless, and so is the fact that this is an instance in which players are expected to make a choice. This moment of choice is not marked as strongly as the prior examples of the dialogue scenes were, as it is simply a moment embedded in a strongly scripted passage of the game, but there is still a palpable difference between how the choice is set up here, and how the unmarked scenes in *The Stanley Parable* are presented. The player's attention is deliberately drawn to the available set of options, and both preceding dialogue and on-screen text drive home the current task.

Even in games with a high degree of marking, there may be unmarked options in moments of choice that appear otherwise strongly marked. If one considers Fig. 2, which depicted a dialogue scene in *The Walking Dead*, the time-bar at the bottom did not only indicate that there was a limited time to choose a given option, but letting the timer run out is itself considered a valid choice by the game, one of either doing or saying nothing, which is often commented on by in-game characters, or extra-diegetic elements in the game itself.

Occasionally, the degree of marking may also be left to the player to some extent. *The Walking Dead*, for example, allows the player to choose between two different 'display styles': the standard one, which is described as providing "[m]ore help from UI and feedback when you make important choices", or the minimal one, which will "[t]urn off UI hints, helps and choice notification". The latter option will not leave players with games entirely free from any sort of markers, but they will be much reduced.

As this section has shown, while many games will opt for marking their available instances of (narrative) choice, there is some degree to the extent that this is done. Many adventure games opt for a design like it was shown in the examples from *The Walking Dead* and *Life is Strange*. Leaving the choice sections entirely unmarked, or misleading players into disregarding available options is certainly the type of design that is rarer to find, but, as *The Stanley Parable* demonstrates, even that can be done. Both marked and unmarked approaches have their merit, and the suitability will largely depend on what kind of gameplay one wants to foster, and ultimately, which type of story one wants to tell.

5.2.2. Verbal and visual

Apart from being marked or unmarked, there are other aspects one may consider when thinking about how a choice is staged. As video games are a multimodal medium, they can make use of a number of channels and signs, many of which are familiar from other media such as film or literature. It can therefore be rewarding to think about not only how a player's attention is drawn to interactive possibilities, but also what channels are used to convey information about a moment of choice itself.

The most direct one is usually the verbal dimension. Casting one's mind back to earlier examples provided from *Life is Strange* and *The Walking Dead*, in many cases the available options are written out and stay visible on screen until the player makes a decision, or, in the case of choices with a temporal dimension, until the time to do so runs out. Dialogue options, like the ones commented on in the last section, are either verbatim written expressions of what is spoken directly after choosing an option, or they may be paraphrased and summarised to give players an indication of what direction the conversation will take. The latter is how *Life is Strange* pre-dominantly handles its dialogue choices, while in *The Walking Dead* there is a mixture of types to be found. In most cases, however, the player avatar Lee will at least

voice the line chosen, even if he then keeps speaking for a period of time during which the player can take no influence.

In other cases not only are available options retained as written text, but als the choice itself may be posited in writing. If the choice is part of a conversation, some games keep the last part of the spoken dialogue in written form above the options a player may choose from, or, as seen earlier in Fig. 7, when players are to make a choice regarding the distribution of food, the choice will be indicated elsewhere on the screen, in the case of this game in the top left corner: "You only have four food items for ten hungry people"; or in a different scene: "Save Doug or Carley" (*The Walking Dead*).

If a game does not include voice acting, or only partial voice acting, much, if not all of the verbal communication will necessarily be written, but games that feature extensive voice acting are not limited in that sense. Games like *Life is Strange* and *The Walking Dead*, which are fully voiced and feature large casts of voice actors, will often also frame the options in larger conversations and scenes, which lead up to a specific choice. Again the food distribution scene in *The Walking Dead*, which has been mentioned earlier, provides a good example of this. Before the choice itself players witness a conflict among the characters, with only minimal involvement of their player character Lee. As a result of this scene Lee is handed the available food items, and has to make the choice who in the group to feed. This choice is delegated directly in speech to Lee by the character, who had taken on the responsibility beforehand. Moments of dialogue choice will also frequently be introduced by another character voicing a question directed at the player character. An early example in *The Walking Dead* can be found when Clementine asks Lee "What should we do now?", after which the player is presented with two options as possible replies: "Look for help, before it gets dark" or "Get out of here once the sun goes down".

The Stanley Parable, on the other hand, does make use of voice acting to relay its narrative by involving a narrator, but it does not use this as a channel to present moments of choice. On the contrary, when the narrator poses questions, this is usually done in stretches of the game during which the player cannot interact. As the earlier examples from this game show (see Fig. 4-6), *The Stanley Parable* extensively relies on environmental design to leave clues to the player about when they may make a choice, and which options are available to them to do so. Open doors may indicate alternative paths to take, some buttons shown in-game - not as extra-diegetic elements of a user interface, but directly integrated in e.g. machinery depicted in the game itself - may be pushed to activate an elevator or other machines.

But visual elements may also be employed in a more explicit fashion: symbols and icons can indicate different ways to interact with an object or character within the game, and may supplement, or even substitute written text. Consider the three symbols shown in the screenshot below.

Fig. 8. Use of symbols in *The Walking Dead*

The symbols indicate three different options the player may choose from to interact with the door: Look through it, knock on it, or open it, corresponding to the eye, the hand, and the open door symbols respectively.

A similar approach can be found in so-called quick time events (often abbreviated as QTE), which are usually encountered in fast-paced action sequences. Although quick time events have gone somewhat out of fashion, Auerbach describes the concept like this: "QTEs were moments in a game's cinematic cut scenes where a prompt would appear to press a particular controller button" (par 12). In action sequences, in order to keep up a feeling of urgency, it may not be feasible to lay out options in writing, but simply provide the player with a button to press. Occasionally the use of a tool may be indicated by a symbol, but usually quick time events just depict a button on screen, which the player is meant to press on the keyboard or controller.

Quick time events are not a common way to frame narrative choices, as they tend to elicit more of an involuntary reaction as players are pressed for time. As Auerbach indicates, quick time events used to lead to failure if players were unable to complete a given sequence of button pressing (par 13). Nowadays, failing one instance of button pressing may also simply result in a scene playing out differently, rather than leading to a 'game over', but with

the minimal amount of information provided, both visually or otherwise, players cannot predict outcomes beforehand, and can usually not make deliberate choices in the moment.

Another way of providing visual information to the player, which is usually more effective for moments of narrative choice than a quick time event, is allowing the player to shift the direction of the camera to view different options that are available to them, right as a scene is happening in-game.

Fig. 9. Choosing between two characters in *The Walking Dead*

In this particular instance, the player is asked to decide which of two characters Lee should save from being attacked by zombies. When the player shifts the camera, the different characters are put in the center of the field of view, and their individual struggles can be observed. In the screenshot above Carley is reaching for her bag to reach ammunition, while the left-hand arrow indicates that the player may also view the scene to the left, where Doug struggles to hold an entryway shut. The individual scenes indicate urgency, but also provide a lot of visual information for the player to evaluate the situation - which of the given situations looks more dire? Will other characters perhaps also be able to help either Doug or Carley?

As the player makes their choice, it becomes clear that the situation does not resolve in an overall good way. The character chosen survives, and the other dies and is cut from the remaining parts of the narrative - which, as this scene happens towards the end of the first of of five episodes in *The Walking Dead*, is potentially the majority of the game. This also makes it clear that not all choices are equal in the grand scheme of things. Some of the earlier discussed dialogue choices may change the way the player character is regarded by other characters, but other choices may have deep implications for the overall narrative. When

staging a choice, game designers may therefore also allow a player insight into whether or not a choice is trivial or significant for the overall narrative, so they consider moments of choice in the appropriate light. How this can be done, without disclosing the later consequences of a choice, will be shown in the next section.

5.2.3. Trivial and significant

While the truth of whether a moment of choice leads to large changes in the narrative, or merely affects the story in a small way, can only be evaluated with certainty in hindsight, there are ways to allow categorisation of choice moments when playing through them. This can be achieved either through experiences players gather throughout one or more playthroughs - e.g. whenever the game asks to choose between two different routes to navigate the gameworld, the story branches into one of two mutually exclusive sections, or choices made in the later part of an episode tend to be more significant than those presented earlier - or by framing the moments of choice differently from a game design perspective, in order to share information about the impact of a choice willingly with the player.

Like in the earlier sections, *The Stanley Parable* makes no effort to provide any such information to its players. Barring any sort of clues to the contrary, players have to assume that each choice they encounter bears the same weight; none can be discounted as either trivial or particularly significant. Each choice just takes the player closer to one of many endings, none of which are given a particular weight either, as there appears to be no 'true' or 'final' ending.[63] For the remainder of this section, *The Stanley Parable* will therefore not be discussed further.

In *The Walking Dead*, choices with significant impact on the story are usually only binary ones, which need the player to decide on either one or the other available option in order to progress. To illustrate this, it is helpful to go back to an example discussed earlier: Lee has to save either Doug or Carley; the game only moves forward when one of the two has been saved, and the other left behind. There are generally no hidden options, and there is no way to save both of them or to leave both of them behind. Many instances in the game that potentially result in the death of one or more characters are presented in this way: Lee can pull a character up, or let him fall to his death; when he has been bitten by a zombie and has

---

[63] This will be expanded on in a later part of the thesis.

likely become infected, Lee can choose to disclose his state, or hide the wound from the rest of the group.

If a choice is framed as significant, the game also takes care to keep the player involved as the scene around them develops, by either allowing the player to switch the camera angle manually, like in the example of saving Carley or Doug, or by cutting to different perspectives without the player's involvement. When a decision has to be made whether or not to attempt to save a character from falling to his death, the camera frequently cuts from the struggling characters to the approaching horde of monsters to drive home the urgency and direness of the situation.

Life is Strange also takes care to emphasise which moments of choice are trivial, and which are significant. The majority of choices take on a form similar to the dialogue wheel in Fig. 3. The scene simply appears to come to a halt until the player makes a choice, and neither the camera work or any part of the visible interface tends to give off a particular sense of urgency. This changes drastically, however, in a few selected moments of choice. Often this coincides with moments of particular tension in the narrative, when the lives of either the player character Max or other characters in the game are about to be impacted significantly. Since this game is not set during a zombie apocalypse, the stakes are usually not life and death. Nevertheless they may be high when considered in a contemporary setting: someone may lose their job, a student might get suspended or the relationships between family members may either improve or sometimes deteriorate drastically. One such example can be seen in the next figure.

Fig. 10. A significant decision in *Life is Strange*

As becomes immediately obvious, something is not quite right with the image. Attentive players may notice that the available options are typed using only capital letters, which is unlike the regular, more trivial moments of choice, where the text is simply typed according to the conventional rules of orthography. But even more evident is the distortion of the image beneath the text.

Indeed, when Max is confronted with a significant choice in the game, the video becomes distorted and appears to be tinted red. The background music or soundscape is similarly affected, and the player can hear a droning, ebbing and swelling seemingly in time with the visual distortion. This effect persists for as long as it takes the player to make a decision. Unlike in *The Walking Dead*, there are no (hidden) timers during these decisions, so players are given as much time as they need - they are expected to make a deliberate decision at this point, and take into consideration any information they have acquired prior, as well as potential consquences they might infer from the given options.

In the scene depicted in the screenshot above the player has to decide between reporting a fellow student, Nathan, for bringing a gun to the campus, or keeping it a secret from the principal. In an earlier time-loop the student has shot somebody, although on accident, but this has not happened in the gameworld at the time of this moment of choice, so only Max and the player are privy to this information. It therefore has to be considered whether him potentially harming another student is reason enough to possibly get Nathan suspended.

When one considers the setting of this game, this is a moment of choice that would likely have a considerable impact on the character implicated in the available options, so marking this one as a significant moment of narrative choice is not surprising. Throughout the game the player encounters more of these situations, and learns to read these consistently as significant choices - in the majority of cases, the situation seems to warrant the label, but such explicit marking can also alert the player to the fact that a choice may be more important than one would normally expect going just by the available actions.

One such instance is a scene in which Max gets a call from a struggling classmate, while being out in a diner with her childhood friend, with whom she has reconnected after five years. The player is then presented simply with the options to either take the call or not, which does not initially give the impression that this is a particularly significant moment. The scene distorts, however, and the options are presented in the same way as depicted in Fig. 10. Through this the player is made aware that this seemingly innocent situation may have far-reaching consequences and should be treated accordingly. The presentation of this choice as

67

As becomes immediately obvious, something is not quite right with the image. Attentive players may notice that the available options are typed using only capital letters, which is unlike the regular, more trivial moments of choice, where the text is simply typed according to the conventional rules of orthography. But even more evident is the distortion of the image beneath the text.

Indeed, when Max is confronted with a significant choice in the game, the video becomes distorted and appears to be tinted red. The background music or soundscape is similarly affected, and the player can hear a droning, ebbing and swelling seemingly in time with the visual distortion. This effect persists for as long as it takes the player to make a decision. Unlike in *The Walking Dead*, there are no (hidden) timers during these decisions, so players are given as much time as they need - they are expected to make a deliberate decision at this point, and take into consideration any information they have acquired prior, as well as potential consquences they might infer from the given options.

In the scene depicted in the screenshot above the player has to decide between reporting a fellow student, Nathan, for bringing a gun to the campus, or keeping it a secret from the principal. In an earlier time-loop the student has shot somebody, although on accident, but this has not happened in the gameworld at the time of this moment of choice, so only Max and the player are privy to this information. It therefore has to be considered whether him potentially harming another student is reason enough to possibly get Nathan suspended.

When one considers the setting of this game, this is a moment of choice that would likely have a considerable impact on the character implicated in the available options, so marking this one as a significant moment of narrative choice is not surprising. Throughout the game the player encounters more of these situations, and learns to read these consistently as significant choices - in the majority of cases, the situation seems to warrant the label, but such explicit marking can also alert the player to the fact that a choice may be more important than one would normally expect going just by the available actions.

One such instance is a scene in which Max gets a call from a struggling classmate, while being out in a diner with her childhood friend, with whom she has reconnected after five years. The player is then presented simply with the options to either take the call or not, which does not initially give the impression that this is a particularly significant moment. The scene distorts, however, and the options are presented in the same way as depicted in Fig. 10. Through this the player is made aware that this seemingly innocent situation may have far-reaching consequences and should be treated accordingly. The presentation of this choice as

67

significant will therefore have players approach this scene more carefully, than a regular framing of the options would have warranted.

Some games, mostly episodic ones such as *Life is Strange* or *The Walking Dead*, periodically also offer a summary of a player's choices in an on-going playthrough, and how these choices relate to friends' or other players' decisions. An example is given below:
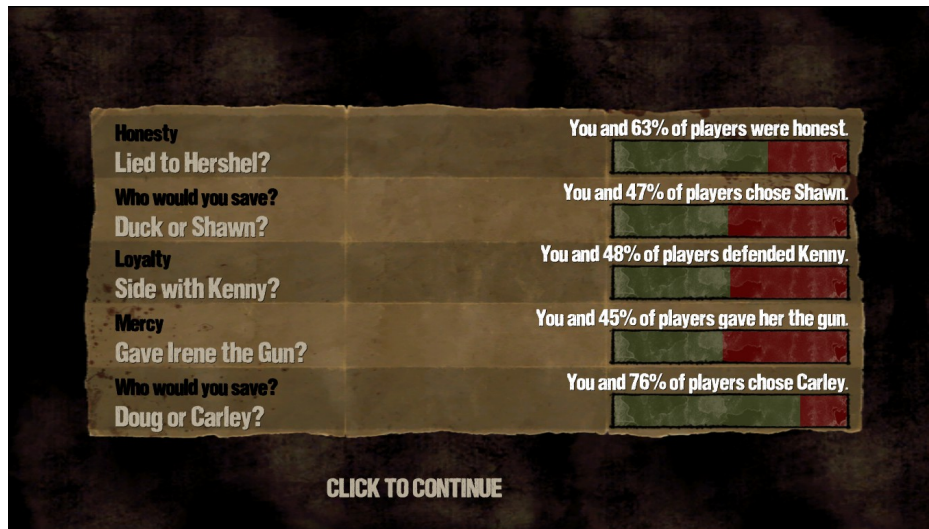

Fig. 11. A summary of player choices in *The Walking Dead*

This not only introduces a social dimension to the game, but it also makes use of an extra-diegetic device to retro-actively frame earlier moments of choice. As these are summaries of often hours of playtime, from a user's perspective it stands to reason that only the most important decisions would find entry in these statistics.

Before delving deeper into the earlier example of the phone call in *Life is Strange*, and having a look at whether players are right to act according to the information provided by the game design, it may be useful to recall the different ways in which a choice can be staged. Moments of choice and available options may be marked, often by making use of a suitable interface design that is overlaid, and visible only to the player. This is the preferred approach in many adventures games, of which *The Walking Dead* and *Life is Strange* were granted more in-depth analysis. In comparison, *The Stanley Parable* makes for a stark contrast and leaves its moments of choice unmarked. Players are left to their own devices and have to uncover interactive possibilities mostly through a trial and error strategy, coupled with an explorative attitude. 'Marked' and 'unmarked' do not merely exist as two polar opposites, but games may showcase different degrees of markedness.

As video games are multimodal in nature, they may make use of a variety of signs and channels to frame and present a choice. It is common to include some form of verbal

communication, either written or voiced (or a combination thereof), but the visual set-up may also provide indications about the availability of different options, either through symbols and icons, which are integrated in the overlaid user interface, or on the diegetic level through specifically designed in-game environments and objects.

Lastly, choices may be presented as trivial, or can be framed in a way that implies significance. In how far a player perceives a decision as important may influence how a particular moment of choice is approached.

What all of these categories have in common is that they influence how informed a choice is. From a game design perspective, to stage a moment of choice means to decide on how much information should be made available to players in a particular moment. This can range from merely emphasising information that is already available, to providing new or additional information to a player, or leaving them in the dark.

A choice is generally not made as a completely isolated event, but relates to what a player has learned in the past, and how they expect a given option to play out in the game's future. Usually players will choose based on incomplete information; as Domsch puts it, "the agent is provided with some knowledge about possible outcomes, but no certainty in relation to the probability of the outcomes and/or the completeness of information about outcomes" (114). Rarely will they have to act on no information, though *The Stanley Parable* comes close, and even less likely is their having complete information - only the game designers tend to have access to it.

As a player progresses through and eventually completes a game, the amount of information available to them increases, and they will learn which of their choices have truly made an impact on the narrative they experience. Since a choice is not truly a choice without having different outcomes, looking at how a game may implement consequences must be a necessary second part to the typology.

5.3. How to give weight to a choice

While the first part of the typology was concerned with the moment of choice itself, and in what form a player may encounter it, the following section will introduce categories along which one can consider the impact each given choice has on the narrative. Games which let the player know from the outset that "the consequences of all your in game actions and decisions will impact the past, present and future" (*Life is Strange*), and that "[t]his game

series adapts to the choices you make" (*The Walking Dead*), set up certain expectations regarding the weight a choice carries.

It is not reasonable, of course, to expect that every choice influences the narrative in a major way - in games that are riddled with moments of dialogue, whose main mode of interaction is allowing the player moments of choice, and which provide many hours of playable content just for one playthrough, some choices will necessarily only change small details. The next sections will therefore provide insight in what shape a consequence may take.

5.3.1. Impact

The existence of trivial and significant moments of choice, as described earlier, already implies that they differ in the way that they impact the overall narrative. Otherwise a choice may be presented in a striking way, but could not truly count as significant, if their consequences were no more far-reaching than that of any other dialogue option.

As the setting of *The Walking Dead* is a high stakes one, it is not surprising that a player encounters many instances where a character is in severe danger. A number of the examples discussed before are choices that carry grave consequences in the overall narrative. Saving Carley or Doug removes one character from the narrative entirely, and a similar situation arises when Lee can save a character at a later point in the game, depending on what choice a player makes. After Lee is bitten by a zombie, the group of survivors may also amputate his arm, in a desperate attempt to keep the infection from spreading - this, too, is up to the player. If they decide to go through with it, they will be confronted with the changed form of their avatar for the rest of the game. Choices such as these, which lead to either loss of life or limb, tend to be classic examples of ones with a big impact on the narrative.

What, then, of the choices that *Life is Strange* marks as significant, since the game is so up front about it? The phone call in the diner remains an interesting case; the immediate consequences of choosing either option - taking the call, or disregarding it - do not point to a large impact on the overall narrative. If the player does not take the call, the childhood friend appears pleased that you put her first, but the scene changes quickly afterwards and the call is paid no more mind. If one accepts the call, the player is not rewarded with particularly interesting insights either. The classmate indicates she is feeling stressed and anxious, but Max, the player character, simply resolves the situation by saying "I'll call you back later",

which cuts the conversation short and makes it appear quite trivial. The childhood friend is slightly annoyed about having to wait, but the scene changes just as quickly as it did in the other option. By making use of the protagonist's power to revert time, both of these scenes can be watched by the player before locking in one of the two options, but the dramatic presentation of the choice, with its distorted visuals and disconcerting audio, still will not make sense at the time.

As the game progresses, the narrative around the distraught and bullied classmate will come to its tragic climax, as she attempts suicide by jumping from a building. It is only then, approximately an hour of playtime after the phone call, that the choice is revealed as one with significant narrative impact. The protagonist will attempt to talk her classmate down and have her step away from the edge of the roof, but in the conversation the player will be confronted with a small number of choices they made until then, one of which is how they dealt with the phone call. Having taken it signifcantly increases the chances of successfully preventing the suicide, while having ignored it will have led to the classmate feeling even more isolated and not cared for, significantly increasing the chance of her jumping. Largely depending on the player's earlier choices, the classmate will either survive or die, which shapes the narrative significantly.[64]

The player will have therefore been right to believe the game designers, when they framed a seemingly insignificant moment of choice as important. This is the case for many of the choices presented this way, although a few of them do turn out not to have significant consequences. Another of Max's classmates, to give a small example, will act a little more civil towards her, if the player did not opt for making fun of her after getting splashed with paint, but in the grand scheme of things this remains little more than flavouring.[65]

The majority of choices in the game result in much smaller changes to the narrative, however. Although *Life is Strange* likes to remind the player that "this action will have consequences" (see Fig. 1), and *The Walking Dead* helpfully informs you that e.g. "Kenny will remember your loyalty", and that another character "noticed your ambivalence", games that stretch over many hours of playtime per playthrough cannot imbue every choice with high importance.

---

[64] It should be noted that the protagonist cannot go back in time indefinitely - players only have a limited amount of in-game time they can revert. It is therefore usually possible to review different options for the latest choices made, and even change decisions in the process, if so desired. After some point, however, earlier choices are out of reach. During the rooftop scene with the classmate it is no longer possible to go back to the diner.

[65] This may be a result of the episodic format and production schedule of the game, as their may have been changes made to the story during production. Some storylines may have been scrapped, or reduced signifcantly, leading to some incongruence with the presentation of choices in earlier episodes.

This does not mean that they can have no impact at all. *Life is Strange* offers many small moments with side characters, who are neither of particular relevance to the central narrative presented in game, nor do they appear to be particularly relevant to the larger story of the protagonist. Nevertheless it can be rewarding for players to notice their smaller choices reflected as well. Early in the first episode, Max can let another student sketch her portrait, which will then be made reference to in conversation with other characters - "By the way, I saw Daniel's sketch of you online..." - and is even available for viewing on an in-game website. Of course, if the player does not interact with this side character, none of these details will be included in their playthrough.[66]

A string of small choices can also amount to noticeable changes over time, e.g. by having characters change their attitude towards the protagonist throughout the game. This is illustrated well by the way that the character Kenny can act towards Lee in *The Walking Dead*; he may either be Lee's most loyal supporter, or antagonise him at every possible turn. He may even take on a mostly neutral stance. Much of his attitude depends on how Lee's decisions affect Kenny's family, and how well he manages to take care of Clementine. Recalling an earlier example, at one point Lee has to distribute food to a group of people. Among them are Kenny and his family, consisting of his wife and young son. If the player chooses to give food to Kenny's son and/or Clementine, Kenny will appreciate the gesture, more so than if you had given him food. As an isolated moment this choice does not have a big impact on the narrative, but accruing points this way with Kenny in more situations will have him adopt a more favourable attitude towards Lee. This then can significantly change the overall narrative a player experiences.

Considering its quite experimental nature, it may not be surprising that *The Stanley Parable* takes an unusual approach to this issue as well. As mentioned before, the choices in this game not only remain unmarked, they also lack any framing to indicate a particular level of significance for the narrative. Each choice made must therefore be considered to carry the same weight, and even hindsight is not helpful in categorising choices in any meaningful way. Every option chosen by the player brings them towards one of many endings, each related narrative differing vastly, until a last possible point of branching has been reached. The player is then locked into a specific ending, after which they are promptly put back in Stanley's office, with no 'the end' or rolling credits to give them a sense of closure. At no point is any ending evaluated either, so no ending may be considered more successful or important than any other.

---

[66] These would therefore be instances of 'bending' according to Cardoso and Carvalhais' model. (see *Breaking*)

Designing the game this way is a particular affordance of not going for a single, sprawling narrative with a dynamic cast of characters, which would include a large number of variables to consider. The relatively short overall play time of around two hours, during which the player experiences a number of largely self-contained stories, is another factor that makes this possible.

Titles like *The Walking Dead* or *Life is Strange*, on the other hand, will need to allow some decisions more impact on the overall narrative than others. This is necessary to be able to tell a coherent story that stays recognisable to all players, while keeping them engaged as active participants over the whole duration of the game, rather than having them watch a movie, interspersed with a moment of choice every thirty minutes or so.

5.3.2. Timeline and ending(s)

When looking at the consequences a choice may bring, the overall impact is certainly one of the most noticeable aspects, but there are others to consider, such as how it can be measured against the entire timeline of the game. At what point in the narrative does a consequence come into play? Is the effect immediately apparent, like when a character is saved or left to die? Or is the consequence delayed, as it is for example when the relevance of a phone call is revealed an hour after the decision was taken by the player?

In some cases a choice may even have both short- and long-term consequences for the narrative. *Life is Strange* in particular makes use of this, by allowing players to view the immediate effect of any action and allowing them to try out and reverse decisions for a small time period, while keeping them in the dark about later, and sometimes large-scale, consequences, which take place when reversal is no longer possible.

Related to this is the question of how far the reach of any given choice is. In the case of many of the available dialogue choices, their influence will only extend towards the next few minutes of gameplay, as the conversation is tailored to fit the choices made, but e.g. the only dialogue option that actually will be made reference to in later parts of the game is the last one, when a course of action is decided. In *The Walking Dead*, when Lee first encounters Clementine and converses with her via the walkie-talkie, the dialogue changes depending on which questions you choose to ask, but the game will not point back at any of the choices made at this point. The only one that projects further than the scene itself is the very last one, when Lee decides to either seek help immediately, or wait until nightfall.

On the other hand players may find that some choices remain relevant until the very end of the game. Max may be able to kiss her childhood friend in one of the last scenes of *Life is Strange*, depending on how they behaved towards her earlier. And if a character is saved, they may live and be part of the remainder of the narrative.[67]

This does not mean, however, that, once a player has made a choice, it has to remain relevant over long stretches of time - even if it appears to be a significant one. Returning to the example from *The Walking Dead*, which sees Lee saving either Doug or Carley, one may assume that the saved character accompanies the protagonist until the end of the game. This is not the case, however. While the player is given the choice to save either character's life in episode 1 of the game, already in episode 3, which marks approximately the middle of the game, they die anyway, in a scene that it is entirely outside the player's sphere of influence.

While players may feel disgruntled that a decision has been taken out of their hands, this is an effective way to converge different story lines, and keep the branching on a manageable level from a game designer's perspective. If one considers a game like *The Walking Dead*, which includes a comparatively high number of character deaths, it becomes easy to see that, if the player were able to save many characters, and each of them were included in the narrative until the end, the amount of branching story lines would soon become insurmountable. Game designers would have to account for and write variations of the story in which character A and character C are alive, but not character B, another in which characters B and C survived, one in which only character D has been saved, and so on. Therefore a trade-off has to be made, and one will often find points of convergence established in longer games, even when the player can make very impactful decisions throughout.

Although not all decisions have to remain relevant until the end, in a game that is marketed as one in which 'choices matter', players will certainly expect that some of them do - this is the last possible point at which player choice may affect the timeline. This generally results in the implementation of a range of different endings a player can reach. The amount of available endings differs from game to game: In *The Walking Dead* there are a number of varying end states, which are constructed from a combination of variables such as which characters are alive, or of what nature their attitude towards Lee is. After completing the game, the player is provided with an overview about the choices they made, and how they affected the fates of various characters. An example of this is provided in Fig. 12.

---

[67] An extreme case of this is found in the video game trilogy *Mass Effect,* where the player has to choose between two playable characters in the first game, only being able to save one of them, but the character that is saved plays a role in the second game, and returns as a playable character in the last one.

Fig. 12. An ending screen in *The Walking Dead*

A very different, and rather divisive, approach was taken in *Life is Strange*. Here, the player can arrive at only one of two different endings, both of which are available for any player to choose in a very last instance of narrative choice. One ending leads to the reversal of the entire in-game time that the player has experienced and played through, until right before the protagonist uses her powers for the first time, as she realises that her interference in the regular flow of time has inadvertently caused the natural order of things to fall apart, and a natural disaster to occur.[68]

The other ending sees Max accepting the natural disaster as a consequence of saving her childhood friend, which marked the first time she used her powers. What makes these endings problematic and unsatisfying in the eyes of many players[69] is the fact that both endings negate any of the choices made before this very final one. The first option is a reversal of in-game time to a point before the player has gotten involved with the narrative, and in the second one the small town and its residents are lost to the tornado, so all the relationships forged and every object interacted with are understood to be gone.

In contrast to *Life is Strange*'s very small number of end states, *The Stanley Parable* offers more than twenty different endings - or does it? Like in many other aspects, *The*

---

[68] This is a reference to the concept of the butterfly effect, which posits that something small, like a butterfly flapping its wings, may, in an unexpected manner, influence the occurrence of something much larger in magnitude, such as a tornado. *Life is Strange* incorporates the symbol of a butterfly throughout the game to illustrate that a choice will carry a consequence.

[69] Online forums, such as the one on the software distribution platform *Steam*, may give an insight to players' reactions. Articles, e.g. the one by Macgregor, may also give a good impression.

Stanley Parable shows a more experimental attitude in this regard as well. Unlike *The Walking Dead* and *Life is Strange*, which aim to tell one overarching narrative with a beginning, a journey shaped by a player's choices and concluding at one of a possible variety of endings, *The Stanley Parable* appears to contain a number of shorter narratives, each of which might work as a stand-alone as well. The beginning point may always be the same - Stanley finding himself alone in his office - but the stories spun by the narrator range from Stanley having gone insane, to discovering and freeing himself from the clutches of a mind control facility, to him ignoring the mystery at hand and continuing his life of safe monotony, and may even go as far as having the narrator realise that a 'real person' guides Stanley's decisions.

Most games arrive at one conclusive ending per playthrough, after which players may view credits, be informed that they have successfully completed the game, or simply find themselves at the main menu, allowing them to e.g. start a new playthrough or exit the game. Looking at *The Stanley Parable*'s different narratives gives the impression that this is the case here as well, but whenever a player appears to reach the ending of one plot line, the game displays a loading screen, telling them that "the end is never the end is never the end...", and puts them back in Stanley's office to continue exploring the game. As players progress repeatedly through different narratives, they may also notice that these are not completely self-contained, as earlier decisions lead to changes in the environment. A room may be closed off, another looks different and the narrator might comment on an action taken in an earlier plotline. This means that the timeline never arrives at a conclusive ending, instead seeming to loop endlessly, and players may potentially play on for hours, although at some point content starts to repeat.[70]

Combining the insights gained in this and the preceding section gives an overview about the way player choice can affect the overall narrative. Generally, a distinction will be made between choices with a strong or weak impact on the storyline, resulting in decisions that may either lead to widely differing story branches, the modulation of a given branch, or simply to the addition of small details as a nod to some of the player's choices. Effects of a specific choice can be revealed to players immediately, or may be delayed to a (much) later point in the game, while the consequences may shape the narrative short-term or long-term, potentially until and including the ending.

---

[70] While this is very unusual for story-driven games, this is a common thing to do in so-called roguelike or roguelite games, which have players start back at the beginning every time the avatar dies during the exploration of procedurally generated environments, without giving them the option to simply go back to an earlier save state. These games are generally meant to test players' skills.

This final point of the timeline can be handled in a variety of ways as well. Either game designers will use it to display the result of many choices the player made throughout a playthrough, offering a number of tailored endings, or they may let all players choose between a few endings, regardless of their prior choices. A more unconventional solution would be to offer no conclusive ending at all[71], although this will likely only be a feasible approach for a select, often experimental group of games.

All of these aspects together make up the range of possibilities through which a choice made by a player is given weight within the narrative, and how the results of their participation in the video game can be conveyed to them.

5.3.3. Faux-choices

After having explored both the presentation of a choice, as well as the element of how to showcase the consequence(s), one last point remains to be mentioned to round off the typology. Depending on how often a game presents a player with options to choose from, and how many of those are then imbued with actual consequence in the narrative, it is likely that players will encounter a number of faux-choices.

These are gameplay moments that are stylised like a choice, and impress upon a player the idea that they can exert some influence on the way the game's narrative develops, but ultimately reveal that all available options lead to the same result. However, "[i]f all possible 'after' states are identical to each other or even to the 'before' state, the options have no differential consequence, and the choice is therefore not a real choice at all" (Domsch 114).[72]

An illustrative example of this can be found in *The Stanley Parable*. One of the earliest choices a player is confronted with is the issue of choosing the left or the right door. This decision has a very strong impact on which narrative the player will experience, so when a similar situation occurs again in a later part of the game, the narrator immediately remarks:

---

[71] Please note that this pertains to the overall structure, not merely to an open-ended story that may e.g. leave room for a sequel.

[72] This is comparable to the issue of the pseudo-node in the Future Narrative (see Bode and Dietrich 50). Indeed, readers of this thesis may have wondered, why, instead of choice, the term „node" was not used consistently throughout the thesis instead. The reason lies in the fact that, while every true narrative choice me be a node, not every node is a choice, as nodes do not necessitate an interactive potential for the audience, which contrasts with the issue of narrative choice in video games. Earlier mentioned titles such as the movie *Run, Lola, Run* or John Fowles's novel *The French Lieutenant's Woman* are excellent examples of Future Narratives, but certainly not of choice on part of the audience (see Bode and Dietrich 26ff). As the Future Narrative does encompass narrative choice, as well as instances of randomness, which are a well-liked device in the video game genre overall, it is still a very suitable narratological model for investigating narratives in video games.

"Ah, a choice! We get to make a decision; from here, the story is in our control! How important we mustn't squander the opportunity." As it turns out, there is no choice to make, as both doors lead to the same room.

Not all cases are as clear cut, however, and often whether or not one has encountered a faux-choice is also a question of scope. An early moment of choice in *The Walking Dead* has the protagonist face the decision of which of two characters to save. Considering the many similar examples discussed in this thesis, the case seems clear-cut: The character chosen will survive and remain part of the narrative, and the other will die and be cut from the rest of the game. However, no matter which character the player chooses, it is always the same one who dies. This may make it appear an obvious example of a faux-choice, but while it is not possible to have a say in which character to keep within the narrative, the choice will influence how Lee's relationship with Kenny progresses, as one of the two characters Lee can attempt to save is Kenny's son.

A last, rather extreme example, would be the ending of *Life is Strange*. No matter the player's final choice, the end state negates all consequences of the choices a player made earlier in the game. But does that mean that all choices made in the approximately 15 hours of playtime before that are now cases of faux-choices, because they did not impact the final ten minutes? It seems a very harsh stance to take, but it is an important reminder that consequence is not only a necessary, but valued part of a 'true' choice.

6. Player choice as narrative opportunity? A brief discussion

"Is this what you wanted? Was it worth ruining the entire story I had written out specifically for you?" (*The Stanley Parable*)

6.1. The possibilities

While one purpose of developing the above typology was to provide a suitable set of terms to discuss narrative player choice as an issue located at the intersection of game and narrative elements, another was to take the opportunity to analyse how three teams of game designers handled the actual implementation of narrative choice in their respective games. Doing this, however, also allows one to consider some of the challenges and opportunities that interactivity on a narrative level brings with it.

While the early stages of video game studies were marred by a heated debate between ludologists and narratologists interested in the medium, from nowadays' perspective it would be hard to confidently state that the video game industry itself is averse to experimenting with and integrating increasingly complex narratives in their products. Many studios employ writers, just as they employ programmers or visual artists, and attempt to challenge conventional ways of handling narratives.[73]

And indeed, it seems to me that it would be an oversight to restrict the use of the medium's defining feature, interactivity, to the level of skill- and competition-oriented gameplay. As the typology and the given examples have shown, there are many different ways one can go about constructing an interactive narrative experience, and the video game medium appears to be uniquely suited to do so successfully.

The medium largely profits from the rapid ongoing technological developments, which act as a backbone to innovation in the industry. And it is this technology that allows the implementation and keeping track of complex narrative structures, involving many different

---

[73] Examples of innovation on the narrative level apart from narrative player choice can be found in titles such as Supergiant Games' *Hades*, for which an impressive responsive dialogue system was created, based on a script exceeding 300 000 words (see Bratt) .

variables and input given on part of the player. Ryan illustrates some of the most common constructs wonderfully in one of her figuers in *Avatars of Story*, cited below:
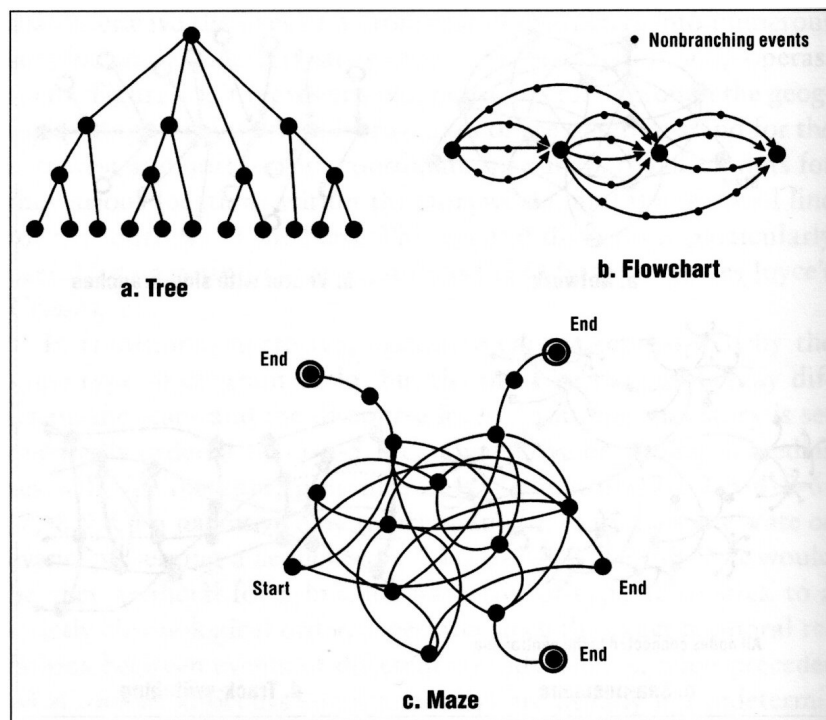

Fig. 13. An illustration of interactive story architecture (Ryan, *Avatars* 104)

Although Ryan structures these architectures around events, rather than nodes, if one considered each branching event as a moment of narrative player choice, these graphs showcase the nature of the impact of player choice on a narrative quite impressively. Though probably the most well-known, the tree is likely the one that is least encountered in reality as a consistent model reflecting all narrative player choice within a game, as an ever-branching structure would be too hard to keep up over a duration of many hours in a video game centered around the concept of narrative choice. Nevertheless, the flowchart and the maze offer plenty more of creative potential, and all three are examples of narrative structures that traditional media would struggle with, but video games may implement comparatively well.

The most widely used structure at the moment is the flowchart, allowing for different, mutually exclusive ways of arriving at the points of convergence in a story - keeping the narrative centered, but still accomodating for player choice. This is how both *Life is Strange* and *The Walking Dead* operate.[74] *The Stanley Parable,* as usual, is the odd one out, being more akin to the maze, albeit a particularly devious one, as any end would loop back to the starting point.

---

[74] For a more accurate depiction, the flowchart would have to end in a branching section.

What this figure shows is that interactive narratives must account for variations. It is not enough that the potential for it is showcased or alluded to; different story variations must be implemented in a way that allows for them to be experienced. Video games constitute the medium that can do this almost seamlessly.

Furthermore, telling a story in variations makes it possible to create many unique combinations and thus, if these variations are a result of player choice, individualise the play experience. This is significant in two ways: It may increase the replay value of a game, which means that a significant number of players will remain invested in the game even after having completed it once, trying to uncover 'new' parts of the story.[75] Additionally, an individualised play experience may also hold a lot of immersive potential, as the player is actively involved in the narrative as a participant, rather than being a spectator, relegated to remaining outside of the story.

In her seminal work *Hamlet on the Holodeck*, Murray writes that "[i]mmersion is a metaphorical term derived from the physical experience of being submerged in water. We seek the same feeling from a psychologically immersive experience that we do from a plunge in the ocean or swimming pool: the sensation of being surrounded by a completely other reality" (98). Although our technology has not (yet) developed far enough to replicate the holodeck, narrative driven video games make for a good alternative within our current capabilities.[76]

By making use of avatars, video game designers put players into the shoes of a character within the gameworld - a diegetic agent, whose role they may take on. And as technology and the video game medium become more sophisticated, so do their abilities to address more complex topics and themes in an immersive manner, as players may feel a sense of involvement and responsibility for the decisions they make through their avatar. Examples of this can already be seen in the way a player is confronted with moral choices in games such as *The Walking Dead, Fallout* or *Papers, Please* (see e.g. Schulzke or Taylor, Kampe and Bell).

---

[75] Some games allow the player insight in which options and endings they have already explored, such as the science-fiction game *Detroit Become Human*, which makes a decision-tree structure available to players that is filled in with parts of the game a player has already experiences, and alluding to sequences not yet uncovered. This may further incentivise players to complete the 'collection'.

[76] Apart from Murray's *Hamlet on the Holodeck*, which is certainly a very suitable starting point to learn about immersion, Ryan also provides valuable insights in her monograph *Narrative as Virtual Reality 2*.

6.2. The limitations

Naturally, where there is light, there is also shadow, and when something provides opportunities, one will also encounter challenges. Introducing interactivity to narrative structures is certainly not without its issues. As has been alluded to several times throughout the thesis, and as has been compellingly illustrated by Ryan's set of graphs, the more moments of narrative choice are integrated - especially if they are intended as mutually exclusive and always resulting in significant impact - the harder it will be to keep track of all the permutations and narrative strings, and still tell a coherent story.

Considering that many games provide numerous hours of playtime, the task of writing and implementing all of these versions of the story seems hardly doable, if not impossible. And not only must the narrative remain coherent, but the finished product should still be recognisable as providing variations of the same story.

Additionally, there are economic factors to consider, as, after all, video games are ultimately products to be finished and sold. The necessary programming efforts, or other related parts of production, such as character animation and voice-acting, must be feasible as well - all within the bounds of constraints of time, money and available technologies. As game designer Tim Schafer puts it, "[r]eal choice in games is tricky. If you have real branching, it can get exponentially large really fast. And it gets into these cheesy production issues. Are you going to record all that dialog? It costs $45 a line" (Pearce, *Game Noir*).

Some also share the opinion that integrating elements of player choice into the narrative is a moot point in any case, as 'true' choice and agency are not achievable. Frasca remarks that "[t]he biggest fallacy of 'interactive narrative' is that it pretends to give freedom to the player while maintaining narrative coherence" (*Simulation* 229). Commenting specifically on *The Walking Dead*, Heron and Belford note that "choice where it exists is largely illusory" (15), as no narrative path in the game achieves independence, and the stories that different players experience tend to converge in many places over the course of the game.

These concerns are not entirely unwarranted, but they may not be as important as they are made out to be. Just like readers will approach a literary text with some amount of willing suspension of disbelief, there is no indication that players do not approach games the same way. A product that has to be pre-programmed will logically not be able to grant complete freedom to a player, as both options and consequences have to come pre-determined in some form, but this is not a point of surprise to the video game community.

Furthermore, it appears that there is little merit in offering a player the same number of options in a game as they might conceivably find in reality anyway, as the number of options is likely to be overwhelming at some point. Pearce puts it simply: "Choice is overrated" (127). More is not always better. It is Ryan, who expands on this idea in relation to interactive narratives. "In the domain of interactive narrative, an overabundance of choices is more likely to lead to confusion, frustration, and obsession with the missed opportunites, as well as to logically inconsisten sequences of events" (*Avatars* 123).

How then to approach these issues? If one is set to include interactivity also on the narrative level, seeking some sort of middle ground seems to be the most feasible way to go about this. Introducing points of convergence in the narrative, i.e. adapting the flowchart structure, may allow for a reasonable amount of variation while keeping the story coherent; examples of this can be found in *The Walking Dead* and *Life is Strange*. Another possibility is to limit the overall length of the game, as the developers behind *The Stanley Parable* did, so there is a smaller temporal expanse over which variations and branches would have to be kept track off. Or one may include only a small amount of moments of choice, interspersed with different forms of gameplay - a strategy often found in role-playing or action adventure games.

It should be kept in mind, however, that there is a danger in overstating the degree of freedom of choice that a game achieves. Players may not expect complete freedom of choice within a game, but if game designers want to deliver a successful product, it is also important to manage expectations. When one is constantly reminded that their "action[s] will have consequences" or that "[t]he game series adapts to the choices you make", this will generate expectations that are easily disappointed. To give one example: Though it was generally well received, *Life is Strange* garnered no small amount of backlash for its ending. As one journalist writes, "[p]layers were worried that Life Is Strange [sic!] might not stick the landing from the moment it started flapping its chaos-theory butterfly wings. [...] Well, we were right to worry. [...] [I]n its closing moments it all went wrong" (Macgregor, par 1-2).[77]

Nevertheless, video games as a medium offer a vast playground of possibilities to go about the implementation of narrative player choice, and if game designers keep in mind the potential dangers, there is much potential for innovation and new things to be discovered. Making use of the medium's unique affordabilities may well be worth the efforts.

---

[77] In the case of the video game trilogy *Mass Effect*, player discontent went far enough that the game developers published an amended version of the ending, which was more reflective of players' choices (see e.g. Lindner).

7. The conclusion - Does choice matter?

"I wonder if he's happy with his choice, and if he's learned the heavy cost that comes with it." (*The Stanley Parable*)

The title of this thesis is not posed as a question, but it is useful question to ask to conclude the thesis, and consider the implications of what has been investigated. "Does choice matter?" Or, to be a bit more specific: "Does narrative choice in video games matter?"

1. Does it matter to the players?
2. Does it matter within a specific game?
3. Does it matter for video games as a (narrative) genre?

The first question was only briefly touched on in the last chapter, and certainly warrants more in-depth investigation. Player choice has been considered as a factor in immersion, and I would argue that feeling disappointed about the ending of a game, because it does not adequately reflect the choices made throughout a playthrough (see e.g. Lindner, or Macgregor), strongly indicates that choice does matter to players. Additionally, on *Steam*, the largest digital distribution platform for the PC gaming market, "Choices Matter" is used as a tag to categorise games, so it appears to be sought after enough that it is considered a useful category from a sales and marketing perspective, and is thought to incentivise potential buyers.

Whether or not, or perhaps rather „how", choice matters within a specific game is the level of in-depth analysis of primary texts, which too is an area that would benefit from more academic research. This thesis was also intended to contribute to the pool of primary text analyses of video games, and has looked into how choice is handled in three specific games - *The Walking Dead, Life is Strange* and *The Stanley Parable* - to draw up and illustrate a typology of narrative player choice. All three games have provided examples of the impact particular choices have on their narrative, but have also showcased some of the limitations they face when toeing the line of freedom and restriction of narrative player choice.

The text has also examined where video games come from, looked at their tense early relationship with narratives, and the way that game designers have struggled with implementing narrative choices in a satisfying and meaningful way. But is it a worthwile

endeavour for the video game genre to engage with choice on a narrative level? I would suggest that it is.

If one considers the video game as a narrative medium, using narrative choice as a game mechanic is clearly the area in which video games can be narratively innovative; it is the one thing with which most other narrative media struggle. This does not mean that making use of choice on a narrative level is a particularly easy thing to do. The last section of this thesis has brought up some of the difficulties it might pose, but it has also showcased opportunities it may offer, while the typology developed in this thesis was meant to both allow the analysis of moments of narrative choice in existing video games, and also to provide a way to systematically consider how to integrate narrative choice in future game projects. To that end it included not only a section on choice as individually presented moments within a game, considering on what levels information may be shared with a player, but also a section on consequences of a given choice, which situates it within the larger context of a game's narrative.

Ultimately, since interactive opportunities for the players have to be programmed and planned, currently there is a necessary trade-off between a coherent narrative experience and the impact of player choice on the narrative. As each additional mark the player puts on the overall narrative can easily lead to an overwhelming amount of variations the further the story progresses, game designers have to make careful decisions about which narrative choices they want to leave up to the players, and how strongly these choices influence the narrative, e.g. in terms of gravity, or how far down the timeline a specific decision made by the player will matter. It is simply not possible to account for every decision an individual player would like to make, because the programming effort would not be feasible.

However, there is still much creative potential to be explored with regards to player impact on the narrative, and the video game genre will profit from future advances in the technology sector, just as it has done in the past. Having more data storage space available has allowed for e.g. more variations to be programmed, or characters to be voice-acted, and advancements in the artificial intelligence sector may allow for even more responsive narrative design in the future. As a dynamic medium video games will certainly bring more developments in the narrative sector as well, which will be of interest to future game designers and players, and may well be a worthwile object of study for academics, or perhaps even offer opportunities to learn for other types of media.

31772 words

8. Bibliography

Primary Sources

Age of Empires. Microsoft, 1997.
Alice: Madness Returns. Spicy Horse, 2011.
American McGees's Alice. Rogue Entertainment, 2000.
Call of Duty. Activision, 2003.
Civilization. MicroProse, 1991.
Cooking Mama. Nintendo, 2006.
Dear Esther. The Chinese Room, 2012.
Detroit Become Human. Quantic Dream, 2019.
Dishonored. Arkane Studios, 2012.
Dragon Age: Origins. BioWare, 2009.
Dragon Age 2. BioWare, 2011.
The Elder Scrolls V: Skyrim. Bethesda Game Studios, 2011.
Fallout 4. Bethesda Game Studios, 2015.
Fowles, John. *The French Lieutenant's Woman*. London: Jonathan Capes, 1969.
Hades. Supergiant Games, 2020.
Higinbotham, William. *Tennis for Two*, 1958.
The Last of Us. Naughty Dog, 2013
Life is Strange. Dontnod Entertainment, 2015
Mario Kart. Nintendo, 1992.
Mass Effect. BioWare, 2007.
The Matrix. Dir. The Wachowskis. Warner Bros., 1999.
North, Ryan. *To Be or Not To Be: A chooseable-path adventure.* Breadpig, 2013.
O'Brien, Richard. *The Rocky Horror Show,* 1973.
Overwatch. Blizzard Entertainment, 2016.
Pac-Man. Midway Games, 1980.
Papers, Please. 3909 LLC, 2013.
Paschitnow, Alexei. *Tetris*. 1984.
Persson, Markus. *Minecraft*. Mojang, 2009.
Pong. Atari, 1972.
Pride and Prejudice. Dir. Joe Wright. Universal Pictures, 2005.
Pride and Prejudice. Dir. Simon Langton. BBC, 1995.
Red Dead Redemption 2. Rockstar Games, 2018.
Run Lola Run. Dir. Tom Tykwer. Prokino Filmverleih, 1998.
Russell, Steve. *Spacewar!*, 1962.
Silent Hill 2. Konami, 2001.
SimCity. Maxis, 1989.
The Sims. Maxis, 2000.
Space Invaders. Midway Games, 1978.
The Stanley Parable. Galactic Cafe, 2013.
Super Mario Bros. Nintendo, 1985.
Tales from the Borderlands. Telltale Games, 2014.
The Walking Dead: Season 1. Telltale Games, 2012.
The Witcher 3: Wild Hunt. CD Projekt RED. 2015.
World of Warcraft. Blizzard Entertainment, 2004.

Secondary Sources

Aarseth, Espen. "Computer Games Studies, Year One." *Game Studies 1.1* (2001). Web. 17 May 2017. <http://www.gamestudies.org/0101/editorial.html>

---"Quest Games a Post-Narrative Discourse." *Narrative Across Media*: *The Languages of Storytelling*. Ed. Marie-Laure Ryan. Lincoln: University of Nebraska Press, 2004: 361-376.

Auerbach, David. "The Quick Time Event." *The White Review* (2014). Web. 30 Dec. 2021. <https://www.thewhitereview.org/feature/the-quick-time-event/>

Beck, Victoria, Stephanie Boys, Christopher Rose, and Eric Beck. "Violence Against Women in Video Games: A Prequel or Sequel to Rape Myth Acceptance?" *Journal of Interpersonal Violence 27.15* (2012): 3016-3031.

Bode, Christoph, and Rainer Dietrich. *Future Narratives: Theory, Poetics, and Media-Historical Moment*. Narrating Futures 1. Berlin: De Gruyter, 2013.

Bodkin, Henry. "Violent Video Games Like Grand Theft Auto Do Not Make Players More Aggressive, Major New Study Finds." *The Telegraph*, 8 Mar. 2017. Web. 02 June 2017. <https://www.telegraph.co.uk/science/2017/03/08/violent-video-games-like-grand-theft-auto-do-not-make-players/>

Bratt, Chris. "The System Behind Hades' Astounding Dialogue." Online video clip. *Youtube*. 19 Nov. 2020. 29 Dec. 2021.

Bremond, Claude. "Le message narratif." *Communications 4* (1964): 4-32.

Caillois, Roger. "The Definition of Play and The Classification of Games" *The Game Design Reader: A Rules of Play Anthology*. Ed. Katie Salen and Eric Zimmerman. Cambridge: MIT Press, 2005. 122-155.

Cardoso, Pedro, and Miguel Carvalhais. "Breaking the Game: The Traversal of the Emergent Narrative in Video Games." *Journal of Science and Technology of the Arts 5.1* (2013): 25-31.

---"Profiling: A Traversal Between the Player and the Game System." *Conferência de Ciências e Artes dos Videojogos* (2014). Web. 22 May 2017. <http://web.ipca.pt/videojogos/Papers/videojogos2014_submission_27.pdf>

Chatman, Seymour. *Story and Discourse: Narrative Structure in Fiction and Film*. Ithaca: Cornell University Press, 1978.

Costikyan, Greg. "I Have No Words and I Must Design." *Interactive Fantasy 2* (1994). Web. 22 May 2017. <costik.com/nowords.html>

---"I Have No Words & I Must Design: Toward a Critical Vocabulary for Games." *Proceedings of Computer Games and Digital Cultures Conference*. Ed. Frans Mäyrä. Tampere: Tampere University Press, 2002. 9-33.

Crawford, Chris. "Assumptions Underlying the Erasmatron Storytelling System." *Narrative Intelligence*. Ed. Michael Mateas and Phoebe Sengers, 2003. 189-197.

---"Interactive Storytelling." *The Video Game Theory Reader*. Ed. Mark J.P. Wolf and Bernard Perron. New York: Routledge, 2003. 259-273.

Domsch, Sebastian. *Storyplaying: Agency and Narrative in Video Games*. Narrating Futures 4. Berlin: De Gruyter, 2013.

Dovey, Jon, and Helen W. Kennedy. *Game Cultures: Computer Games as New Media*. New York: Open University Press, 2006.

EA. *Dragon Age: Origins*. n.d. Web. 20 Dec. 2021. <https://www.ea.com/en-gb/games/dragon-age/dragon-age-origins?setLocale=en-gb>

Ensslin, Astrid. *The Language of Gaming*. Basingstoke: Palgrave Macmillan, 2012.

ESA. *Video Games in the 21st Century: The 2020 Economic Impact Report*. 2019. Web. 12 Jan. 2022. <https://www.theesa.com/video-game-impact-map/wp-

content/uploads/sites/2/2020/12/Video-Games-in-the-21st-Century-2020-Economic-Impact-Report-Final.pdf>

Ferguson, Christopher J. "Video Games and Youth Violence: A Prospective Analysis in Adolescents." *Journal of Youth and Adolescence 40* (2011): 377-391.

Frasca, Gonzalo. "Ludology meets Narratology: Similitude and Differences Between (Video)Games and Narrative." 1999. Web. 06 June 2017. <https://ludology.typepad.com/weblog/articles/ludology.htm>

---"Simulation versus Narrative" *The Video Game Theory Reader.* Ed. Mark J.P. Wolf and Bernard Perron. New York: Routledge, 2003. 221-235.

"Game." *Oxford Learner's Dictionaries*. n.d. Web. 31 Oct. 2017. <https://www.oxfordlearnersdictionaries.com/definition/english/game_1?q=game>

Harrigan, Pat, and Noah Wardrip-Fruin. Introduction. *Second Person: Role-Playing and Story in Games and Playable Media.* Ed. Pat Harrigan and Noah Wardrip-Fruin. Cambridge: MIT Press, 2007. xiii-xv.

Hartmann, Tilo, and Peter Vorderer. "It's Okay to Shoot a Character: Moral Disengagement in Violent Video Games." *Journal of Communication 60* (2010): 94-119.

Heron, Michael J., and Pauline H. Belford. "All of Your Co-Workers are Gone: Story, Substance, and the Empathic Puzzler." *Journal of Games Criticism 2.1* (2015): 1-29.

Huizinga, Johan. *Homo Ludens: A Study of the Play-Element in Culture*. 1949. New York: Angelico Press, 2016.

"Interactive." *Oxford Learner's Dictionaries*. n.d. Web. 31 Oct. 2017. <https://www.oxfordlearnersdictionaries.com/definition/english/interactive?q=interactive>

Jenkins, Henry. "Game Design as Narrative Architecture." 2004. Web. 23 August 2021. <http://web.mit.edu/~21fms/People/henry3/games&narrative.html>

---"Games, the New Lively Art." 2005. Web. 06 June 2021. <http://web.mit.edu/~21fms/People/henry3/publications.html#articles>

Juul, Jesper. "Games Telling Stories? A Brief Note on Games and Narratives." *Game Studies 1.1* (2001). Web. 8 May 2017. <http://gamestudies.org/0101/juul-gts/>

--- *Half-real: Video Games between Real Rules and Fictional Worlds*. Cambridge: MIT Press, 2005.

---"On Absent Carrot Sticks: On the Level of Abstraction in Video Games." *Storyworlds Across Media: Toward a Media-Conscious Narratology*. Ed. Marie-Laure Ryan and Jan-Noel Thon. Lincoln: University of Nebraska Press, 2014. 173-192.

Juul, Jesper, and Marleigh Norton. "Easy to Use and Incredibly Difficult: On the Mythical Border between Interface and Gameplay." *Proceedings of the 4th International Conference on Foundations of Digital Games* (2009): 107-112.

Kampmann Walther, Bo. "Playing and Gaming: Reflections and Classifications." *Game Studies 3.1* (2003). Web. 22 May 2017. <http://www.gamestudies.org/0301/walther/>

Kiili, Kristian, Keith Devlin, Arttu Perttula, Pauliina Tuomi, and Antero Lindstedt. "Using Video Games to Combine Learning and Assessment in Mathematical Education." *International Journal of Serious Games 2.4* (2015): 37-54.

Kleinman, Zoe. "Do Video Games Make People Violent?." *BBC* 17 May 2015. Web. 02 June 2017. <https://www.bbc.com/news/technology-33960075>

Kocher, Mela. *Folge dem Pixelkaninchen! Ästhetik und Narrativität digitaler Spiele*. Zurich: Chronos Verlag, 2007.

Kohler, Chris. "Indie Passion Fuels the 10 Best Games of 2012." *Wired* 12 December 2014. Web. 29 November 2021. <https://www.wired.com/2012/12/the-10-best-games-of-2012/

Lindner, Natalie. "Mass Effect 3's Original Ending (& How It's Different) Explained." *Screenrant* 21 May 2021. Web. 02 Jan. 2022. <https://screenrant.com/mass-effect-3-

original-ending-me3-bad/>

Macgregor, Jody. "Why a bad ending doesn't have to ruin a great game." *PCGamer* 24 Oct. 2015. Web. 02 Jan. 2022. <https://www.pcgamer.com/life-is-strange-ending/>

Malliet, Steven, and Gust de Meyer. "The History of the Video Game." *Handbook of Computer Game Studies.* Ed. Joost Raessens and Jeffrey Goldstein. Cambridge: MIT Press, 2005. 25-45.

"Medium." *Merriam-Webster*. n.d. Web. 31 Oct. 2017. <https://www.merriam-webster.com/dictionary/medium>

Michael, David, and Sande Chen. *Serious Games: Games that Educate, Train and Inform.* Boston: Thomson Course Technology, 2006.

Moss, Richard. "A truly graphic adventure: the 25-year rise and fall of a beloved genre." *ArsTechnica*, 27 Jan. 2011. Web. 29 Nov. 2021. <https://arstechnica.com/gaming/2011/01/history-of-graphic-adventures/>

Murray, Janet H. *Hamlet on the Holodeck*. Cambridge: MIT Press, 1997.

Neitzel, Britta. "Narrativity in Computer Games." *Handbook of Computer Game Studies.* Ed. Joost Raessens and Jeffrey Goldstein. Cambridge: MIT Press, 2005. 227-245.

---"Narrativity of Computer Games." *The Living Handbook of Narratology*. 22 Apr. 2014. Web. 08 Aug 2021. <http://www.lhn.uni-hamburg.de/node/127.html>

Nelson, Theodor H.. "Computer Lib/ Dream Machines." 1974. *The New Media Reader*. Ed. Noah Wardrip-Fruin and Nick Montfort. Cambridge: MIT Press, 2003. 301-338.

Pearce, Celia. "Game Noir: A Conversation with Tim Schafer." *Game Studies 3.1* (2003). Web. <http://www.gamestudies.org/0301/pearce/>

--- *The Interactive Book: A Guide to the Interactive Revolution.* Indianapolis: Macmillan Technical Publishing, 1997.

Pittman, Cameron. "Teaching with Portals: the Intersection of Video Games and Physics Education." *LEARNing Landscapes 6.2* (2013): 341-360.

"Play." *Oxford Learner's Dictionaries*. n.d. Web. 31 Oct. 2017. <https://www.oxfordlearnersdictionaries.com/definition/english/play_2>

Ritterfeld, Ute, and Rene Weber. "Video Games for Entertainment and Education." *Playing Video Games: Motives, Responses, and Consequences*. Ed. Peter Vorderer and Jennings Bryant. New York: Routledge, 2006. 399-413.

Ryan, Marie-Laure. *Avatars of Story*. Electronic Mediations 17. Minneapolis: University of Minnesota Press, 2006.

---"Digital Media." *Narrative Across Media*: *The Languages of Storytelling*. Ed. Marie-Laure Ryan. Lincoln: University of Nebraska Press, 2004. 329-335.

--- Introduction. *Narrative Across Media*: *The Languages of Storytelling*. Ed. Marie-Laure Ryan. Lincoln: University of Nebraska Press, 2004. 1-40.

---*Narrative as Virtual Reality 2: Revisiting Immersion and Interactivity in Literature and Electronic Media*. Baltimore: John Hophins University Press, 2015.

Ryan, Marie-Laure and Jan-Noel Thon. Introduction. *Storyworlds across Media: Toward a Media-Conscious Narratology*. Lincoln: University of Nebraska, 2014.

Salen, Katie, and Eric Zimmerman. "Game Design and Meaningful Play." *Handbook of Computer Game Studies.* Ed. Joost Raessens and Jeffrey Goldstein. Cambridge: MIT Press, 2005. 59-79.

--- *Rules of Play: Game Design Fundamentals.* Cambridge: MIT Press, 2004.

Schulzke, Marcus. "Moral Decision Making in Fallout" *Game Studies 9.2* (2009). Web. <http://www.gamestudies.org/0902/articles/schulzke>

Scutti, Susan. "Do Video Games Lead to Violence?." *CNN* July 26, 2016. Web. 02 June 2017. <https://edition.cnn.com/2016/07/25/health/video-games-and-violence/index.html>

Smith, Barbara Herrnstein. "Narrative Versions, Narrative Theories." *Critical Inquiry* 7.1 (1980): 213–236.

Smith, Spencer, and Samantha Chan. "Collaborative and Competitive Video Games for Teaching Computing in Higher Education." *Journal of Science Education and Technology 26* (2017): 438-457.

Stuart, Keith. "Video Games Do Not Cause Violence - But Makers Do Need to Think About It." *The Guardian* 07 Aug. 2019. Web. 06 July 2021. <https://www.theguardian.com/games/2019/aug/07/video-games-do-not-cause-violence-but-makers-do-need-to-think-about-it>

Suits, Bernard. *The Grasshopper: Games, Life and Utopia.* Toronto: University of Toronto Press, 1978.

Tanner, Nicole. "Video Games 101: What Are Mods and Should my Kids be Downloading Them?" *pixelkin* 4 Aug. 2015. Web. 15 Dec. 2021. <https://pixelkin.org/2015/08/04/video-games-101-what-are-mods-and-should-my-kids-be-downloading-them/>

Taylor, Nicholas, Chris Kampe, and Kristina Bell. "Me and Lee: Identification and the Play of Attraction in The Walking Dead." *Game Studies 15.1* (2015). Web. <http://gamestudies.org/1501/articles/taylor>

Tu, Trumann. "Steam Set Yet Another Concurrent Player Record Today." *Gamerant* 9 Jan. 2022. Web. 12 Jan. 2022. <https://gamerant.com/steam-concurrent-player-record-january-9-2022/>

Tulloch, Rowan. "The Construction of Play: Rules, Restrictions, and the Repressive Hypothesis." *Games and Culture 9.5* (2014): 335-350.

Wolf, Mark J.P., and Bernard Perron. Introduction. *The Video Game Theory Reader.* Ed. Mark J.P. Wolf and Bernard Perron. New York: Routledge, 2003. 1-24.

9. List of Figures

Index

A

abstract, 7, 16, 18, 45, 50
action-adventure, 5, 8, 34, 43
agôn, 13, 14, 16, 19, 21
alea, 13, 16, 21
avatar, 22, 46, 48, 49, 52, 53, 54, 55, 56, 60, 61, 70, 76, 81

B

bending, 33, 34, 35, 37, 59, 72
branching, 33, 34, 37, 39, 40, 72, 74, 80, 82

C

consequence, 9, 25, 39, 42, 44, 45, 50, 70, 73, 75, 77, 78

D

decision-making, 7, 11, 42, 43
dialogue option, 50, 54, 55, 61, 70, 75
dialogue wheel, 34, 66
diegetic, 46, 57, 60, 62, 68, 69, 81
digital, 5, 7, 10, 13, 14, 16, 18, 19, 22, 23, 24, 25, 26, 40, 41, 43, 84, 87, 88, 89

E

embedded narratives, 30, 33, 34
emergent narratives, 30, 32
enacting stories, 30, 31, 32
event, 28, 64, 69, 80, 87
evocative spaces, 30, 31
existent, 11, 28

F

faux-choice,77, 78
flowchart, 80, 83
Future Narrative, 8, 38, 45, 77

G

game theory, 11

H

hardware, 22, 25, 42, 52
hypertext, 25, 41

I

ilinx, 13, 14, 16
immersion, 9, 20, 42, 81, 84, 89
impact, 5, 24, 25, 34, 51, 53, 65, 67, 69, 70, 71, 72, 73, 76, 77, 78, 80, 82, 84, 85, 87, 88

interactivity, 7, 21, 23, 24, 25, 29, 37, 40, 41, 42, 79, 82, 83, 89
interface, 24, 42, 52, 54, 57, 60, 62, 66, 68, 69, 88

L

ludology, 6, 8, 11, 12, 19, 22, 26, 88
ludus, 11, 14, 15, 16, 17

M

marked, 15, 40, 51, 54, 55, 56, 59, 60, 61, 68, 75
maze, 80
media-conscious, 8, 29, 37
medium-independet, 26, 29
mimicry, 13, 14, 16
modulating, 33, 34, 35, 37, 55, 59
moral choice, 81
multimodal, 6, 7, 22, 25, 61, 68

N

narratology, 6, 8, 11, 25, 26, 29, 37, 38, 88, 89
node, 39, 40, 45, 77, 89
NPC, 34, 36, 37

P

paidia, 14, 15, 16, 17
playthrough, 34, 58, 59, 68, 70, 71, 72, 76, 77, 84
profiling, 36, 37, 87

Q

quick time event, 63, 64

R

roguelike, 13, 76
role-playing game, 8, 10, 14, 19, 47
rules, 12, 14, 15, 16, 17, 18, 19, 20, 21, 30, 32, 67, 87, 88, 89, 90

S

sandbox game, 14, 16, 32
simulation game, 16, 19, 21
software, 5, 16, 22, 24, 52, 75

T

technology, 5, 14, 22, 24, 26, 79, 81, 85, 87, 88, 89, 90
trivial, 11, 65, 66, 67, 69, 70, 71
typology, 1, 8, 9, 17, 23, 44, 46, 47, 48, 49, 50, 51, 69, 77, 79, 84, 85

U

unmarked, 51, 59, 60, 61, 68, 72

Abstract

English

The thesis looks at narrative player choice in video games as intersection between ludic elements and narrative potential, drawing on existing research in the areas of (video) game studies, media-conscious narratology and the Future Narrative. Furthermore, it aims to add to a growing pool of video game case studies, affording *The Walking Dead*, *Life is Strange* and *The Stanley Parable* a closer look. A close analysis of moments of narrative choice in these three games serves as the basis to develop a typology of narrative player choice in video games. The typology is focused on issues of the presentation of narrative choices and looks into factors like whether or not they are marked, which channels and signs are used to make players aware of, and give information about, individual choices, and their perceived degree of impact. Additionally, it considers elements of the implementation of consequence as necessary parts of moments of choice. The thesis thus contributes to the existing models and terminology available to discuss medium-specific narrative strategies in video games, and further serves as a point of departure to consider opportunities and challenges inherent to integrating player choice in narratives.

German

Die Arbeit befasst sich mit narrativen Entscheidungsmomenten in Videospielen als Schnittstelle zwischen spielerischen Elementen und narrativem Potenzial, und stützt sich dabei auf bestehende Forschung in den Bereichen der Ludologie, medienbewussten Narratologie und dem „Future Narrative". Weiter soll die Thesis den Pool von Fallstudien zu Videospielen erweitern, und betrachtet die Spiele *The Walking Dead*, *Life is Strange* und *The Stanley Parable* näher. Eine genaue Analyse von Momenten narrativer Entscheidung in diesen drei Spielen dient als Grundlage für die Entwicklung einer Typologie narrativer Spielerentscheidungen in Videospielen. Die Typologie konzentriert sich auf Fragen der Präsentation solcher narrativen Entscheidungen und untersucht unter anderem folgende Faktoren: ob sie gekennzeichnet sind oder nicht, welche Kanäle und Zeichen verwendet werden um Spieler auf individuelle Entscheidungsmomente aufmerksam zu machen, bzw. nähere Informationen zu diesen zu geben, und deren wahrgenommene Signifikanz. Darüber hinaus wird auch die Umsetzung von Konsequenzen als notwendiger Bestandteil von Entscheidungsmomenten analysiert. Die Dissertation trägt somit zu den bestehenden Modellen und Fachbegriffen bei, die verfügbar sind um medienspezifische Erzählstrategien in

Videospielen zu diskutieren. Zusätzlich dient sie als Ausgangspunkt um Möglichkeiten und Herausforderungen zu betrachten, die dem Integrieren von Spielerwahl in Erzählungen innewohnen.